1. Introduction

We are all creatures of habit, whether that habit is our preferred route to drive somewhere, our preferred breakfast foods or our preferred way of using verbs plus particles. We repeat ourselves on several different levels. In ordinary talk, people repeat sounds, words, phrases, and grammatical patterns, and usually neither we nor our partners notice anything other than perhaps one particular phrase or word, such as the way a young speaker might use *like* to report somebody’s talk (*And he was all like I’m outta here*). More noticeable are deliberate word and phrase repetitions in speeches such as Martin Luther King’s stirring *I have a dream* or the political oratory of Jesse Jackson (see Tannen 1989: 174-95). Repetition is more than emphasis or a mental stutter: Johnstone’s well-regarded collection (1994) includes twenty-eight different scholarly discussions of repetition and its ‘structural, cognitive, and interactional’ (Martin 1995: 576) functions from a wide range of situations and disciplinary orientations. As summarized by He (1996:140), the discussions include the examination of repetition in literary discourse, language learning, workplace sites, and ordinary conversation, from sound and syllable to plot components and philosophical readings.
In one of her earlier studies, Johnstone comments that repetition is how speakers illustrate ‘the underlying paradigmatic structure’ of the discourse (1987: 205). One particular strand of study is that by researchers who are interested in the way that one instance of a word or construction can prime the speaker to use the same form again. Bock (1986) for example, found that if speakers read out a priming sentence that was passive (e.g. John was seen by Mary) they were likely to describe a picture by using a passive (the referee was punched by one of the fans). Sankoff and Laberge (1978) investigate the rates at which speakers switched between the French general pronoun on and the more specific tu-vous, ils or nous and noted that speakers most often persist with the pronoun they first used while referring to the same entity. Priming has been found both for production (see e.g. Scherre and Naro 1991, 1992) and for perception. Rae and Warren (2002), for example, carried out experiments on semantic priming for New Zealand English and found that the presentation of a word such as chair in a sentence resulted in a related word like sit being recognised faster than an unrelated word such as toe. Sankoff and Laberge and Scherre and Naro use corpora of natural speech for their analyses, but most other people who have looked at priming have used experimental tasks (cf. Bock 1986 and Rae and Warren 2002). Gries (2005: 366-67) reviews the experimental literature on spoken priming and then considers the use of naturalistic data. He claims that corpora of natural data allow researchers to look at levels other than discourse-level priming or lexical repetition.

Szmrecsanyi (2005) looks at repetition in two large scale corpora, (the British National Corpus and the Freiburg English Dialect Corpus). He uses the more neutral term persistence rather than priming because he does not consider it possible to disentangle all the motivations that may prime a speaker to use a particular form in a corpus study. He says
In naturalistic data, speakers’ output may exhibit persistence effects for reasons of rhetoric, politeness (for instance, Tannen 1982, 1987, 1989), or thematic coherence, to aid the process of gap filling in creating and processing elliptical utterances (for instance, Mathews 1979), to open up question-answer pairs (for instance, Levelt and Kelter 1982), because speakers feel like intentionally repeating items from previous discourse, or because they have been primed in preceding discourse. (Szmrecsanyi 2005: 144).

Szmrecsanyi focuses on syntactic persistence and finds that speakers are persistent in using their preferred ways of expressing comparison (cleverer or more clever), placing particles (John looked up the word vs. John looked the word up) and marking the future (with be going to vs. will) (Szmrecsanyi 2005: 118). In order to identify persistence, Szmrecsanyi first calculates the overall occurrence of the item of interest in the corpus as a whole. He then considers consecutive instances of the item of interest. If each occurrence of the item is independent, then the probability of the second item in each pair being the same as the first will be the probability of their occurrence in the total corpus. If the second item is the same as the first more often than expected in the corpus as a whole, for whatever reason, then this is identified as persistence.

The non-experimental work on repetition/persistence has usually focused on relatively large corpora of speech. Our interest in this paper is to see whether the concept of persistence is useful for work with unimpaired single-speaker conversational interviews. We examine the speech of two women and provide some preliminary baseline data on persistence in their spoken material. We examine persistence in a syntactic feature (used to vs would to describe habitual past actions), lexical persistence (repeated phrases like in those days), and review the use of pragmatic markers like you see or oh and hesitation phenomena such as um. We also consider rhetorical persistence
with one speaker’s use of *well*. We are not aware of any studies of persistence (or of syntactic priming) in conversational data for New Zealand English.

