

**APPRAISAL OF EVALUATIVE LANGUAGE IN PEOPLE WITH APHASIA'S
CINDERELLA NARRATIVES**

by

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ABSTRACT

By using evaluative language to describe things and occurrences in our environment, we share with our audiences our opinions and feelings on those topics, thereby conveying our perspectives on the subject matter and making our narratives engaging and meaningful to our audiences. In the light of the fact that aphasic speakers have difficulties with language and that they produce a restricted range and amount of evaluations (Armstrong and Ulatowska, 2007), the purpose of the current study was to investigate whether they produced particular types of evaluations described in the Appraisal framework developed by Martin (2003). The evaluative language of eight aphasic speakers and eight normal speakers were compared using the Cinderella story re-tell task. The Appraisal framework was used to assess the use of attitude (Affect, Judgment, and Appreciation) to convey opinions and feelings. Evaluations were also coded for valence (positive or negative) and cognitive representation (abstract or concrete terms). The role of personal style, mood, interest or situation, and gender as well as factors of age and education was considered. The findings of this study, which corroborate Armstrong's (2005) research, indicate that while aphasic speakers use significantly fewer evaluations than normal speakers, they use the different types of evaluation considered in this study in a similar manner as normal speakers. The implications of these findings are discussed in the light of previous research.

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Chapter 1

Introduction

The purpose of this study was to investigate the ways in which people with aphasia, a neurological condition which affects one's language abilities, use "evaluative language" to express judgments or assign values to things and occurrences in their environments. Since spoken language constitutes a primary mode of communicating our stances on things, the consequences for people with aphasia if they are unable to express their opinions or feelings can be frustrating. This introductory chapter explores the functions of using evaluations in language, the relationship between language and emotion, and the importance of language to one's identity. Finally, a framework that is used in contemporary research to study evaluative language is introduced.

1.1 Evaluative language

We use language primarily for two interrelated functions, description and evaluation (Sarangi, 2003). When we recount stories and experiences, in addition to providing details, we punctuate our narratives with our opinions and feelings. These evaluations in our everyday discourse indicate our perspectives on the subject matter, which in turn engage our audiences and make the narrative meaningful at an interpersonal level. Without these evaluations, which can be conveyed explicitly or can be implied based on the linguistic devices we employ (e.g., repetition, metaphor usage, etc.), our audiences may find our narratives less engaging and informative.

Evaluation, regardless of whether it is written or spoken, or in monologue or dialogue, is tied to the relationship between narrator and audience (Page, 2003). It serves three main purposes in our discourse (Thompson and Hunston, 2000). First, in expressing our opinions about a subject, we make our audience aware of our values and of the communities we represent. Second, we use particular evaluations to inform our audiences of our opinions based on the kind of relationship we are trying to forge with them. When we share our feelings, we bond with our audience and create a sense of belonging (Martin, 2004). Finally, evaluations inadvertently indicate the point of discourse (e.g., abstract, high point, ending) as they tend to occur at such boundary points (Martin, 2004; Thompson and Hunston, 2000).

1.1.1 Language and emotion

Language and emotion undoubtedly affect each other. While this relationship is not directional, it can be posited to have two facets (Bamberg, 1997). On one hand, because we *have* emotions and are able to *be* emotional, language *becomes* emotive by allowing us to express our feelings. Herein, our emotional states influence our language in a variety of ways dependent on the situation. For example, narrating a thrilling experience such as riding a roller-coaster immediately after the ride may be more animated than recounting it a week later. Similarly, the words we use to describe a tragic event are significantly different from those used to describe a joyful event. Lastly, the same term can mean different things in different contexts, as is evident from the varied usage of the word “love” (e.g., “I *love* you”, “I *love* ice-cream”, “I *love* my job”, “I *love* to dance”, etc.)

Conversely, we use language to refer to and reflect on our environments, and as a “means of making sense of [our] emotions”. The expression of such emotions is realized verbally through the use of linguistic resources such as intonation patterns and emotive vocabulary (see Martin, 2003), but also through non-verbal resources such as gestures, facial expressions, and body language. However, while language is used to “talk *about* the

emotions”, it cannot be implied that the terms we use necessarily shed light on the “meaning” of the emotion nor do these terms lead us to the emotion (Bamberg, 1997). Words such as “happy” and “sad” can mean different things in different situations but the meanings of “happiness” or “sadness” cannot be inferred from such literary terms, nor do they have any psychological validity. Language is thus but a tool we use “to be understood”.

1.1.2 Language and identity

As human beings, we have a have a need to express our thoughts, ideas, and values; the communication of these allows us to express and form our identities, and also to understand our own and other people’s roles in society. The formation of an identity, or a sense of self, begins in infancy and continues throughout our lives. It involves the development and establishment of personality traits, the various roles we play, and our own values and beliefs (Calvert, 2002). Self-definition is often irreversibly affected by perceptions of physical constraints such as body, biological sex, ethnicity, or age (Collins and Kuczaj, 1991), cultural background, socioeconomic status, etcetera. Developmental stages and milestones also greatly influence us to modify or redefine our identities; these include reaching adolescence, going to college, a first job, marriage, having children, retirement, aging, illness, widowhood, and so on. Despite juggling several roles throughout our lives, the successful search for *who we are* allows us to form a single, uniform sense of identity (Erikson, 1993) across all aspects of our lives.

While identity can be expressed in a myriad of ways, such as art, music, group affiliation, social activities, etcetera, language affords us the best means to abstract our experiences in the world, thereby allowing us to explore, construct, and articulate our identities and roles (Joseph, 2004; Harter, 1998). According to Schiffrin (1996), “the form of our stories (their textural structure), the content of our stories (what we tell about), and our story-telling behavior (how we tell our stories) are all sensitive indices not just of our

personal selves, but also of our social and cultural identities.” For children, and adults learning a new language and/or culture, the process of acquiring social knowledge is simultaneous and interdependent on the acquisition of language structures and usage (see Bernstein, 1975). As adults and members of social groups, we socialize with each other and negotiate our views through language (Schieffelin and Ochs, 1986).

In the light of the extent to which we rely on language to construct and express our identities, it is particularly difficult for those with learning disorders or language impairments to do the same, and this can lead to poor self-image and feelings of frustration, incompetence, and depression (Reed, 2005; Raviv & Stone, 1991; Bashir & Scavuzzo, 1992). The impact a loss or impairment of language has on the identities of people with aphasia is discussed in more detail in the next chapter.

1.2 The appraisal system

The Appraisal framework (Martin, 2003), an extension of Halliday’s Systemic Functional Linguistics theory, was established as an “approach to exploring, describing and explaining the way language is used to evaluate, to adopt stances, to construct textual personas and to manage interpersonal positionings and relationships.” It investigates the ways in which we evaluate, react, and relate to our environments, and the objects, events and people (including their interactions) present in them.

Appraisal proposes three main evaluative functions (White, 2001): dialogistic positioning, intertextual positioning, and attitudinal positioning. Dialogistic positioning is concerned with self-expression, particularly in the written form of verbal communication. By using words and phrases like “surprisingly”, “as expected”, “on the contrary”, “I believe”, “of course”, etcetera, we express based on how we anticipate our audiences will react and

consequently also respond to what we believe they would have felt if we were conversing with them in person.

Intertextual positioning is concerned with the way in which we report other narrators' views and includes us presenting our own evaluative stance by indicating whether or not we endorse the narrators and/or their views. It typically involves the use of words and phrases like "reportedly", "she claims that", "according to", "Mr. X said", etcetera, whereby we make other people's opinions or words relevant to our own.

Finally, and of particular interest to the current study is the evaluative function of attitudinal positioning, wherein we express, both explicitly and implicitly, our opinions about our environments as being either favorable (positive) or unfavorable (negative).

There are three categories of attitudes: Affect, Judgment, and Appreciation (see Table 1.1). Affect is found in descriptions of how we feel and our emotional responses, and is commonly realized through the use of adjectives, but also nominalizations, adverbs, and verbs. Judgment is found in our evaluations about the conformity of ethics, morals, values, etcetera of both people and societies based on norms we believe to be generally accepted (Eggins and Slade, 1997), and is realized through the use of lexical terms and in clauses. Finally, Appreciation is found in our aesthetic reactions to objects or events in our environments, whether concrete or abstract, and is realized through the use of adjectives, nominalizations, adverbs, or verbs.

According to Sherratt (2007), certain questions can probe for each type of attitude: "How did/do you feel about *it*?" elicits Affect, "How would you judge that *behavior*?" elicits Judgment, and "What do you think of *that*?" elicits Appreciation.

Table 1.1. *Attitudinal appraisal.*

Category	Assessment	Probe ¹	Realization
Affect	Emotions	How do you feel about <i>it</i> ?	Adjectives, nominalizations, adverbs, verbs
Judgment	Behavior	How would you judge that <i>behavior</i> ?	Lexical terms, clauses
Appreciation	Attributes	What do you think of <i>that</i> ?	Adjectives, nominalizations, adverbs, verbs

¹ Sherratt, 2007

The following examples, albeit cursory, illustrate the three kinds of attitudes in their positive and negative manifestations:

(i) Affect

- a. I *like* music.
- b. Horror movies *scare* me.

