This article examines changes in language comprehension and production in normal aging, the ways in which lay conceptions of older adults’ abilities influence speech directed towards older people, and the effects of that speech on older recipients. Important changes that occur in language as a function of age-related pathology (e.g., Alzheimer’s disease) are covered elsewhere (e.g., Kemper and Mitzner, 2001).

Considerable work has focused on language comprehension problems in aging, with a particular focus on the effects of age on the processing of language. Age-related changes in language comprehension have been extensively studied, and a number of models have been proposed to account for these changes. One of the most widely accepted models is the cognitive model of language comprehension, which posits that language comprehension involves a series of stages, including encoding, storage, and retrieval of information. Age-related changes in these stages have been hypothesized to account for the observed differences in language comprehension abilities in older adults.

Another important area of research in language comprehension in aging is the influence of speech rate and clarity on comprehension. Older adults tend to have slower speech rates and reduced clarity of speech, which can affect their ability to understand language. Research has shown that older adults are more likely to experience listening difficulties when the speaker is speaking slowly or with reduced clarity.

Age-related changes in language production have also been studied extensively. Older adults tend to have reduced fluency in language production, which can be due to a variety of factors, including decreased vocabulary, reduced cognitive resources, and reduced motor control. Research has shown that older adults are more likely to experience difficulties in generating complex grammatical structures and in producing language with appropriate intonation.

In summary, language comprehension and production in aging involve a complex interplay of cognitive, linguistic, and social factors. Future research should continue to explore the ways in which these factors influence language abilities in older adults, and how these abilities can be enhanced through interventions.

Aging and Language

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on the role of working memory capacity. Correlation-
aal evidence suggests that age is associated with prob-
lems in understanding complex syntactic structures,
and that those problems are largely accounted for
by parallel declines in working memory capacity
(Norman et al., 1991). Complementary patterns are
apparent in language production. Older adults pro-
duce less complex syntax, and again, such declines
are largely accounted for by declines in working
memory (Kemper et al., 1992). Particular problems
are experienced with left-branching clauses, and with
utterances that include multiple clauses – syntactic
structures that put particular strain on working
memory. Fast speech rate also results in decreased
comprehension for older adults more than for
younger adults (Stine and Wingfield, 1987).

Recent research suggests that the association of
communication problems with working memory is not
a result of the immediate processing in working
memory, but rather a function of “postinterpretative
processing” (Caplan and Waters, 1996). That is, older
adults demonstrate equal initial understanding and
processing of language, but demonstrate deficits in
the storage and integration of linguistic material
into memory for future retrieval and use.

Attention has been paid to older adults’ ability to
inhibit irrelevant or intrusive thoughts and the impli-
cations of this for language production and compre-
hension. Harsher and Zacks (1988) suggest that a
decline in inhibitory ability is part of normal aging,
and that it accounts for communication problems in
older adulthood. Other scholars assign the associa-
tion between inhibitory capacity and language use to
pathological conditions. For instance, Pushkar, Gold
and Arbuckle (1995) suggest that “off target verbosi-
ty” in older adulthood is a result of declines in fron-
tal lobe functioning occurring among a minority of
older adults. This debate is ongoing.

Less controversy is apparent in examinations of
older adults abilities to recall proper names. Consider-
able evidence indicates problems in this area (Cohen,
1994). Proper names appear to present a particular
delay between given their uniquely arbitrary and semanti-
cally unelaborated character. Nussbaum, Hummert,
Williams, and Harwood (1995) point out that proper
nouns have no synonyms, which removes one retrieval
route that is used in other situations of retrieval
difficulty.

While not strictly language-related, considerable
communication problems for older adults are also
caused by presbycusis – the normal age-related de-
cline in upper-frequency hearing. While research into
other communication problems has generally
attempted to control for hearing declines, presbycusis
is a somewhat specific pattern of hearing loss that
may contribute to some of the problems observed in
other research (Schneider et al., 1994).

The work described above has revealed important
problems for older adults’ communication, as well as
developing theoretical understanding of psycholinguis-
tic processes. However, it has also sometimes con-
formed to more general notions that aging is about
decline, and thus may serve to reify stereotypical
notions of aging (Coupland and Coupland, 1990). In
the remaining sections, some less pessimistic messages
concerning communication and aging are emphasized.

First, the scholars described above are generally
careful to note that, many findings reflect small
effects that are observable in the laboratory, but
have only minor effects in everyday communication
(Ryan, 1991). In addition, research has revealed mul-
tiple ways older adults compensate for specific defi-
cits, such as by relying more heavily on prosody
or processing at a more global level (Stine and
Wingfield, 1987, Stine-Morrow et al., 1996). Also,
findings of deficits among a group of older adults may
due to some subset of that group who are actually
experiencing the early (undetected) stages of some
form of dementia, rather than a general pattern of
decline across all participants (e.g., note that longitudi-
unal work sometimes shows little age-related
change, except among those who experience working
memory decline: Kemper et al., 1992). Related to
this, many negative effects begin around age 80: Dis-
crepancies among age groups within the ‘older adult’ population is therefore essential.

Second, language and aging research has paid scant
attention to what might improve, or remain unchanged,
with age as compared with what might decline. Normal
aging has no effect on lexical availability or semantic
memory (Kemper and Mitzner, 2001), vocabulary in-
creases into old age (Salthouse, 1988), and narrative
production improves with age (Kemper et al., 1989).
We have little systematic knowledge of older adults’
abilities in group decision-making, public speaking,
or emotional expression, yet each of these seems open
to improvement into late old age. The creative writing
skills of older people might also merit investigation as a
potential area of improvement in language (Sternberg
and Lubart, 2001).