Eventually, we propose to use Szmrecsanyi’s term *persistence* to investigate repetitiveness in speakers with Alzheimer’s disease from our collections of conversations with speakers who have dementia (Davis 2005a; Maclagan, Davis and Lunsford in press). We have found that, as the disease progresses, speakers may use habitual phrases more often. One of our speakers, for example, uses expressions like *that’s the way it goes* or *you’ve got to keep moving* several times within a short interactional period, while another often commented that her husband preached *hell hot and heaven beautiful* (see Maclagan, Davis and Lunsford in press). Such persistent phrases are relatively easy to notice, especially when they are repeated regularly. However, before we are able to fully understand the significance of such repetition in the language of speakers with Alzheimer’s disease, we need to establish whether persistence can be examined in relatively short interviews, and obtain baseline data on normal speakers.

2. Methodology

In this paper we focus on the speech of two women, MD, born in 1921, and MH, born in 1918. Both interviews were conducted in the 1990s by Dr Rosemary Goodyear as part of an oral history project and both now form part of the Intermediate Archive of the Origins of New Zealand English project (ONZE) at the University of Canterbury (see Gordon, Maclagan and Hay 2007). We chose speakers from this archive to match two of the New Zealand speakers in our Alzheimer’s data bases in terms of age, social class and birthplace. The interview topics focus round the speakers’ childhoods,
including material on their schools and homes. They were recorded on audio cassette tapes on Sony Walkman recorders. They have been digitised and time-aligned to be part of the ONZE corpus (see Gordon, Maclagan and Hay 2007 for details). Although Dr Goodyear’s interviews sometimes lasted for several hours, a maximum of one hour has been digitised for the ONZE corpus. Approximately 52 minutes is available for MD, and 18 for MH. Because more data is available for MD, we focus on her interview, and make comparisons with MH.

In order to identify potentially persistent phrases, we used WMatrix (Rayson 2001), to identify multiword expressions (MWE) in the transcripts. MWEs such as *by and large, take a walk or pull strings* can be decomposed into several simple words, but they are lexically, pragmatically and/or syntagmatically idiosyncratic (Moon 1998, Wray and Perkins 2000, Wray 2004, Kecskes 2000). We highlight the hesitation phenomena, usually *um* and *er*, and tokens such as *oh* and *ah* which can mark hesitations or else serve as pragmatic markers. Pauses are marked and identified as either less than or greater than 2 seconds.

### 3. Results and discussion

MD and MH are matched in terms of interviewer and topics; however they present very different patterns of persistence over items they both use as well as idiosyncratic persistent items, and thus demonstrate some of the variation that occurs within normal NZE. In this discussion, as noted above, we focus mainly on the speech of MD, and make brief comparisons with the speech of MH, in order to see if the concept of persistence is useful for work with single-speaker conversational interviews.
3.1 Syntactic persistence

Because the interviews focus on the speakers’ childhoods, the content is focused on the past. For MD, WMATRIX identified *used to* as the MWE she used most commonly – *I remember she used to have fried eggs for tea on a Friday*. In this sense, *used to* expresses habitual past action. Another way of expressing such action uses *would*: *she’d have fried eggs* rather than *she used to have* (see Tagliamonte and Lawrence 2000). Both MD and MH use *would* in this way as well as *used to*. Table 1 presents the usage of both *used to* and *would* for both speakers. We included both the abbreviated ‘*d and the full form *would* in this analysis.

**Table 1**: Use of *used to* and *would* for past habitual action by MD and MH

<table>
<thead>
<tr>
<th>speaker</th>
<th>Used to</th>
<th>Would</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>56</td>
<td>50</td>
<td>106</td>
</tr>
<tr>
<td>MD % use</td>
<td>53%</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>MH</td>
<td>12</td>
<td>40</td>
<td>52</td>
</tr>
<tr>
<td>MH% use</td>
<td>23%</td>
<td>77%</td>
<td></td>
</tr>
</tbody>
</table>

It is clear from Table 1 that MD uses *used to* slightly more often than *would* for past habitual action, whereas MH uses the reverse pattern. It is also clear that MH’s preference for *would* is stronger than MD’s preference for *used to*. At the simplest level, then, each speaker persists with her preferred syntactic form. This pattern is not affected by the interviewer. In MH’s interview, the interviewer uses no examples of *used to* or *would* and in MD’s interviewer, she uses 3 tokens of *used to* and 6 of *would*. The high percentage use of *would* is perhaps surprising, since Tagliamonte and Lawrence found that, for their speakers, *used to* was used more often than *would* (2000: 330). However an
unpublished class project using the ONZE data base found that speakers born at the same time as MD and MH used relatively fewer tokens of *used to* than speakers born at other times covered by the ONZE corpora (Heidi Quinn, personal communication).