(ii) Judgment

- a. The *honest* driver returned the lost briefcase to its owner.
- b. The senator has earned a reputation of being *corrupt*.

(iii) Appreciation

- a. You look *lovely*.
- b. The lecture was *boring*.

While Affect, Judgment, and Appreciation are related by virtue that they “all encode feeling” (see Figure 1.1; Martin, 2003), they are not distinguished by their structural features but semantically, thereby allowing for some grammatical flexibility between the categories (Page, 2003). Affect, however, forms the base for evaluating feelings as can be seen in the

diagrammatic representation (Figure 1.1.) below. Depending on contextual factors, Affect is adapted in order to evaluate behaviors (through Judgment) and attributes (through Appreciation).

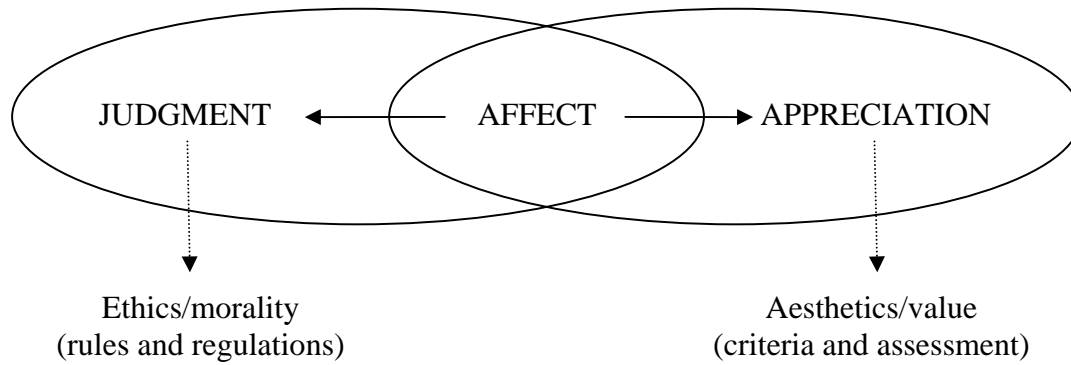


Figure 1.1. Encoding of feelings in attitudinal appraisal (Martin, 2003)

A more detailed explanation of attitudinal positioning can be found under Assessment in the Method section.

Chapter 2

Studies of Evaluative Language

2.1 Children

Owing to the semantics of English, appraisal only begins to emerge at about 18 months of age when children begin to produce their first words; however, at nine months of age, in what Halliday (1975) refers to as the ‘protolanguage’ phase, infants invent gestures and/or vocal sounds that they use systematically to express emotions (Painter, 2003). While most of evaluations produced by toddlers are affectual (e.g., *like*), consistent with the idea that Affect forms the basis of the attitudinal positioning system, they also exhibit some Appreciation (e.g., *nice*) and Judgment (e.g., *naughty*) during this phase. However, children tend to evaluate their own feelings and behaviors until they accumulate sufficient vocabulary and a more sophisticated social awareness to re-contextualize Affect to evaluate behaviors (Judgment) and attributes (Appreciation).

2.2 Healthy adults

The use of evaluative language is dependent on an individual’s personal style, but it also varies in degree based on factors that include personal mood, level of interest (or motivation), situational demands or constraints, as well as demographic variables including age, gender, and level of education amongst others. What is considered evaluative by a

person in a given situation may be considered otherwise in a different context or culture, or by a different person, owing to the subjectivity in categorizing words (Page, 2003). Different situations also necessitate the use of different types of discourse (e.g., descriptive, repetitive, personal, factual, etc.). Therefore, there cannot be a standard or benchmark for “normal” usage of evaluative language (Armstrong and Ulatowska, 2007).

2.2.1 Style

Our opinions about and reactions to our environments play a vital role in our daily communication, and contribute to the establishment of our identities (Armstrong, 2005). Every narrator tends to use language in a way that they identify themselves by, and that their audiences can recognize their work by (Noyola, 2010; also see Fromkin, Rodman, and Hyams, 2010). Their style is achieved by their particular choices of word usage, sentence types, first/second/third person narration, organization, and levels of formality. They are able to influence their audiences’ moods by manipulating the amount of detail and emotionality in their narratives. Narrators also use tone to indicate their stance on a subject, recognizable through the word and language choices they make in order to reveal their positive or negative disposition to the topic of discussion, or inferable through their use of descriptive words. Finally, in terms of spoken language, narrators also vary in fluency. While fluency is typically dictated by the frequency of silent pauses, filled pauses (*um, uh, etc.*), and interjections (*ugh, oh, ah, etc.*), some research suggests that speakers calculate the use of such words to indicate to their audience a delay in speaking to look for a word, to collect their thoughts, or to keep or terminate their audience’s attention (see Clark and Fox Tree, 2002).

2.2.2 Personal mood

A narrator’s own mood can affect the kind of evaluations they make and impressions they form. Research on personal mood and language (Beukeboom and Semin, 2006) suggest that those in a negative mood tend to focus on concrete information when describing an event

(e.g., “She worked for 14 hours”) whereas those in a positive mood provide insights based on what they know or estimate of such situations in order to provide more meaningful information (e.g., “She is exhausted after a long day at work”). Thus, abstract expressions (which are conceptual, and interpreted differently based on context; e.g., ‘I *love* reading’ vs. ‘I *love* my family,’ or ‘Your insensitivity *hurts* me’ vs. ‘My head *hurts*’) are used more when in a positive mood, while concrete expressions (which are sensory and have stable meanings; e.g., green, hit) are used when in a negative mood. However, it must be noted that a narrator’s personal mood is not necessarily solely inferable based on the cognitive representations, that is the level of abstraction or concreteness, used. Their mood may or may not also be made obvious through their use of emotional tone and/or facial expressions amongst other channels that carry such affective information.

In a study that examined the ways in which personal mood affects our judgments about people (Forgas and Bower, 1987), after having their moods manipulated to feel happy or sad about their performance on a phony test, participants made impression-formation judgments about descriptions of people. The researchers found that participants spent more time reading about people whose characteristics were congruent with their induced moods, and were quicker to form judgments as well as more likely to recall characteristics of people that were mood-consistent. Thus, participants in a happy mood were more likely to have favorable impressions, make positive judgments, and remember more complimentary characteristics than were participants in a sad mood.

In a similar study that measured participants’ reactions to the valence of a story’s ending, Egidi and Gerrig (2009) found that participants in a happy mood found positive endings less surprising, and similarly, those in a sad mood found negative endings less surprising.

Fiedler (1991) found that mood does not affect the retrieval of judgments that we have already formed; however, the studies mentioned above evidence that personal mood can augment the way in which we process language and our environments, and the ways in which we interpret and use language to characterize and describe our experiences.

2.2.3 Interest and situation

Affective states influence our recollection of past experiences such that happy people tend to “recall and use more positive information” while negative moods reflect similarly in narratives of people in a negative mood (Forgas, 2007). This tendency has consequences for the way we react to conflicts, as well as evaluate our environments.

A pattern similar to the use of cognitive representations based on personal mood was found in a study on consumer behavior (Schellekens, Verlegh, and Smidts, 2010). Consumers’ use of abstract and concrete terms when describing their experiences was dependent on their expectations of or experiences with particular brands or products. If they felt positively about a brand or product, they used abstract terms to describe their experiences, whereas they used concrete terms to describe their experiences with brands or products they did not prefer. The researchers also found that the goal of persuading other consumers prompted participants in their study to use more abstract language to describe favorable experiences and more concrete language to describe unfavorable experiences. Abstract descriptions convey the message that these consumers are likely to use that particular brand or product again even though such behaviors are not observable, while concrete descriptions tend to focus on behaviors that are generally verifiable (Semin and Fiedler, 1988). Thus, in situations that demand narrators to be more convincing about their opinions, they moderate the amount and level of abstract and concrete evaluations in order to persuade or dissuade their audience.

2.2.4 Gender

Language socialization based on gender plays a crucial role in the ways men and women express emotions linguistically. Parents are prone to discuss emotions with their daughters more than with their sons (Aldrich and Tenenbaum, 2006), and societies encourage women to talk about their feelings but men to act on theirs (Holm, 2001). The focus is thus on “detailed attention to emotional states” for women and “on causes and consequences” for men (Vainik, 2006). When asked to list words related to emotions and feelings and then to list emotions that they recently experienced (Mei-Rong and Ching-Yu Hsieh, 2007), both men and women generated larger lists for the former task than for the latter. However, women had larger emotional vocabularies than men, and men tended to express their emotional experiences through action words (e.g., shout). Men were also more likely to list more positive experience words than women, a finding that must be interpreted with caution as in many cultures men are socialized to suppress negative feelings as they are commonly associated with weakness and failure. In this study, based on an assessment of emotional words used in isolation rather than from a personal, detailed narrative, gender differences in the recollection of emotional words appear to be conceptual for women and experiential for men.

