Letter to the Editor

Sherlock Holmes and the Strange Case of the Missing Attribution: A Historical Note on "The Grandfather Passage"

Jamie Reilly^a and Jamie L. Fisher^a

Purpose: In 1963, Charles Van Riper published "My Grandfather," a short reading passage that has evolved into a ubiquitous metric of reading ability and speech intelligibility. In this historical note, we describe several heretofore unacknowledged similarities between "The Grandfather Passage" (Darley, Aronson, & Brown, 1975) and a portion of *The Valley of Fear* (Conan Doyle, 1915/2006), the final novel of the Sherlock Holmes series. We also describe overlap between "My Grandfather" and "The Grandfather Passage." **Method:** We contrasted propositions within *The Valley of Fear* to "My Grandfather" and "The Grandfather Passage." We also compared the respective text strings using the Turnitin antiplagiarism software application (iParadigms, 2011).

Results: "My Grandfather" and "The Grandfather Passage" are nearly identical passages with 88% string overlap. In addition, both passages show similarities with text from The Valley of Fear. Conclusions: Darley et al. (1975) did not acknowledge Van Riper (1963) as the original author of "The Grandfather Passage." In addition to this citation oversight, neither Darley et al. nor Van Riper attributed Conan Doyle as original source material. We describe the colorful history of this passage that has seen a remarkable breadth of utility in speech and language sciences.

Key Words: aphasia, discourse, assessment, psychometric

any researchers in speech, language, and hearing sciences with interests as broad as aphasia, stuttering, dyslexia, motor speech disorders, and auditory perception will likely have both a strong familiarity with and affinity for "The Grandfather Passage" and its penultimate phrase, "Banana Oil!" (Darley, Aronson, & Brown, 1975; Van Riper, 1963). This mainstay of speech and language assessment was originally designed to elicit an oral reading sample, and since its inception has provided a metric for analyses of many aspects of oral reading and speech motor functioning. In addition to its research and clinical applications, "The Grandfather Passage" is also employed today in

an official capacity by the U.S. military's Office of Aerospace Medicine as a screening tool for speech intelligibility among astronauts, pilots, and air traffic controllers (U.S. Department of Transportation, 2008). As such, "The Grandfather Passage" has evolved much like the Cookie Theft Picture Description (Goodglass & Kaplan, 1983) or the Mini-Mental State Examination (Folstein, Folstein, & McHugh, 1975) as a common standard assessment.

Many attribute the "The Grandfather Passage" to Darley et al.'s (1975) seminal text, *Motor Speech Disorders* (for examples of work citing Darley et al., 1975, see Adams & Lang, 1992; Constantinescu et al., 2010; De Bodt, Hernández-Díaz, & Van De Heyning, 2002; Farrell, Theodoros, Ward, Hall, & Silburn, 2005; Hiiemae et al., 2002; McLeod, 2006; Ogar et al., 2006; Platt, Andrews, Young, & Quinn, 1980; Wohlert & Hammen, 2000; Yiu, Worrall, Longland, & Mitchell, 2000). However, the passage originally appeared over a decade earlier under the title "My Grandfather" in the fourth edition of *Speech Correction* (Van Riper, 1963). Its author, Charles Van Riper, was a founding father of stuttering and voice research in the United States.

"The Grandfather Passage" represents a diverse inventory of English phonemes appearing both in isolation

^aUniversity of Florida, Gainesville Correspondence to Jamie Reilly: jjreilly@phhp.ufl.edu Editor and Associate Editor: Anne Smith Received June 22, 2011 Accepted October 19, 2011

DOI: 10.1044/1092-4388(2011/11-0158)

¹The etymology of "Banana Oil" is itself noteworthy. This is not a neologism or author-generated quirk but rather an accepted phrase whose popularity dates from the 1920s in a series of comics by American cartoonist Milt Gross (Kelman, 2010).

and also nested within an array of phonotactically improbable clusters (e.g., frock, zest). Alongside taxing articulatory demands, "The Grandfather Passage" batters its reader with syntactic and semantic complexity. As such, the passage offers an ideal mode of eliciting speech and reading errors. The diagnostic utility of the passage is also augmented by its brevity in that the original passage is composed of only 132 words and typically takes less than 3 min to administer.

Charles Van Riper (1963) introduced "My Grandfather" in a sparse manner, offering little description other than

The following passage may be used for a quick survey of the student's ability to produce correct speech sounds. It includes all of the speech sounds and may either be read by the student or be repeated phrase by phrase after the examiner. (p. 484)

Importantly, Van Riper did not include additional supporting detail regarding how he derived the content of the passage. Thus, Van Riper's failure to cite a secondary source (e.g., an earlier novel) or a colleague (e.g., Frederic Darley) must logically be interpreted as the passage reflecting his sole creative contribution. The text of Van Riper's "My Grandfather" appears in Figure 1.