Table 1 shows the overall usage of *used to* and *would* for MD and MH. However, it does not show the pattern of usage. Work on syntactic priming has shown that speakers tend to reuse the form they have just used – the initial occurrence primes the second occurrence, and so syntactic priming or persistence occurs (see Gries 2005 and Szmrecsanyi 2005 for examples of such work in corpus data). Table 2 shows this usage pattern by indicating how often each speaker persists with using either *used to* or *would*. Each occurrence of *used to* or *would* is treated as the potential stimulus for the next occurrence.

In an utterance like and Gran always had . fried eggs . I remember she *used to* [first] have fried eggs for tea on a Friday . the train *used to* [second] get in about five o’clock I think and then they’d sit there and chat about the week the first occurrence of *used to* is the stimulus for the second. (Conventional punctuation is not used in transcriptions, apart from question marks to indicate questioning intonation. Full stops ‘.’ represent pauses of less than 2 seconds. See Gordon, Maclagan and Hay 2007.) As is most usual for MD, the second item is the same as the first. However, she then changes to *would* with and then they’d sit there. The second occurrence of *used to* serves as the stimulus for ‘d, and demonstrates that persistence does not always hold. Szmrecsanyi (2005: 117) and Gries (2005: 367) both indicate that any occurrence of a word may help influence a speaker’s subsequent word choice, with Szmrecsanyi commenting that *go* in a phrase like *you go look* may help trigger the use of *be going to* as a future marker in a nearby utterance (2005: 117). We followed this methodology and counted *used to* and *would* as potential triggers even when
they were used in other senses (e.g., ‘to get used to’). They were not, of course, counted as examples of persistence in these non habitual meanings.

The expected frequencies of used to and would/’d were calculated according to the total frequencies of the two items for the speaker and the interviewer over the whole of each interview (see Gries 2005: 372, Szmrecsanyi 2005: 121). For both speakers, the second item is the same as the first item significantly more often than expected (for MD, chi-squared = 12.26, df = 1, p = 0.0005, and for MH chi-squared = 14.23, df = 1, p = 0.0002). Whether MH uses used to or would, her tendency is to persist with the first item so that the second item is the same as the first stimulus item more often than expected (see the bold items in the lower half of table 2). Although MH uses used to twelve times over the interview, used to is not her most frequent multiword expression. However used to is MD’s favourite MWE, and she persists in its use even when the stimulus item is would (see the bold items in the top half of Table 2). Both MD and MH thus show persistence with used to and MH shows persistence with would but MD’s persistence for used to is stronger than MH’s.

Table 2: Persistence of used to and would for MD and MH. The expected values for the second items based on their total frequency in the texts are shown in brackets. Persistent items are shown in bold.

<table>
<thead>
<tr>
<th></th>
<th>Second item</th>
<th>Second item</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Used to</td>
<td>would</td>
<td></td>
</tr>
<tr>
<td>First item: used to</td>
<td>31 (19.5)</td>
<td>21 (32.5)</td>
<td>52</td>
</tr>
<tr>
<td>First item: would</td>
<td>28 (23.6)</td>
<td>35 (39.4)</td>
<td>63</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>102</td>
<td>163</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Second item</th>
</tr>
</thead>
<tbody>
<tr>
<td>MH</td>
<td>Total</td>
</tr>
<tr>
<td>First item: used to</td>
<td>7 (2.3)</td>
</tr>
<tr>
<td>First item: would</td>
<td>5 (8.4)</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
</tr>
</tbody>
</table>

Note: column totals are based on frequency in the interviews as wholes (see Gries 2005: 372, Szmrecsanyi 2005: 121).
3.2 Lexical persistence

It is harder to analyse lexical persistence with the amount of speech available in single interviews. WMatrix highlighted three phrases that MD used ten or more times in the interview: *in those days, sort of* and *a bit*. She used *in those days* ten times when she was deliberately emphasising the difference between her childhood and the present. One example is *in those days* you only had chicken at *um Christmas and Easter* or something like that you know now of course it’s *sort of* an ordinary meal isn’t it? Although MH was similarly contrasting past and present, she only used *in those days* once – *my neighbours said ooh we must buy some fireworks for and so each ah shopping day we’d get a little bag cos they were cheaper then in those days*. The interviewer does not use the phrase *in those days* in either interview – it is a phrase that is idiosyncratic and persistent for MD.