In contrast, in appraising narratives of childbirth, Page (2003) found that while men told longer stories than women, women’s stories contained more instances of Appraisal. In the breakdown of the attitudinal categories, women used Affect more than men whereas men used more Appreciation than women, suggesting that a gender difference exists in the way men and women represent their emotional responses. Evaluations of Judgment were low for both men and women, and when present, they were often about their own selves. It must be noted that all the participants in this study were friends of the researcher and that the interviews were conducted in a familiar environment. As childbirth narratives are highly

personal and revealing in nature, the familiarity of the researcher may have encouraged participants to reveal more details. In addition, the influence of the sex of the researcher on the nature and extent of evaluations cannot be easily ascertained in such a situation. It is also possible that women use more Affect due to their more intimate role in having childbirth, whereas men are not primary actors and are possibly limited in the range of emotional states. The childbirth story is one that is repeated many times and such rehearsal may result in a higher use of evaluations than would appear in other narratives (Sherratt, 2007). However, despite these limitations and in the absence of research to suggest otherwise, findings from Page's study may also be indicative of our everyday interactions and conversations.

2.3 People with aphasia

The study of evaluative language in people with aphasia (PWA) is a relatively new area of systematic research. Research on aphasic language shows that, despite lexical, syntactic, and semantic impairments, PWA are able to convey meaning with limited use of linguistic and paralinguistic (e.g., gestures, facial expressions, prosody, etc.) devices (see Armstrong and Ulatowska, 2007).

2.3.1 Role of hemispheric specialization

The right hemisphere has been implicated as dominant for emotions in studies with participants with brain damage (for example: Borod, 1992). However, several studies have shown that negative emotions are processed by the right hemisphere and positive emotions by the left hemisphere in normal participants, suggesting that each hemisphere mediates both experience and expression of emotions based on the emotional valence (for example: Bryden, 1982; Davidson, 1984; Sackeim, Greenberg, Weiman, Gur, Hungerbuhler, and Geschwind, 1982; Silberman and Weingartner, 1986).

In a study designed to test hemispheric valence differentiation in participants with brain damage (Borod, Rorie, Haywood, Andelman, Obler, Welkowitz, Bloom, and Tweedy, 1996), monologues on emotional and non-emotional experiences were elicited. In the emotional task, positive and negative emotions (happiness, pleasant surprise, interest, sadness, anger, fear, disgust) were used, and in the non-emotional task, positive, neutral, and negative characteristics of people (beauty, strength, intelligence, hair color, fatness, weakness, stupidity) were used. The researchers found that participants with left-brain damage (LBD), right-brain damage (RBD), and with no brain damage (NBD) used higher levels of emotionality in emotional monologues than in non-emotional monologues. This difference was the least pronounced in RBD participants and most in NBD participants. There was also no difference between the positive and negative monologues in the non-emotional condition across all the groups.

Research on pragmatism (that is, simply put, the study of the effective use of language for communication) in discourse, RBD participants have been found to have pragmatic deficits in responding to emotional stimuli while LBD participants were similarly impaired with non-emotional stimuli (Bloom, Borod, Obler, and Gerstman, 1993). Using the same categories as the Borod et al. (1996) study, a follow-up study evaluated monologues from LBD, RBD, and NBD participants for pragmatic features of conciseness, lexical selection, quantity, relevancy, specificity, and topic maintenance (Borod, Rorie, Pick, Bloom, Andelman, Campbell, Obler, Tweedy, Welkowitz, and Sliwinski, 2000). Consistent with previous research, emotionally laden tasks were found to augment language performance for LBD participants but abate it for RBD participants. The researchers also found impaired pragmatic appropriateness (relevancy, quantity, conciseness) for positive (happy) narratives in RBD participants and for negative (sad, angry) narratives in LBD participants. The latter finding supports the theory of left hemisphere mediation of social emotions, such as

affection, and the right hemisphere mediation of primary emotions, such as sadness (Ross, Homan, and Buck, 1994). Thus, with regards to evaluative language, research indicates that PWA are better at emotional discourse compared to non-emotional discourse, and with positive discourse compared to negative discourse (Borod et al., 2000), suggesting that emotional content may facilitate language production for PWA.

2.3.2 Expression of emotion

Armstrong (2005) found that people with aphasia (PWA) have difficulty using mental verbs (e.g., know, think, feel) and relational verbs (e.g., the verb “to be”), both of which are commonly used to express opinions and feelings. Mental verbs allow us to communicate our perceptions and feelings about our environments and experiences (e.g., “I feel sick”, “she thinks it’s funny”, “we know how to get there”), while relational verbs allow us to communicate more factual information (e.g., “I am on vacation”, “you are late”, “it is freezing”). While PWA were able to produce such verbs, they were restricted in variety and the amount of specificity compared to participants with no brain damage (NBD). The mental verbs that PWA used were general and highly frequent verbs (e.g., think, know, see, want) whereas NBD used these verbs in addition to other specific and infrequent verbs (e.g., decide, experience, understand, assume). The low production of relational verbs by PWA participants resulted in mostly factual narratives with little reflection on their personal involvement, feelings, or circumstances. However, in the light that adjectives and intensifiers, which are commonly used with relational words, have not been studied extensively, it is not clear whether PWA’s inability to use either relational verbs or adjectives and intensifiers is at the root of this problem. It must be noted that the PWA participants in this study were sometimes able to convey their feelings through incomplete clauses or utterances (e.g., “...*terrible*”, “I...*nervous*”), intonations, and non-verbal behaviors.

Consistent with these findings, Armstrong and Ulatowska (2007) found that PWA use similar evaluative devices as NBD participants (that is, repetition, direct speech, metaphors, evaluative words and phrases, and organizational devices of cohesion, continuity, and logical relations). However, these evaluations were simplified, repetitive, and restricted in range. The researchers cautioned being wary of the variability in usage of evaluative language in aphasic speakers, especially in clinical applications, as such a continuum is found in normal speakers, too.

2.3.3 Identity “theft”

In expressing our opinions and feelings about our environments and experiences we contribute to the formation and expression of our identities. We predominantly use conversation and written language to define our identities, and are constantly negotiating and renegotiating them as we encounter other people and experiences. The onset of aphasia is usually unexpected and brings with it a disconnect from one’s sense of identity (Shadden, 2005). Since language is one of the primary tools we use to negotiate and renegotiate our identities, it is foreseeable that people with aphasia (PWA) have trouble expressing their identities owing to their difficulties with language (Armstrong, 2005; Pound, Parr, Lyndsay, and Woolf, 2000). Armstrong (2005) suggests that PWA’s inability to verbally assert their opinions and feelings may be a consequence of their stroke-induced “change in role, status, and overall identity”. From a more sociolinguistic perspective, Sherratt (2007) suggests that their impaired abilities of “interpersonal interaction, social integration, and [ability to] return-to-work” (e.g.: Penn and Jones, 2000) may also be related to the extent to which they are able to express emotion.

Owing to their vulnerability to issues of identity change (for example: LaPointe, 2001; Parr, Byng, Gilpin, and Ireland, 1997; Shadden, 2005), mental states, sense of competence, and interpersonal status with people in their environments (Armstrong and

Ulatowska, 2007), clinicians and therapists must be mindful that it is harder for PWA to work out these issues using language as is typical in such clinical situations.

2.3.4 Issues of mental health

Patients of chronic illnesses, such as aphasia, have their lives and identities disrupted (Bury, 1982), and as a consequence may suffer fragile mental states. In the alteration of the relationship between the “patient’s body, self, and surrounding world” (Hyden, 2007), their illnesses create “new and qualitatively different life conditions”.

In a meta-analysis study that examined data on depression of stroke patients from 51 studies (Hackett, Yapa, Parag, and Anderson, 2005), a third of stroke patients were estimated to have experienced depressive symptoms. The researchers determined this “conservative” estimate to account for “potential under-reporting (or under-recognition)” of symptoms in addition to the already difficult assessment of mood in patients with neurological conditions. Contrary to common notion that the first months post-onset are especially vulnerable to depression, the meta-analyses indicate that the risk for depression was equally likely in the early, middle, and late recovery stages. However, all 51 studies excluded patients with communication problems, including aphasia, commonly based on the logic that depression and other psychological assessments rely heavily on communication (see Angeleri, Angeleri, Foschi, Giaquinto, and Nolfi, 1993).

In several studies, patients with lesions in the left hemisphere have been found to be depressed more often and with greater severity than patients with lesions in the right hemisphere, while others have found conflicting results (see Bhogal, Teasell, Foley, and Speechley, 2004). However, many patients with left-brain damage suffer from aphasia, rendering standardized assessments useless.

As is the case with the expression of their identities, PWA’s difficulty with language also impacts their ability to convey messages about their psychological health making it

harder to detect depression and other psychological disorders. Clinical assessments and linguistic treatments for PWA typically use emotionally neutral topics such as picture descriptions and procedural discourse. The use of emotional topics, such as illness or trauma narratives, may give PWA better opportunities to reconstruct their life stories (Williams, 1984) and to deal with their emotions (Armstrong and Ulatowska, 2007), while for clinicians, it can provide insight into the illness experience from the viewpoint of PWA (Frank, 1995).