Twelve years after Van Riper published the original version of "My Grandfather," a near identical version of the passage emerged under a newly minted title, "The Grandfather Passage." Although it is not uncommon for an author to reiterate and extend his findings in a later edition of a clinical textbook, this was not the context in which "The Grandfather Passage" appeared. Instead, a slightly altered version of "My Grandfather" appeared as an appendix to *Motor Speech Disorders* (Darley et al., 1975, Appendix D, p. 298). "The Grandfather Passage," as depicted in Figure 2, has since been adopted as today's standard in the domain of adult aphasia and motor speech disorders.²

"My Grandfather" and "The Grandfather Passage" are strikingly similar, differing by the substitution of only four words (e.g., ancient/old) and the deletion of several short phrases and bound morphemes; a string matching comparison using the TurnItIn software (iParadigms,

Figure 1. "My Grandfather" (Van Riper, 1963).

My Grandfather (Van Riper, 1963)

You wished to know all about my grandfather. Well, he is nearly ninety-three years old; he dresses himself in an ancient black frock coat, usually minus several buttons; yet he still thinks as swiftly as ever. A long, flowing beard clings to his chin, giving those who observe him a pronounced feeling of the utmost respect. When he speaks, his voice is just a bit cracked and quivers a trifle. Twice each day he plays skillfully and with zest upon our small organ. Except in the winter when the ooze or snow or ice prevents, he slowly takes a short walk in the open air each day. We have often urged him to walk more and smoke less, but he always answers, "Banana oil!" Grandfather

2011) algorithm showed an 88% overlap. Although one might speculate coincidence, the statistical probability of this occurrence far exceeds threshold for our standard of reasonable doubt. Thus, we can with a relatively high degree of confidence reject the null hypothesis that the relation between these passages is incidental. Because "My Grandfather" (Van Riper, 1963) chronologically preceded "The Grandfather Passage" (Darley et al., 1975), one must conclude that "The Grandfather Passage" represents a minor modification of its predecessor, "My Grandfather." Yet, despite the clear overlap between passages, Motor Speech Disorders (Darley et al., 1975) does not include any explicit attribution of Van Riper as the original author of the passage. The same lack of attribution is evident in several other widely cited studies by Darley and colleagues that utilized speech samples elicited from "The Grandfather Passage" as an

Figure 2. "The Grandfather Passage" (Darley et al., 1975). Gray highlighted text indicates a 1:1 match with "My Grandfather" (Van Riper, 1963).

GRANDFATHER PASSAGE (Darley et al. 1975)

You wish to know about my grandfather. Well, he is nearly 93 years old, yet he still thinks as swiftly as ever. He dresses himself in an old black frock coat, usually several buttons missing. A long beard clings to his chin, giving those who observe him a pronounced feeling of the utmost respect. When he speaks, his voice is just a bit cracked and quivers a bit. Twice each day he plays skillfully and with zest upon a small organ. Except in the winter when the snow or ice prevents, he slowly takes a short walk in the open air each day. We have often urged him to walk more and smoke less, but he always answers, "Banana oil!" Grandfather likes to be modern in his language.

²A reviewer has raised the possibility that several iterations of "The Grandfather Passage" might, in fact, precede both Van Riper (1963) and Darley et al. (1975). Bunton, Kent, Duffy, Rosenbek, and Kent (2007) attributed "The Grandfather Passage" to William Gray (Standard Oral Reading Paragraphs: My Grandfather; Gray, 1936). Interestingly Gray's (1936) publication was also preceded by a first edition (Studies of Elementary-School Reading Through Standardized Tests; Gray, 1917). The presence of a "Great Grandfather" passage contemporary with The Valley of Fear (Conan Doyle, 1915/2006) adds a layer of intrigue to the story. If indeed "The Grandfather Passage" originated with Gray (1917), we must clearly amend the history of the passage. We were, however, unable to confirm the presence of these sources through searches of the U.S. Library of Congress and the respective publishers. Thus, further confirmation of a putative "Great Grandfather" awaits.

outcome measure for discriminating between dysarthrias (e.g., Darley, Aronson, & Brown, 1969a, 1969b). This persistent lack of attribution to Charles Van Riper is dubious because Darley and Van Riper were one-time colleagues who collaborated on several projects prior to the original publication of "My Grandfather" (Darley & Van Riper, 1959; Van Riper & Darley, 1961).