Both the interviewer and MD use the minimisers *sort of* and *a bit*. The interviewer uses *sort of* ten times, four times as minimisers (*or did you sort of share a big bed with your sister?* where the intonation makes it clear that this is a minimiser rather than the equivalent of *like* for younger modern speakers) and the rest of the time as a specifier (*what sort of things would you have in the middle of the day?*) (see Holmes 1988 for a description of the use of *sort of* in NZE speech). MD uses *sort of* as a minimiser (*he was sort of the you know lord of the manor*), often when she is trying to explain something (*so they were sort of now my cousin is sort of like she’s still part of the family you know*). MD uses *sort of* a total of 34 times, five times accompanied by a pause and five times with *you know*, which is discussed below. MD uses *sort of* considerably more than the interviewer, which is not surprising, since she produces considerably more speech. However their use of *a bit* is more balanced, with the interviewer using it seven times, usually as a minimiser in her questions (*now*...
I’m just going to ask you a bit about…), and MD using it ten times. The interviewer’s use of a bit never follows a turn in which MD has used it, and MD usually persists with her preferred minimiser sort of. Only once does she follow the interviewer’s use of a bit in her answer:

I: was it a bit scary starting school?
MD: well it was a bit really

By contrast, MH does not use a bit at all, and only uses sort of twice. This difference in lexical usage again highlights the difference between the two speakers and demonstrates MD’s persistent use of several favourite MWEs.

3.3 Persistence in use of pragmatic particles and hesitation markers

MD uses several pragmatic particles during her interview. Table 3 presents the most common particles and their meanings. It is immediately clear that the different particles and hesitation markers are not used randomly. Discussions of you know and similar phrases are plentiful; most researchers comment that while such markers are often used to monitor listener attention and comprehension, they also have additional functions (see, for example, Aijmer 2002, Fox Tree and Schrock 2002; Erman 2001; Macaulay 2002; for a specific discussion in the language use of older persons, see Davis 2005b). Phrases such as you know and you see can be used for quick checks of listener comprehension. They have similar basic ‘meanings’ and common functions. However in MD’s speech they are used slightly differently. You know is offered as part of a clarification and you see to extend (and check the reception of) an explanation.
I always thought that there was a – that the coffin going up to the church was on a . thing drawn by a horse. you know sort of a big thing and people sitting up in the front

and a mantle there was a fire place you see it sort of had a mantelpiece – that was about all really – oh and the wardrobes were built in. so that’s why we didn’t have to have wardrobes

**Table 3**: Pragmatic particles and hesitation markers used by MD, with meanings in order of frequency

<table>
<thead>
<tr>
<th>Particle/ hesitation</th>
<th>n</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Um</em></td>
<td>4</td>
<td>+ long pause – can’t remember</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>+ short pause – marshalling thoughts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– explanation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>no pause – marshalling thoughts</td>
</tr>
<tr>
<td><em>Oh</em></td>
<td>8</td>
<td>Suddenly remembering</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Unsure</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Definite</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Definite</td>
</tr>
<tr>
<td><em>On no</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>You know</em></td>
<td>12</td>
<td>Clarification</td>
</tr>
<tr>
<td><em>You see</em></td>
<td>11</td>
<td>Explanation</td>
</tr>
<tr>
<td><em>Er/ ah er</em></td>
<td>6</td>
<td>Correction</td>
</tr>
<tr>
<td><em>Well</em></td>
<td>4</td>
<td>– Delay, thinking something through</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>– Contrast, presenting another side</td>
</tr>
</tbody>
</table>

Well as a discourse marker has multiple functions, such as a delay strategy (Smith and Jucker 2000) which can deflect a potentially awkward and face-
threatening silence while the speaker thinks something through (Brown & Levinson 1987). Different speakers buy time and save face with different markers; MD apparently prefers *well*. MD’s responses to (a) through (d) signal that she was not able to retrieve specific details but wanted to offer something about her school days. Each answer is vague or incomplete: ‘we must have had toast’ for breakfast because MD refused to eat porridge (a); she does not provide a specific instance of how she and her siblings may have been mischievous (b); while she can identify who made the dressier clothing, she presumes that gym outfits were the school clothes (c); and the description of the dressier clothing she can remember is prompted by a nearby photograph (d).