2.4 Sampling techniques

Research on evaluative language is typically based on elicited emotional and non-emotional narratives, as well as those of stroke or illness, happy events, and job descriptions. The emotional content of each of these narratives differ based on the individual's experiences of them, and can influence the use of abstract or concrete evaluations based on the positivity or negativity of these experiences. Evaluative language in general tends to be more abstract than concrete (Armstrong and Ulatowska, 2007); however, tasks such as picture descriptions (e.g., cookie theft) and procedural discourse (e.g., directions to a store) which are typically used in language assessments for people with aphasia (PWA) are more concrete in nature. Hence, some sampling techniques do not allow for or encourage the use of evaluative language, limiting the range of language elicited.

Narratives depict feelings and opinions, and traditionally elicit comparable ones in audiences with shared cultural experiences. When eliciting narratives in an interview setting about emotional topics such as a stroke story from PWA, researchers must be cautious in determining whether PWA produce narratives *about* their illnesses when “conveying knowledge and ideas about [the] illness” or narratives *as* their illness where “insufficient narrative generates the illness” (Hyden, 2007). This may be best achieved by examining

emotional and evaluative content in narratives at the level of specific word usage with due consideration to the context and temporal flow of the narrative.

In the current study, story narratives of PWA and participants with no brain damage were assessed for the extent and types of evaluations used. Story-telling, which is a commonly used in aphasic language assessments, is different from picture description and procedural discourse tasks in that in addition to narrating the basic story line, the amount of suspense and emotion in the story can be moderated by the narrator. For instance, when narrating the classic fairy tale Cinderella, one might only give the gist of the story, or, engage the audience and make them feel sorry for Cinderella's plight, excited at her transformation, nervous about her fate, and happy with the ending. Such an analysis will throw light on the types and quantity of evaluations used in a discourse task that is not personally emotional.

2.5 Research questions

In light of the acknowledged importance of evaluative language in everyday interactions, and research findings to date which suggest that evaluative language may be compromised in aphasia in varying ways, the current study explored whether, and to what extent, people with aphasia (PWA) use evaluations in a story re-tell task—one of the most commonly used clinical assessment tools. Differences between the narratives of people with fluent aphasia were investigated, and their texts were compared to those of speakers with no brain damage. This study also examined the valence and cognitive representation of evaluations (in terms of positive or negative, and concrete or abstract respectively) and used Martin's (2003) attitudinal appraisal framework to further sub-categorize evaluation types and explore differences between the groups. The specific questions that were of interest in this study are the following:

1. Do PWA use evaluative language in a story-retell task?
2. What kinds of evaluations do PWA use?
3. Is there a predominance of negative or positive valence in these evaluations?
4. How do the stories of PWA compare to those of non-brain-damaged speakers in terms of amount, type, and valence?

Due to the exploratory nature of the study, the only prediction that could be made was that if PWA used evaluations, these were restricted in amount and variety, consistent with Armstrong's (2005) findings.

Chapter 3

Method

In order to address the research questions previously posed, people with aphasia (PWA) were compared to participants with no brain damage (NBD) with regards to their use of evaluative language in a story narration task. The details of the participants, design and materials, and the analyses follow.

3.1 Participants

Through AphasiaBank, a subcomponent corpora of the TalkBank database of spoken language interactions (MacWhinney, 2007), eight speakers with moderately severe aphasia were selected for this study and matched as best was possible with eight non-brain-damaged speakers based on gender, age, and years of education (see Table 3.1 for details; aphasic speakers listed in order of severity, from highest to lowest). To limit as much as possible the impact of differences in ethnicity, culture, and variations in usage of particular words, expressions, and devices, all participants were white, American, monolingual English speakers. They had never learned another language, and had self-reported knowledge of the Cinderella story. They also all had adequate vision and hearing abilities. Only those participants who were listed as not depressed at the time of testing were selected so as to reduce, if not eliminate, the influence of mood and/or medication as a possible confounder of their use of evaluative language.

Table 3.1. *Participant demographics.*

Aphasic speakers				Non-brain damaged speakers			
Participant	Gender	Age	Education	Participant	Gender	Age	Education
thompson04a	F	79;6	16	capilouto41a	F	77;8	12
adler02a	M	69;8	20	capilouto40a	M	71;6	13
wright203a	M	66;4	18	capilouto37a	M	70;9	13
adler20a	M	76;7	12	wright45a	M	76;5	14
adler01a	M	58;9	13	wright52a	M	64;1	20
cmu03a	F	83;2	12	capilouto01a	F	80;5	12
wright202a	F	63;2	14	wright63a	F	62;1	16
elman10a	F	59;5	12	wright50a	F	56;8	11
Mean		69;7	14.63	Mean		69;11	13.88

According to specifications prescribed in the AphasiaBank database, the aphasic speakers were classified as fluent and assigned a type of aphasia based on their Boston Diagnostic Aphasia Examination scores (see Table 3.2 for details). As a group, they were considered mild-moderately impaired based on their Western Aphasia Battery–Aphasia Quotient scores, which ranged from 72.4 to 93.2. The cut-off score was set at 50 as this study sought to further explore the abilities of people with mild-moderate aphasia which have been examined in small numbers only in previous studies. The etiology of the aphasia was stroke resulting in lesions in the left hemisphere. None of the aphasic speakers had a history of previous stroke or other neurological conditions. At the time of testing, they ranged in time-post-onset from 9 months to 178 months.

Table 3.2. *Details of the aphasic speakers.*

Participant	Aphasia quotient ¹	Aphasia type ²	Time post-onset ³
thompson04a	72.4	Anomic	36
adler02a	74.9	Conduction	63
wright203a	76.3	Conduction	79
adler20a	79.1	Anomic	24
adler01a	86.8	Anomic	15
cmu03a	88.3	Anomic	42
wright202a	89.5	Anomic	9
elman10a	93.2	Anomic	178

¹ Western Aphasia Battery; ² Boston Diagnostic Aphasia Examination; ³ in months

3.2 Materials and design

The Cinderella story has all the elements of a typical fairy tale (i.e., “good” and “evil” characters, oppression and romance, poverty and royalty, mysticism and reality) and can be narrated in a concise or elaborate way with varying degrees of evaluative language. Samples of Cinderella narratives collected by various researchers and available online in the AphasiaBank (MacWhinney, 2007) were used in this study. These story narratives in the AphasiaBank were collected using a prescribed protocol, and were transcribed using the CHAT system. The other discourse tasks included in the protocol were free speech samples (i.e., stroke story and coping, important event), several picture descriptions, and procedural discourse (i.e., peanut butter and jelly sandwich).

After determining that the participants were familiar with the story of Cinderella, the same protocol was followed for both aphasic and non-brain-damaged speakers. Participants looked through a Cinderella picture book after which it was taken away. They were then prompted by the researcher to narrate as much of the story as they could, using details that they already knew about the story as well from the pictures in the book. The researchers were instructed to encourage the participants to give as many details as they could until they concluded the story or it was clear that they were unable to continue. Most of the samples on the database have accompanying audio or video media which would be useful if considering gesture and facial expressions, however this was considered beyond the scope of this present study.

The Cinderella samples selected for this study were coded for emotional, ethical, and aesthetic attitudes (Martin, 2003), with a corresponding positive or negative valence (see Brendl and Higgins, 1996), as well as the abstract or concrete representation (see Audet and Burgess, 1999) for each evaluation. Differences in performance between aphasic and non-brain-damaged speakers, as well as between gender groups, were analyzed in terms of proportion of evaluations to the total story length, attitude (i.e., Affect, Judgment, or Appreciation), emotional valence (i.e., positive or negative), and cognitive representation (i.e., abstract or concrete) of evaluations.

3.3 Assessment

Three measures were used to assess the evaluative language used in the Cinderella narratives reviewed for this study: appraisal of attitudes (Martin, 2003), emotional valence, and cognitive representation in the form of abstraction vs. concreteness. These measures are described in detail below.

3.3.1 Appraisal of attitudes

Martin's (2003) appraisal framework posits three main evaluative functions as described earlier: dialogistic positioning, intertextual positioning, and attitudinal positioning. Of relevance to the current study is the function of attitudinal positioning wherein evaluations serve as indicators of "positive or negative assessment of people, places, things, happenings, and states of affairs" (Martin and White, 2005). Attitudinal positioning consists of evaluations of Affect, Judgment, and Appreciation; what each attitude encompasses and their manifestations are distinguished below based on the authors' descriptions.

Affect (or emotion) involves positive or negative evaluations of the emotional relationship between the narrator and the object of the evaluation (e.g., 'he fell in *love*', 'they were so *upset*'). Affect is usually realized using adjectives of emotion (e.g., *proud*, *angry*), verbs of emotion (mental verbs; e.g., *like*, *want*, *promise*), adverbs (typically Circumstances of Manner; e.g., *happily*, *unfortunately*), and nominalizations (converting verbs and adjectives into nouns; e.g., *joy*, *insecurity*).