The striking similarities between "The Grandfather Passage" and "My Grandfather" are only a small part of this strange story. Although one might be tempted to chastise Darley et al. (1975) for their citation oversight, it appears that Charles Van Riper (1963) was himself also perhaps somewhat lax in his attribution of portions of "My Grandfather" to a previous author. The original source to which we refer is Sir Arthur Conan Doyle's (1915/2006) final novel of the Sherlock Holmes series, The Valley of Fear.

Similarities Among *The Valley of Fear,* "My Grandfather," and "The Grandfather Passage"

Our reader will first benefit from a description of the motivation and method by which we linked Sherlock Holmes to "The Grandfather Passage." Thus, we depart briefly from narrative convention and describe personal circumstances that led to the circuitous development of this historical note. The first author is an aphasiologist who regularly administers "The Grandfather Passage" as part of his language battery. Recently, he evaluated a patient who showed an idiosyncratic pattern of surface dyslexia on the passage that was characterized by semantic errors on low-frequency words. These odd error patterns elicited further scrutiny of the content of the passage. Later that evening, on the first author's bedside table, pleasure reading awaited him in the form of *The* Valley of Fear (Conan Doyle, 1915/2006). Upon reaching the story's dénouement, the following phrase (p. 91) gave its reader pause:

an elderly man, shrewd, silent, and self-contained, clad in an old black frock coat, which with his soft felt hat and ragged, grizzled beard gave him a general resemblance to an itinerant preacher.

The salient phrase "old black frock coat" and the unusual semantic content of this sentence struck its reader

as remarkably similar to "The Grandfather Passage" that he had administered hours before. This curiosity then led to comparison of the Sherlock Holmes text with that of "The Grandfather Passage." We isolated each of the propositions within the three texts using standard discourse coding criteria. Table 1 represents a comparison of the propositions organized by semantic similarity.

As the reader will discern, *The Valley of Fear* converges with both "My Grandfather" (Van Riper, 1963) and "The Grandfather Passage" (Darley et al., 1975). Yet, the passages also diverge in several respects, including the addition of detail (e.g., description of a felt hat) and lexical substitutions (e.g., "grizzled" in place of "long") in Conan Doyle's (1915/2006) passage that are absent in the other passages. It is perhaps paradoxical that one of the very few modifications Darley et al. (1975) made to Van Riper's (1963) passage was to change "ancient black frock coat" to "old black frock coat," thus matching more closely the original Sherlock Holmes text "old black frock coat."

One might argue on the basis of simple intuition that similarity between "My Grandfather" and The Valley of Fear is entirely coincidental (Peelle, 2011). Moreover, it is clear that the overall extent of divergence between passages precludes any formal allegation of plagiarism. Yet, we could also consider the alternate possibility that Van Riper (1963) adapted text from The Valley of Fear as a subtle tribute to a favored author or text. If this is indeed the case, then one might also entertain the possibility that Van Riper nested an inside quip within what has since become one of our most ubiquitous measures of reading. Such an assumption is not outside the realm of feasibility when one considers the character of the author. In addition to a prolific body of research in stuttering, Van Riper was also an accomplished novelist and poet (Kuster, 2009) who penned work under both his own name and also under his nom de plume, Cully Gage. As Gage, Van Riper wrote a series of popular novels about life and nature in the Upper Peninsula of Michigan (Gage, 1982, 1987, 1988). Yet, another twist in this story is that Van Riper was also a writer of murder mysteries (Van Riper, 1945). A clever sleuth might, therefore, deduce that Van Riper's original intent was to pay a veiled tribute to the grandmaster of mystery literature, Sir Arthur Conan Doyle, by weaving excerpts into "My Grandfather." Whether the same can

³A reviewer pointed out a noteworthy exception. In an article in the journal *Medical Clinics of North America*, Darley, Aronson, and Brown (1968) remarked, "A sample of contextual speech can be elicited by having the patient tell about a picture representing a situation, or one may have the patient read a standard paragraph of simple prose containing all the consonants and vowels of English, as well as some consonant clusters Such a passage is 'My Grandfather' reproduced (with slight alterations) from Van Riper" (p. 836).

⁴The phrase "old black frock coat" was likely familiar to both Van Riper (born in 1905) and Conan Doyle (born in 1859). Both authors saw the rise and fall of the fashion of the frock coat, which peaked in the later 1800s and fell thereafter in favor of morning coats and lounge suits (Horn, 1999). ⁵We also submitted the specified block of text from *The Valley of Fear* to TurnItIn. This antiplagiarism software yielded a 100% match with the published text itself. However, TurnItIn did not identify Conan Doyle's (1915/2006) passage as having consistent word-for-word correspondence with any published source.