(a) *I: so did you what did you have for breakfast in that case?*  
MD: *well* we must have had toast. I I wouldn’t eat porridge

(b) *I: so did you get up to a bit of mischief as a child?*  
MD: *well* we always seemed to be doing things and we used to. we used to amuse ourselves a lot

(c) *I:… who made your clothes or were they bought?*  
MD:  
*well* cos our we wore wore gyms. to school. and um. no um um we had our frocks made by. a Mrs Worm

(d) *I: and what kind of material were the dresses the good dresses{made} MD: {well} the one I can remember most is the ones we got photos there. sort of navy um. serge with a black and white collar.*

MD’s use of *well* in examples (e) and (f) points to something a little different. The reporting of a conversation with oneself serves as a delay strategy, but it
also allows MD to do several rhetorical things at once. She is presenting more than one side, and, not coincidentally, establishing or maintaining herself as authority and arbiter. She is signalling a contrast to the preceding line of discourse. She is also, at the same time, offering the listener a chance to affiliate with the new story line by offering a disclosure. In (e), she discusses a person who did not socialize in expected ways for the time. The well draws a line between the Country Mouse and the City Mouse: a person ‘coming up from the country,’ and only recently settled in, could not really be expected to socialize or even to know how to do it, assuming she would wish to. In (f), MD again uses a rhetorical strategy of seeking affiliation and expands on how her family provided the person not just with any kind of companionship, but with a great deal of lively company.

(e) she didn’t seem to have any friends really she didn’t go out you see and didn’t do anything socially . didn’t go to meetings or anything. well of course coming up from the country. and just settled in there

(f) and just settled in there and seemed to be quite happy though cos we were there for company . well we provided a lot of company [laughs] there was always something going on

4. Implications

According to Szmrecsanyi (2005: 114), ‘language users are hard-wired to go for recently used (or activated) linguistic patterns whenever they can.’ Szmrecsanyi notes Tannen’s claims that ‘repetition in conversational interaction maintains involvement, connection, and interaction...[it is] speaker economical ... and hearer economical’ in terms of processing load on
both speaker and hearer (Szmrecsanyi 2005: 115). This also accords well with Wray (2002) and Wray and Perkins (2000), who make similar claims on behalf of formulaic language.

Psychologists and psycholinguists are keenly interested in the role of memory in various kinds of repetition. Shintel and Keysar (2007) devised two eye-tracking experiments to focus on how people use the same referring expressions throughout a conversation, concluding that hearers ‘expect speakers to use the same expressions in conversation, independently of cooperativeness’ (p. 362). Their claim is that this repeated reference, also called ‘lexical entrainment’ (p. 357; see Brennan 1996, for a discussion of repeated reference in dialogue systems), can arise either from ‘listeners’ inferences about a speaker’s current linguistic behavior on the basis of that speaker’s past behavior … [or] ordinary non-goal-directed memory processes in which the speaker’s identity acts as a retrieval cue for a stored expression–referent mapping’ (p, 368). Our conversational interviews are audio-only, and are characterized by a willingness by both interviewer and interviewee to cooperate in the larger sense of ‘telling about’ early days in New Zealand. We have no way to choose between Shintel and Keysar’s two competing explanations for repeated reference, since either one will fit our data. The concept of persistence enables a fine-tuned appreciation of ways speakers use repetition without making assumptions about the causes of the repetition. The two analysed interviews seem to contain a particular kind of repetition which serves to disclose and proffer information as reminiscence, within a sociolinguistic interview framework.
5. Conclusion

The conversations we examine here can hardly be counted as a full corpus, though they are samples of such; nonetheless, we find that looking at language features from the perspective of persistence has expanded our understanding of the complex repertoire of ways these two older, normally-aging speakers choose to present themselves and share stories from their past.

Our analysis of MD’s, and to a lesser extent, MH’s speech suggests that the concept of persistence is useful for an examination of syntax, lexis, and pragmatic particles. Both MD and MH use very similar items in different ways, but both demonstrate persistent use of their preferred words and devices. Considerably more analysis of normal speakers will be necessary before any comparison can be made with the speech of people with Alzheimer’s disease. Ideally, there should be a comparison of impaired speech from such people with their unimpaired speech before the disease affected their communication. This, unfortunately, is rarely possible. This preliminary analysis of two unimpaired speakers gives us the beginnings of a window on language and aging, and provides an initial background against which analyses of persistence within the speech of other unimpaired speakers and of speakers with Alzheimer’s disease can be compared.

Acknowledgments

We wish to thank Paul Warren and two anonymous reviewers for helpful comments on an earlier version of this paper. The speakers analysed are part of the Intermediate Archive of the Origins of New Zealand English project (ONZE) at the University of Canterbury (see Gordon, Maclagan and Hay, 2007). The interviews
were conducted by Rosemary Goodyear. The work done by members of the ONZE project in preparing the data, making transcripts and obtaining background information is gratefully acknowledged.

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