Judgment (or ethics) involves positive or negative assessments of behavior based on culturally accepted rules or conventions (e.g., 'this *lovely* lady', 'the *wicked* stepmother'). The most obvious forms concern issues of legality, morality, and politeness (e.g., *law-abiding*, *virtuous*, *compassionate*). Other forms of judgment concern normality (e.g., *traditional*), competence (e.g., *intelligent*), and psychological disposition (e.g., *lazy*). Judgment is usually realized using lexical terms such as in the previous examples and in clauses (e.g., 'He *made a mess* in my kitchen').

Appreciation (or aesthetics) involves positive or negative assessments of "form, appearance, composition, impact, significance, etc., of human artifacts, natural objects, as well as human individuals (but not of human behavior)" (e.g., 'such a *wonderful* time', 'two *ugly* daughters'). It is different from Judgment in that it is not directed at behavior but rather

to attributes or properties of the object (or person). Appreciation is usually realized through adjectives (e.g., *scary*), verbs (e.g., ‘The sports car *cruised* by’ as opposed to ‘*drove* by’, adverbs (e.g., *quickly*), and nominalizations (e.g., *radiance*).

3.3.2 Valence

Valence is often used to describe and characterize emotions or feelings and behavior based on how appealing or aversive they are; the former is categorized as positive and the latter, negative (Brendl and Higgins, 1996; Barrett, 2006). Love, joy, and pleasure typically have positive connotations, while fear, jealousy, and anger typically have negative connotations. Actions and behaviors motivated by such “emotions” are likewise considered positive (e.g., hug) or negative (e.g., avoid). However, the subjective nature of such evaluations can result in some emotions and behaviors may be interpreted differently based on context or culture (e.g., “*proud*” in ‘She is *proud* of you’ vs. ‘She is too *proud*’). In this study, the predictable flow of the Cinderella story limits contradictory interpretations. In addition, all participants were culturally and linguistically homogeneous.

3.3.3 Cognitive representation

Cognitive representation was determined based on widely used definitions of abstract and concrete language. Abstract language does not have physical referents, but refers to ideas and concepts (e.g., good, justice, passion). Abstract terms often have unstable meanings which change based on usage and context (e.g., “*free*” in ‘Buy one, get one *free*’ vs. ‘You are *free* to leave’). Concrete language, on the other hand, refers to objects, actions, events, etcetera that are available to the senses (e.g., *car*, *sneeze*, *flooding*).

Abstract words occur more frequently, have larger contextual diversity (i.e., patterns of occurrences in diverse contexts), and are experienced differently compared to concrete words (Audet and Burgess, 1999). As they encounter abstract words more frequently, English speakers make stronger associations between abstract words and related contextual

information. This is seen in evaluative language where the use of abstract terms is higher than that of concrete terms (Armstrong and Ulatowska, 2007).

3.4 Analyses

Every evaluative expression from the narrative samples was thus assigned one of the three attitudes, a positive or negative valence, and an abstract or concrete representation. For example, “fell in *love*” was coded as affect, positive, and abstract, while “she’s just our *scullery maid*” was coded as judgment, negative, and concrete (see Table 3.3 for more examples).

Table 3.3. *Examples of evaluation coding.*

Expression	Attitude			Valence		Cognitive Representation	
	AFF ¹	JUD ²	APP ³	POS ⁴	NEG ⁵	ABS ⁶	CON ⁷
“treated Cinderella pretty <i>bad</i> ”		✓			✓	✓	
“becomes <i>enchanted</i> with her”	✓			✓		✓	
“ <i>big-footed</i> stepsister”			✓		✓		✓
“lived <i>happily</i> ever after”	✓			✓		✓	
“be their <i>servant</i> ”		✓			✓		✓
“ <i>belle</i> of the ball”			✓	✓		✓	

¹ Affect; ² Judgment; ³ Appreciation; ⁴ Positive; ⁵ Negative; ⁶ Abstract; ⁷ Concrete

Slang words such as “gonna” (going to), “kinda” (kind of), and “hafta” (have to) which are commonly used in spoken language, and mispronunciations such as “outiment” (outfit) and “stissers” (sisters) which could be understood from the context were counted towards the total word usage. Jargon and incorrect plural words such as “nadiya”, “russa”, “meeses”, and “mouses” were not included.

Words that were repeated for emphasis were coded as separate entries, while those that appeared to be perseverations or hesitations were not included. For example, in extract (i) below, the second “stay” was considered a repetition for emphasis, whereas in extract (ii), the last “good” was considered a repetition was not included in the number of evaluations produced.

- i. all of a sudden a [//] &uh &la &uh the [/] the [/] the prince was **good** . | it was **good** . | it was good .
- ii. and the prince says +“%. | + “no stay stay . | +“we [//] &uh the evening’s young yet . | +“we’re still going a lot before us .

Ambiguous utterances such as “I was good” in extract (iii) below which were problematic to categorize were also excluded from the analysis.

- iii. anyway a lot of pe(ople) . | I [/] I was good . | &uh Ci(nd)erella was [/] &wa &uh was **good** . | i(t) wa(s) **good** &a &a &am .

Context was considered during analyses since the attitudes described earlier take different forms in varying situations (e.g., ‘brilliant’ in ‘a brilliant plan’ would be a judgment if “plan” was evaluated as a result of human behavior, but appreciation if “plan” was seen as an object; ‘mean’ is a positive evaluation in ‘He throws a mean punch,’ but negative in “Don’t be mean’). In extract (iv),

- iv. &uh turning to the castle &uh the king is &uh very **upset** because his son has not taken a bride . | and he brings his **top** advisor to [/] &um &uh to develop a strategy to &uh find a wife for his son because he doesn’t want to &relinq die and relinquish his crown to his son without a wife to carry on the line .

“top” advisor was coded as positive appreciation on the assumption that the advisor was the highest ranked advisor rather than he who was the best at his job, in which case it would have been coded as a positive judgment.

Descriptive statistics were employed to compare the performance between aphasic and non-brain-damaged speakers, as well as between the gender groups. Pearson’s r was used to compare the correlation between the demographic variables (age, education, gender) with attitude, valence, and cognitive representation. One-way multiple-factor analysis of variance was run to examine if there were significant differences in performance between the two participant groups and gender groups, and paired-sample t -tests were run to assess whether there was a preference in using a particular attitude, whether there was a particular emotional valence or cognitive representation associated with each attitude.

Chapter 4

Results

A wide range was found in the length of narrative for both participant groups in this study. Normal speakers' narratives ranged from 195 to 869 words, while aphasic speakers' narratives ranged from 115 to 614 words. The total number of evaluations produced by the group of aphasic speakers was 53 in comparison to the 154 evaluations produced by the group of normal speakers. A breakdown of the amount of evaluations the participants produced based on attitude, valence, and cognitive representation is shown in Table 4.1.

Table 4.1. Raw number of evaluations produced by male and female aphasic (PWA) and normal (NBD) speakers.

Group	Attitude			Valence		Cognitive Representation		Average length of narrative
	AFF ¹	JUD ²	APP ³	POS ⁴	NEG ⁵	ABS ⁶	CON ⁷	
PWA female	7	6	3	10	6	16	0	210
PWA male	6	15	16	21	16	37	0	334
NBD female	16	21	27	38	26	64	0	351
NBD male	26	29	35	50	40	83	7	631

¹ Affect; ² Judgment; ³ Appreciation; ⁴ Positive; ⁵ Negative; ⁶ Abstract; ⁷ Concrete

With the exception of Affect in the aphasic speaker group, males produced a higher number of evaluations than females in both aphasic speakers and normal speakers. Female aphasic speakers produced the lowest amount of evaluations across all types of evaluation,

other than in Affect. Normal male speakers produced the highest number of evaluations across all types of evaluation, and were the only ones to use concrete words.

Consistent with the wide range in length of narratives, the rate in use of evaluations as a percentage of the total word usage ranged from 0.51 to 4.23 per cent in aphasic speakers, and from 2.64 to 7.49 per cent in normal speakers. A breakdown of the ratio of each type of evaluations to the total number of evaluations produced, as well as the ratio of total number of evaluative words to the length of narratives, is shown in Figure 4.1 below.