Third, a focus on ‘decrement’ causes inattention to
the positive functions that may be served by what
are apparently aberrant behaviors. For instance,
Coupland, Coupland, Giles, Henwood, and Wiemann
(1988) describe a pattern of “painful self-disclosure”
(PSD) among older people – e.g., disclosure to relative
strangers about personal issues such as illness or be-
reavement. It would be possible to interpret this as a
sign of egocentrism or a decline in conversational
skill. However, Coupland et al. (1988) illustrate the
functional nature of PSD for managing age-related face threat.

Fourth, research has begun to pay attention to the social construction of decline and decrement in old age, i.e., decline is created by language use concerning age and language directed towards older adults. Levy (1996) shows that making negative age stereotypes salient leads to less competent behavior (e.g., memory problems). These stereotypes are likely to be activated when older adults are addressed with stereotype-driven language strategies. For instance, patronizing talk to older people (in various manifestations called overaccommodation, elderspeak, secondary baby talk) is documented in numerous settings (Kemper, 1994), particularly institutional settings (Caporael, 1981), and is driven by stereotyped conceptions of aging (Ryan et al., 1986; Hummert et al., 2004). Patronizing speech can result in ‘blame the victim’ effects (recipients of such speech are perceived to be impaired, even if they are not: Hummert and Ryan, 2001). Varieties of this speech are associated with dependency in institutional environments (Baltes and Wahl, 1996), and older adults in institutional settings become accepting of such speech despite initially viewing it negatively (O’Connor and Rigby, 1996). Ironically, certain elements of the patronizing style (particularly semantic elaboration and reduced syntactic complexity) are helpful to older adults’ comprehension, but other elements are harmful, such as prosodic adjustments and reduced sentence length (Kemper and Harden, 1999).

This brief review does not touch on all aspects of language and aging (e.g., paralinguistics of older people’s speech, critical approaches, etc.). As noted by Coupland (2004), aging has received less attention than race/ethnicity, gender, class, and regional variation within the sociolinguistic literature on group variation. This is, however, beginning to change, and attention to aging issues is now common in psycholinguistics (Kemper and Mitzner, 2001) and communication (Nussbaum and Coupland, 2004). The theoretical and practical implications of this work are tremendous.

Bibliography


Agrammatism is a disorder that leads to difficulties with sentences. These difficulties can relate both to the correct comprehension and the correct production of sentences. That these difficulties concern sentences is evident from the fact that word comprehension and production can be relatively spared. Agrammatism occurs in many clinical populations. For Wernicke’s aphasia, for instance, this has been established for both comprehension and production. Agrammatic comprehension has been demonstrated in Parkinson’s patients, Alzheimer patients, and children with specific language disorders. However, agrammatism has been studied most systematically in patients with Broca’s aphasia, and it is this group that is the focus of this article.

**Agrammatism in Comprehension**

The large majority of studies on agrammatism in Broca’s aphasia have been on comprehension. An important impetus to these studies was the claim made by Zurif and Caramazza in the early 1970s that Broca’s aphasics lack all knowledge of syntactic rules. It appeared that these patients were unable to comprehend reversible sentences such as ‘the cat that the dog chased was black’ (Caramazza and Zurif, 1976). The hypothesis that Broca’s aphasics were ‘asynctactic’ led to three different reactions. The first was that this global characterization ignores the possibility that these patients may all be classifiable as Broca’s aphasia but that their underlying deficits may be very different (Badecker and Caramazza, 1985). In support of the claim that agrammatism is not a unitary phenomenon, a number of studies have demonstrated that problems in comprehension can dissociate from problems in production (Miceli et al., 1983); that in production, problems with grammatical morphology can dissociate from problems with syntax per se (Miceli et al., 1983); and that there is large variation in the type of morphological errors within a group of patients (Miceli et al., 1989). (It should be noted that the latter findings were obtained from a large group of unselected aphasic patients, both fluent and nonfluent. However, grammatical deficits may manifest themselves very differently in fluent and nonfluent aphasia.) The critique by Badecker and Caramazza has widely been taken as a critique on neuropsychological group studies as such and has led to a substantial shift from group to case studies, particularly in the areas of reading, writing, and naming. Many researchers still insist on the usefulness of group studies in the case of agrammatism, maintaining that these patients share a number of important symptoms that need to be accounted for. A second reaction came from aphasiologists with a linguistic background. It held that instead of a loss of all syntax, only specific subsets of linguistic competence could be lost. In particular, when patients have to understand sentences with noncanonical word order, such as the ones employed by Caramazza and Zurif, they perform at chance, whereas they seem relatively unimpaired with canonical sentences (Grodzinsky, 1989). This approach has led to a large number of linguistically motivated studies of agrammatism, which are discussed in **Agrammatism II: Linguistic Approaches**.

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**References**


Caramazza and Zurif, they perform at chance, whereas they seem relatively unimpaired with canonical sentences (Grodzinsky, 1989). This approach has led to a large number of linguistically motivated studies of agrammatism, which are discussed in **Agrammatism II: Linguistic Approaches**.

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**Agrammatism I: Process Approaches**

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