Table 1. A comparison of propositions in excerpt from *The Valley of Fear* (Conan Doyle, 1915/2006), "My Grandfather" (Van Riper, 1963), and "The Grandfather Passage" (Darley et al., 1975).

Proposition	Conan Doyle (1915/2006)	Van Riper (1963)	Darley et al. (1975)
1	old [man]	old [man]	old [man]
2	silent [man]		
3	self-contained [man]		
4	[wearing] coat	[wearing] coat	[wearing] coat
5	coat is old	coat is ancient	coat is old
6	coat is black	coat is black	coat is black
7	coat is frock coat	coat is frock coat	coat is frock coat
8		coat lacks buttons	coat lacks buttons
9	shrewd [man]	quick-thinking [man]	quick-thinking [man]
10	[man] wears hat		
11	hat is soft		
12	hat is felt		
13	man has beard	man has beard	man has beard
14	beard is ragged	beard is long	beard is long
15	beard is grizzled	beard is flowing	beard is flowing
16	beard gives resemblance to preacher	beard gives feeling of respect	beard gives feeling of respect
17	preacher is itinerant		,
18		[man] takes walk	[man] takes walk
19		walk is slow	walk is slow
20		walk is short	walk is short
21		walk is daily	walk is daily

be said of Darley et al.'s (1975) iteration of "The Grandfather Passage" is unclear.

In its tenure of almost half a century, "The Grandfather Passage" has seen a remarkable tour of duty as a research tool, clinical diagnostic measure, and screening device. Here, we have detailed some unique properties of this measure. To recap, there are two distinct but also strikingly similar versions of the passage. "My Grandfather" was designed by Charles Van Riper (1963) as a primary means for eliciting dysfluencies and stuttered speech. Darley et al. (1975) appeared to slightly modify the original version and subsequently renamed it "The Grandfather Passage." In so doing, Darley et al. did not explicitly cite Van Riper as the original source of the passage. Whether intentional or otherwise, this oversight seems to have produced an unintended consequence, in that today, most researchers link Darley et al. to "The Grandfather Passage." In addition to the similarities between "My Grandfather" and "The Grandfather Passage," both reading passages also arguably share similarities to a block of text from Conan Doyle's (1915/2006) Sherlock Holmes novel, The Valley of Fear.

Concluding Remarks

It is our sincere intent that this historical note not be construed as an assault on the standards of scholarship of any individual. Rather, we hope that our readers will further appreciate the history of this unique measure that has so vibrantly informed our field. As we approach the half-century mark (or arguably longer) of the publication of "My Grandfather," many colleagues and former students who trained with Van Riper and Darley remain active in the field. Therein perhaps rests our best hope for solving the mystery of "The Grandfather Passage."

Acknowledgments

This work was funded by National Institutes of Health Grant K23 DC010197 (to the first author). We are grateful to Joseph Duffy, who during the original review of this work was instrumental in calling our attention to several secondary sources and unconsidered historical lines. We also thank Kenneth Logan and Jonathan E. Peelle for advice and counterpoint.

References

- Adams, S. G., & Lang, A. E. (1992). Can the Lombard effect be used to improve low voice intensity in Parkinson's disease? *International Journal of Language & Communication Disorders*, 27, 121–127.
- Bunton, K., Kent, R. D., Duffy, J. R., Rosenbek, J. C., & Kent, J. F. (2007). Listener agreement for auditory-perceptual ratings of dysarthria. *Journal of Speech, Language, and Hearing Research*, 50, 1481–1495.
- **Conan Doyle, A.** (2006). *The valley of fear* (Kindle version). Retrieved from amazon.com. (Original work published 1915)
- Constantinescu, G., Theodoros, D., Russell, T., Ward, E., Wilson, S., & Wootton, R. (2010). Assessing disordered speech and voice in Parkinson's disease: A telerehabilitation application. *International Journal of Language & Communication Disorders*, 45, 630–644.
- Darley, F. L., Aronson, A. E., & Brown, J. R. (1968). Motor speech signs in neurologic disease. *Medical Clinics of North America*, 52, 835–844.
- Darley, F. L., Aronson, A. E., & Brown, J. R. (1969a).
 Clusters of deviant speech dimensions in the dysarthrias.
 Journal of Speech and Hearing Research, 12, 462–496.
- Darley, F. L., Aronson, A. E., & Brown, J. R. (1969b).
 Differential diagnostic patterns of dysarthria. *Journal of Speech and Hearing Research*, 12, 246–269.
- Darley, F. L., Aronson, A. E., & Brown, J. R. (1975). Motor speech disorders (3rd ed.). Philadelphia, PA: W.B. Saunders Company.
- Darley, F. L., & Van Riper, C. (1959). Introduction to speech problems. Basel, Switzerland: Ciba Pharmaceutical Company.
- De Bodt, M. S., Hernández-Díaz, H. M., & Van De Heyning, P. H. (2002). Intelligibility as a linear combination of dimensions in dysarthric speech. *Journal of Communication Disorders*, 35, 283–292.