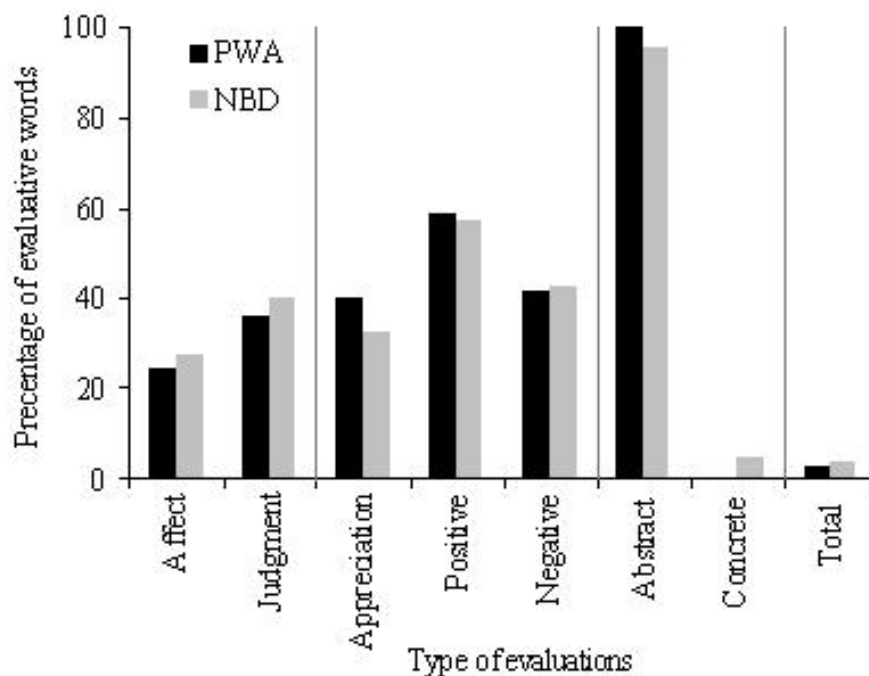


Figure 4.1. Type of evaluations used as a percentage of total evaluations produced.

Figure 4.2 illustrates the differences in performance based on the rate of each type of evaluation to the total evaluative words used in participants' narratives. Despite the fact that female speakers in this study produced fewer positive evaluations than males in terms of raw numbers, the rate at which they produced positive evaluations relative to their overall

evaluation usage was higher than that of male speakers in both aphasic and normal speakers. As is also evident from the figure, female aphasic speakers used Affect at a higher rate than all other participants.

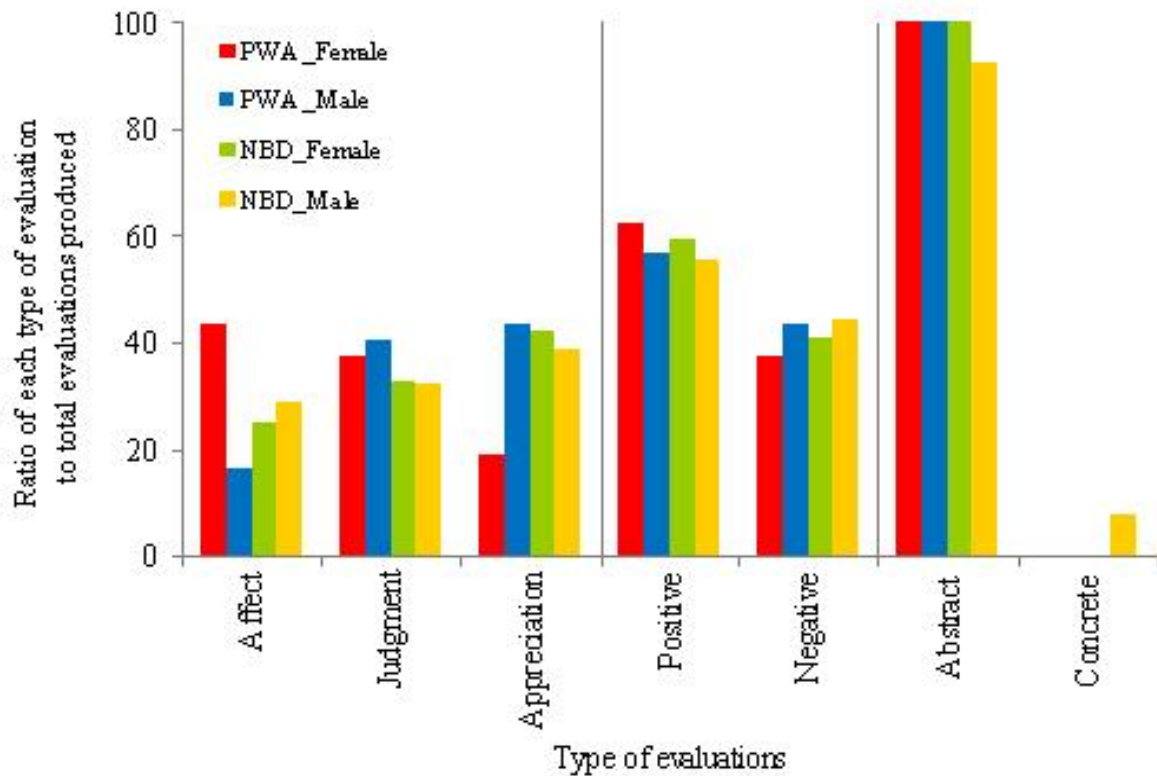


Figure 4.2. Ratio of each type of evaluation to total evaluations produced by aphasic (PWA) and normal (NBD) speakers.

When comparing aphasic speakers and the normal speakers that they were matched with on the basis of the ratio of evaluations to the total words produced, female participants had a higher rate of evaluative word usage than the male participants in this study (see Figure 4.3).

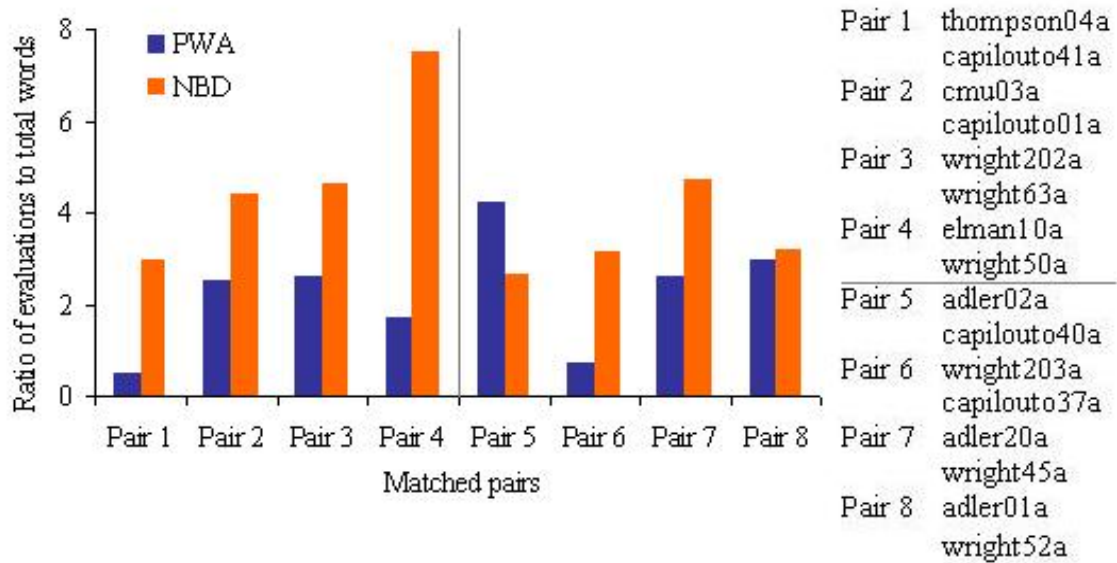


Figure 4.3. Pair-wise comparisons of total number of evaluations.

In six of the eight pairs, the aphasic speakers produced evaluations at a much lower rate than their normal counterparts. This pattern was also seen in Pair 8; however the difference was not as gaping as in the six other pairs. An opposite pattern was seen in Pair 5, where the aphasic speaker, adler02a, had a higher rate of using evaluations than his normal counterpart. While it is noteworthy that he produced over four times as many evaluations as the two aphasic speakers with the next highest number of evaluations (i.e., five), a closer look at his evaluations revealed an inflated rate of evaluation due to repetition of a few evaluative words. The following nonconsecutive extracts highlight the lack in variety of evaluative words in adler02a's narrative.

adler02a

- i. but all of a sudden the [/] &th the two womens [: women] [* +s-sup] were absolutely *awful* . | <and the> [/] and the &uh wife was *awful* too . | and so [/] so &i <I was> [//] &uh my [x 4] my [//] &wi &uh the [/] &w <the son> [//] the [/] the man was [//] died too . | and <tha(t) was> [/] that was it (be)cause boy

<I was> [/] I was &uh **terrible** like this . [+ es] | and &uh so I [/] &w <I was> [/] <I was> [//] I [x 3] I [/] &cou I [/] <I couldn't get the> [//] I [/] I go to the [/] the shirt and [/] and [/] and I [//] &w it was absolutely **awful** . [+ es]

- ii. I [/] I was **good** . | &uh Ci(nd)erella was [/] &wa &uh was **good** . | i(t) wa(s) **good** &a &a &am . | but I [/] I [//] &w the [/] &b the [/] the woman <and the> [/] and <the two> [//] &uh: &w the &uh [x 3] daughter was absolute(ly) **awful** .
- iii. <I couldn't get> [/] <I couldn('t) get but> [/] <I couldn't get> [//] but my [x 3] [//] &uh &l &bl the [/] the &uh &uh dress was **nice** but all of a sudden no(t) **nice** . | the [/] &uh [x 3] the [/] &uh the [/] the &uh hair &=ges:hair was **nice** but here . [+ jar] | an(d) &a &a an(d) so the [//] but <the prince> [/] &uh the prince I [/] &cou I couldn't get him . | it was **awful** .

The aphasic speaker with the least number and rate of evaluations, thompson04a, had the highest number of years of education (along with a female normal speaker) but was the most impaired amongst the aphasic speakers based on her Western Aphasia Battery—Aphasia Quotient score. Amongst the normal speakers, those that produced the highest and lowest numbers of evaluations were neither the most or least educated nor the youngest or oldest in the group.

Correlations were run using Pearson's r to look for patterns in evaluations based on age education, and gender. However, none of these variables was significantly correlated with the types of evaluations or the rate of evaluative word usage to total word usage. However, a strong correlation was found for the number of evaluations and the total word usage ($r=0.88$, $p < .01$). In the aphasic speakers, neither the Western Aphasia Battery-Aphasia Quotient scores nor the number of months post-onset of the stroke correlated to the total number of evaluations or the ratio of evaluative word usage to total word usage.

Analyses of variance of the data revealed that while gender did not have any significant effects, a significant main effect of participant group was found for the rate of evaluations used based on total word usage, $F(1, 15) = 7.35$, $p < .05$; that is, normal speakers used a significantly higher rate of evaluative words in their narratives than aphasic speakers.

Significance of participant group for Attitude-Valence combinations (i.e., Affect-positive, Affect-negative, Judgment-positive, Judgment-negative, Appreciation-positive, Appreciation-negative) was only found for Appreciation-negative, $F(1,15) = 5.71$, $p < .05$ (see Table 4.2 below). Thus, based on their total evaluative word usage, aphasic speakers used negative appreciation (e.g., old, ugly) evaluations significantly less than normal speakers.

Table 4.2. *F-values of participant group effect on Attitude-Valence combinations.*

	AFF ¹ - positive	AFF ¹ - negative	JUD ² - positive	JUD ² - negative	APP ³ - positive	APP ³ - negative
<i>F</i> (1, 15)	0.66	0.13	0.02	0.35	2.92	5.71
<i>p</i>	> .05	> .05	> .05	> .05	> .05	< .05*

¹ Affect; ² Judgment; ³ Appreciation; * Significant

In paired-sample *t*-tests to assess the rate of which Attitude-Valence combinations were used, significant differences were found in for all combinations (see Table 4.3 below).

Table 4.3. *t-values for rate of use of Attitude-Valence combinations.*

	<i>t</i> (15)	Significance
Affect-positive vs. Affect-negative	3.48	< .01*
Judgment-positive vs. Judgment-negative	-2.88	< .05*
Appreciation-positive vs. Appreciation-negative	3.17	< .01*

* Significant

Thus, Affect was more likely to be positive, Judgment, negative, and Appreciation, positive. Significant differences were also observed for abstract and concrete evaluations, $t(15) = 4.76, p < .001$, but not for the rate of positive and negative evaluations, $t(15) = 2.33, p > .05$. While evaluations tended to be abstract, a finding consistent with the notion that evaluative language comprises of far more abstract than concrete language, there was no difference in their valence.

Examples from the text of two normal and two aphasic speakers are listed below. These extracts were not consecutive utterances but were chosen to better illustrate the differences in the narratives produced by each group.

1. Normal speakers

a. capilouto01a

- i. and he didn't realize that the woman he married was so *wicked* . | but then the father passed away and so Cinderella was left to the &uh *wicked* &uh stepmother . | and &uh she had &uh two *ugly* daughters &=laughs . | and Cinderella was really *pretty* . | so they were really *jealous* of her .
- ii. and then the [//] he just *pined* away because he lost this *lovely* lady and [//] who he had really fallen in *love* with and wanted to &uh make his wife . | and so &um the king ordered &uh one of his servants to take the glass slipper around the village and have the maidens try it . | and when it was a *perfect* fit he knew that he had found the one &uh that the prince had fallen in *love* with . | so &uh when he went to the home of the &uh *ugly* stepsisters they tried to force <their big feet into the> [//] &s their *big* foot into the slipper .

b. wright45a

- i. and I guess the *mean old* aunt came in +/. | +, with the two *horrible* two beyond *despicable* daughters . | they were *terrible* . | they just looking at her as a *downgrade* . | and eventually while the father's away the aunt's running the house . | and Cinderella then becomes a *servant* . | she has to cater to them feed them clean the house wash their things . | and she's treated just as a *lowlife servant* .
- ii. and when she went to the ball and the prince saw her he was so *taken with* her that he spent the whole night dancing with her and having such a *wonderful* time . | and unbeknownst to her but those two &c <sisters or> [//] <cousins or> [//] <whatever they were> [//] stepsisters . | they were so *upset* and *depressed* . | and they're *squawking* and everything else like that . | and being that she's havin(g) a *wonderful* time .

2. Aphasic speakers

a. elman10a

- i. and she had &uh &uh &=ges:three three &uh gals that were supposedly [: supposedly] too **good** to clean &=ges:wipes &th this house . | so the gal Cinderella &=ges:wipes had to clean the house and stuff . | and the gals &l &l looked [//] watched . | and &um so Cinderella <got all of> [//] &=ges:clean cleaned the floor and stuff .
- ii. oh then there [/] there was this &uh other lady, the &m mother . | and she was not too **nice** either . | and &um I don't know what made &uh Cinderella &uh +... | &uh &f <she was> [//] she's gonna [: going to] go to a ball . | and &uh &um then <she was> [//] she had &=ges:gown this really **beautiful** dress and everything .

b. cmu03a

- i. and <though it> [//] &w well the fairy godmother came along and said &uh (.) she-'would give her anything . | and &uh &w well see [//] &sh <she fixed her up with> [//] &uh she &uh made her **beautiful** . | and so <he fell in love with the> [//] &uh the [/] &uh the &uh prince fell in **love** with her . | and &uh so he wanted to find her . | so afterwards &s they came and &uh they [//] they went through the neighborhood .
- ii. and so he [//] they [//] Cinderella was [//] was the [//] the &um oh &=throat:clear (.) +... | what &um Cinderella &d did when she found it out, she &uh made a [//] a move to <take the> [//] (.) take the &um &uh glass slipper and she [//] (.) <it was> [//] it fit the prince [: princess] [* s] . | or &uh the [//] the prince was **thrilled** with it when he found out . | and he found his princess . | so they lived **happily** ever after &=laughs .

It is evident from these examples that despite being able to get the story across, aphasic speakers have trouble narrating the Cinderella story and providing substantive and varied evaluations. Although not analyzed in this study, normal speakers exhibited fewer pauses in their narratives, while “um” and “uh” fillers were far more prevalent in the narratives of aphasic speakers.

The following differences were also observed in the narratives of aphasic and normal speakers:

- All but one normal speaker used the “happily ever after” ending, whereas only two of the aphasic speakers attempted to use the phrase.

- All of the concrete evaluations were negative and were produced by male normal speakers.
- In terms of the range of evaluations, the aphasic speakers had a very limited scope of evaluative words and so repeated them several times in their narratives.
- Normal speakers used several graduations such as “try really hard”, “really pretty”, and “really jealous” amongst others. They also exhibited use of other linguistic devices such as metaphors (e.g., “weight of greed”).

The implications of these results for assessing evaluative language in aphasic speakers and for diagnosing their moods based on their use of evaluative words in narratives are discussed in the next chapter.

Chapter 5

Discussion

The goal of this study was to determine whether people with aphasia used evaluative language in a story-retell task, and if they did, to what extent when compared to normal speakers. It was expected that if aphasic speakers produced evaluative language in their Cinderella narratives, that these evaluations would be restricted in amount and variety as Armstrong (2005) found to be the case with aphasic speakers' simplified and repetitive production of mental and relational verbs. The findings of this study suggest that while speakers with mild to moderate aphasia used evaluative language to punctuate their stories, the length and detail of their narratives, the rate at which they used evaluations, and the variety of such evaluations were limited. It is worthy to note that aphasic speakers were ultimately able to convey the gist of the story despite their limited speech, and that they compensated by gesturing and writing down words they could not utter.

With regards to demographic differences, while age and education did not impact the amount or rate of evaluations each aphasic and normal speakers produced, it is of interest that as a group, the aphasic speakers were a few months younger and had slightly higher number of years of education than the normal speakers. In terms of gender differences, despite the lack of a statistically significant difference in evaluative language use between male and female participants, the results of this study were generally consistent with Page's (2003) findings. While men produced longer narratives and women more instances of evaluations, the rate at which male and female participants in this study produced evaluations based on the length of their narratives was almost identical. The rate of production of evaluations was higher in women for Affect and for Appreciation in men; however, ironically, men produced

higher instances of evaluations for both Affect and Appreciation unlike in Page's study where women had more instances of Affect. A possible explanation for these differences may lie in the type of narrative used – the highly personal childbirth narrative versus a more impersonal story re-tell task. However, Page admitted being close(r) to the female participants in her study, which may have resulted in greater self-disclosure in the form of evaluations of Affect. The impact of age, education, and gender on use of evaluations while not evidenced in the current study are nevertheless important variables to consider in the assessment of evaluative language.