- Farrell, A., Theodoros, D., Ward, E., Hall, B., & Silburn, P. (2005). Effects of neurosurgical management of Parkinson's disease on speech characteristics and oromotor function.

 Journal of Speech, Language, and Hearing Research, 48, 5–20.
- Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975).
 Mini-Mental State: A practical method for grading the state of patients for the clinician. *Journal of Psychiatric Research*, 12, 189–198.
- Gage, C. (1982). Heads and tales. Au Train, MI: Avery.
- Gage, C. (1987). What? Another Northwoods reader? Au Train, MI: Avery.
- Gage, C. (1988). A love affair with the U.P. Au Train, MI: Avery.
- Goodglass, H., & Kaplan, E. (1983). The assessment of aphasia and related disorders (2nd ed.). Philadelphia, PA: Lea & Febiger.
- **Gray, W. S.** (1917). Studies of elementary-school reading through standardized tests. Chicago, IL: University of Chicago.
- **Gray, W. S.** (1936). Standard oral reading paragraphs:

 My grandfather. Bloomington, IL: Public School Publishing Company.
- Hiiemae, K. M., Palmer, J. B., Medicis, S. W., Hegener, J., Scott Jackson, B., & Lieberman, D. E. (2002). Hyoid and tongue surface movements in speaking and eating. *Archives of Oral Biology*, 47, 11–27.
- **Horn, P.** (1999). *Pleasures and pastimes in Victorian England*. Stroud, United Kingdom: Sutton Publishing.
- iParadigms. (2011, June). Turnitin [Computer software]. Oakland, CA: Author.
- Kelman, A. Y. (2010). Geeve a listen! A Milt Gross Comic Reader. In A. Y. Kelman (Ed.), *Goldstein–Goren series* in American Jewish history (pp. 1–54). New York, NY: New York University.

- Kuster, J. (2009). Bibliography of Charles Van Riper. Retrieved from www.mnsu.edu/comdis/kuster/vanriper/vrbib.html
- **McLeod, S.** (2006). Australian adults' production of /n/: An EPG investigation. *Clinical Linguistics & Phonetics*, 20(2–3), 99–107.
- Ogar, J., Willock, S., Baldo, J., Wilkins, D., Ludy, C., & Dronkers, N. (2006). Clinical and anatomical correlates of apraxia of speech. *Brain and Language*, 97, 343–350.
- **Peelle, J. E.** (2011). It's a complete coincidence. In J. Reilly (Ed.), *Google chat* (pp. 1–3). Mountain View, CA: Google, Inc.
- Platt, L., Andrews, G., Young, M., & Quinn, P. T. (1980). Dysarthria of adult cerebral palsy: Intelligibility and articulatory impairment. *Journal of Speech and Hearing Research*, 23, 28–40.
- U.S. Department of Transportation. (2008, April). Army aviation standards regulation 40-501: Standards of medical fitness. Retrieved from www.faa.gov/library/reports/medical/ oamtechreports/index.cfm
- Van Riper, C. (1945). The hook of the Parmachene Belle (A murder mystery). Unpublished manuscript.
- Van Riper, C. (1963). Speech correction (4th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Van Riper, C., & Darley, F. L. (1961). Introduction to speech disorders. *JAMA: The Journal of the American Medical Association*, 175, 416.
- Wohlert, A. B., & Hammen, V. L. (2000). Lip muscle activity related to speech rate and loudness. *Journal of Speech*, *Language*, and *Hearing Research*, 43, 1229–1239.
- Yiu, E., Worrall, L., Longland, J., & Mitchell, C. (2000).
 Analysing vocal quality of connected speech using Kay's computerized speech lab: A preliminary finding. *Clinical Linguistics & Phonetics*, 14, 295–305.

Sherlock Holmes and the Strange Case of the Missing Attribution: A Historical Note on "The Grandfather Passage"

Jamie Reilly, and Jamie L. Fisher *J Speech Lang Hear Res* 2012;55;84-88 DOI: 10.1044/1092-4388(2011/11-0158)

This information is current as of February 21, 2012

This article, along with updated information and services, is located on the World Wide Web at: http://jslhr.asha.org/cgi/content/full/55/1/84