The Appraisal framework was crucial to the current study as it allowed for a uniform assessment of evaluations at the word level in participants' story narratives. The relatively predictable plot of the Cinderella story made attitudinal positioning, rather than dialogistic or intertextual positioning (which are more suited to assessing narratives that give more leeway to express personal opinions or reactions, such as a stroke or illness story), especially relevant to the current study. The aphasic speakers in this study demonstrated their ability to use the three types of attitudes – Affect, Judgment, and Appreciation. However, unlike the normal speakers who each used all three attitudes in their narratives, the aphasic speakers only used up to two types of attitudes each. While this observation does not imply that aphasic speakers are unable to use attitudinal positioning comprehensively, it hints at individual difficulties with particular types of evaluations.

The categorization of the evaluations produced in this study based on valence and cognitive representation also revealed that aphasic speakers used positive, negative, and abstract evaluations similarly to normal speakers, with the exception of concrete evaluations which were only produced by normal male participants. The latter finding was unexpected, and research on gender differences in preference for either word type (i.e., abstract or concrete) conflict despite acknowledging that such a difference does exist (see Bauer and

Altarriba, 2008). However, given that evaluative language tends to be more abstract, the complete absence of concrete evaluations in the aphasic speakers' stories is not alarming especially due to the paucity in use of concrete evaluations by normal male speakers and failure of normal female speakers to use any. On a related note, since participants in this study were instructed to provide as many details as they could recall about the Cinderella story as part of the data collection protocol, it is possible that what is assumed to be a generally positive experience and memory of a childhood story amplified the use of abstract evaluations. This explanation would corroborate Schellekens et al.'s (2010) finding that in situations which require them to be convincing, narrators use abstract terms to persuade their audiences based on a favorable experience or preference and concrete terms to dissuade audiences after an unfavorable experience.

Personal mood has been widely and consistently documented as having an effect on our opinions and judgments, such that positive moods facilitate positive evaluations while negative moods influence negative evaluations (for example: Forgas and Bower, 1987; Beukeboom and Semin, 2006; Egidi and Gerrig, 2009). Despite a lack of significant statistical difference between the rates of use of positive and negative evaluations in this study, both aphasic and normal participants produced positive evaluations in higher amounts and rates. This finding does not connote that the participants were in a positive mood, however, it is apposite to recall that none of the participants included in this study were depressed. In the absence of data on their moods in the TalkBank corpora, or alternately a comparison of evaluative language patterns in Cinderella narratives from a population of depressed aphasic and normal speakers, the relationship between evaluative language and mood remains an intriguing topic for future research.

On the issues of expressing emotion and identity, while the Cinderella story was not an ideal platform for personal evaluations or opinions, several evaluative devices as well as

phrases that established the participant's role as narrator were used; however, as is wont with aphasic speakers, these were restricted in range. The evaluative devices that were used by aphasic and normal speakers included repetition and direct speech ("come on, come on, let's go"), but there was only one example of metaphoric usage with a normal speaker ("weight of greed"). While there were a few instances where normal speakers expressed their personal stances while narrating the story - "I don't think the stepmother or stepsisters liked that", "I can hear the music from the classic Disney version of Cinderella which I have seen many times since I was probably eight years old" - the majority of instances in which they referred to themselves identified them as the narrator: "I can't remember their names", "I think I'm spinning tales here", "I guess he lost his wife", "I'm not sure". Aphasic speakers also referred to their personal stances - "when I was a boy", "I don't know what made Cinderella..." - however, these self-references lacked any follow-up making it hard to determine whether they were intended to be evaluative. Evidence that aphasic speakers were renegotiating their identities may be inferred from their use of phrases such as "I'm sorry about it", "I don't know, I guess he found it", "oh I know what it's...as well as I do my own name", "I forget what it's called", "I don't know what they call it", "the name I can never say" - these examples highlight a struggle with being able to express what they "know" rather than what they "think".

Since a baseline for the amount of evaluations used by the normal and aphasic participants in the current study was not established, it is difficult to ascertain whether their performance in the Cinderella story narration was typical or atypical. In the light of the fact that emotional discourse tasks facilitate the use of evaluative language in patients with left brain damage (Borod et al., 2000), the emotional elements of a fairy tale allow narrators to vary the degrees to which they express their opinions and feelings about the characters and events. Therefore, it may be speculated that participants' evaluations of the Cinderella

narrative in this study fall in the mid to upper range of typical evaluative language use. However, the flaws in making this assumption are, one, that the participants in Borod et al.'s (2000) study included aphasic and non-aphasic participants which limits the generalizability of their findings to aphasic speakers, and two, that the Cinderella story may not be personally emotional and therefore not represent a narrator's typical use of evaluative language. Furthermore, the fact that aphasic speakers may have difficulties with lexical access, coupled with the possibility that they are less engaged due to the nature of the task may also influence the level of detail and evaluation that aphasic speakers use. It is also likely that the changes in identity that aphasic speakers undergo after their strokes may play a role in what linguistic tasks they find interesting and/or personally relevant.

On a slight tangent, the expression of Affect inherently enables narrators to present their own opinions and feelings about the topic. Therefore, it is possible that in narratives that are not personally emotional, such as story re-tell tasks, narrators are forced to present a third-person's insights as if they were the narrator's own despite not having direct access to information to what that third person thought or felt (Bamberg, 1997). Thus, if comparing the use of evaluative language from the Cinderella story to a more emotional and personally relevant story, such as the stroke narrative, a similar comparison in normal speakers' experiences of a major illness may shed light on the extent to which normal and aphasic speakers evaluations are influenced or enhanced by their personal experiences. Another interesting approach would be to compare the evaluative performance of aphasic speakers with non-brain-damaged speakers with word finding difficulties, or other expressive linguistic impairments.

The context of narration must be considered when assessing evaluative language for its influence on the production of evaluations. The Cinderella stories used in this study were elicited towards the end of a battery of tasks and in a clinical or therapy setting for the

aphasic speakers. Research indicates that when narrating their stroke story in a medical environment (Hyden, 2007; Agar, 1985), patients often seek affirmation from their health care providers. If narrating the same story to people they encounter everyday in their private lives (Early, 1984), they may not provide as many medical details but rather narrate how they felt, what they did, etcetera. Finally, if narrating their stroke story in an interview setting where a researcher elicits information about their illness, their narratives may be impacted depending on, for example, whether they feel they are performing to the researcher's expectations. Thus, when interpreting evaluative content of narrative, the context in which the narrative was produced must be borne in mind due to the influence of context on the narrative's "form, presentation, and interpretation" (Hyden, 2007). With regards to narratives that are not necessarily personally emotional, for instance, a narrative in everyday life such as telling grandchildren a story is spontaneous and may be more evaluative than the same story when elicited in a clinical or therapy setting. This holds true not only for aphasic speakers, but for normal speakers too.

While aphasic speakers have problems with lexical access and often with forming cohesive and coherent utterances, Armstrong and Ulatowska (2007) found that they could ascertain aphasic speakers' evaluations even when their utterances were incomplete demonstrating that "aphasic individuals do not have to have intact syntax and semantics in order to convey meaning". Whether it is to compensate for difficulties with word finding or to reinforce an utterance, in addition to lexical means, evaluations can also be conveyed through non-verbal and paralinguistic devices. However, the role of gestures, facial expressions, body language, etcetera, to convey emotions or thoughts was not considered in the current study, making it possible that aphasic speakers' evaluations were underrepresented.

Though narrators convey their evaluations in a myriad of ways, the appraisal of evaluations in this study was limited to the explicit realization of these evaluations by categorizing them using the attitudinal positioning of Affect, Judgment, and Appreciation. This approach excludes any other types of evaluations that aphasic and normal speakers may have used and presents narrators as using very limited types of evaluations in such storytelling tasks. Future research may examine how all components of Martin's Appraisal system are used not only in storytelling tasks, but also in emotional and non-emotional discourse.

From a clinical perspective, it is impossible to draw conclusions about the moods of aphasic speakers based on their use of evaluations in this study. However, when analyzed in conjunction with mood data, Appraisal of evaluative language in aphasic speakers' discourse may allow therapists to look for patterns in language use that may suggest that their patients are experiencing depressive feelings. In addition, based on the finding in this study that aphasic speakers may have problems with one or more types of evaluation, working on such categories in therapy and then tracking the changes in amount and variation in evaluations used over time may provide insight into how aphasic speakers cope with their identity change.

The mode of storytelling has not been used before as a tool to assess the ways in which speakers express evaluations, but based on the findings of this study, it shows promise in the exploration of evaluative language in aphasic discourse. Coupled with the Appraisal system's classification of different types of evaluations, storytelling provides a new avenue for evaluations in aphasic language to be studied.

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