Case Study: Chief Justice John Roberts Jr. and the U.S. Presidential Oath of Office
A Comparative Analysis of the January 20, 2009 Swearing-in Ceremony

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Abstract

In this paper I offer a detailed analysis of the mistakes that occurred when Chief Justice John Roberts Jr. Administered the United States Presidential Oath of Office to President Barack Obama on January 20, 2009. The speech errors were examined in terms of models of memory and of speech acts. Brief comparisons were also made with four subsequent Oath administrations by Roberts when he cited the Oath correctly. I suggest that Chief Justices should read the oath to the Presidents in Shorter Segments, and that they should carefully rehearse the procedure in advance of the official swearing-in ceremony.

Keywords: Chief Justice John Roberts, U.S. Presidential Oath of Office, memory.

Following the vote for a United States President in November of an election year, as mandated in the Acts of the 28th Congress of the United States (1845), the official swearing-in ceremony takes place two months later, as mandated in the Constitution of the United States (2013). The Twentieth Amendment (Section 1-6) specifies that the term of the current President shall end at noon on January 20 in the year following the election and that the term of the new President shall then begin. This implies that taking the Presidential Oath of Office is not required to be appointed as President. However, it is also stated in the Constitution (Article 2, Section 1, Clause 8) that, before entering into the execution of the office, the President must take the Oath. This means that it is required before the President takes any actions as President. The Oath reads as follows:

"I do solemnly swear (or affirm) that I will faithfully execute the Office of President of the United States, and will to the best of my Ability, preserve, protect and defend the Constitution of the United States."

Although it might be thought that the new President should be referred to as the President-elect (which was how Chief Justice Warren E. Burger addressed Ronald Reagan in 1981), it is clear from the Constitution that the new President has already assumed that position when the Oath is taken. I shall therefore use the term "President" or "new President" rather than "President-elect". In the Oath, the President's name is entered after "I" and "swear" is usually preferred over "affirm". Although not part of the Oath, "So help me God" is usually added at the end (Pfander, 1999). There have been 44 presidents, and the Oath has been given 75 times (Oath of Office of President of the United States, n.d.). Some presidents were elected more than once and some took the Oath again, either because there were errors in the original administration or because January 20 fell on a Sunday (Coleman, n.d.; Medea's Biggest Fan, 2017). Information is available for 30 of these ceremonies from various sources (e.g., Coleman, n.d. ; Oath of Office of President of the United States, n.d.), and 28 can be viewed in a YouTube compilation (Medea's Biggest Fan, 2017).

From these sources, it is surprising to discover that the protocol for administering the Oath is not absolutely fixed (McKelvie, 2018). Two important variations are (a) whether the Oath is read or whether it is cited from memory and (b) the number of segments (four, five, six, seven or eight) in which the Oath is presented. In three

other variations, there is or is not a mention of (c) being ready, (d) instructions for the hands, and (e) "repeat after me". Finally, (f) either the third ("you") or first ("I") person is used (McKelvie, 2018).

Over the years, there have been speech errors by the Chief Justice and/or the new President. In particular, a statistical analysis showed that Chief Justices made significantly more mistakes when they recalled the Oath from memory (errors occurred in 5 out of 12 cases) than when the Oath was read (no errors in 13 cases) (McKelvie, 2018). It might be thought that errors are also more likely if there are fewer segments (i.e. there is more information per segment), but data for the number of errors in different-sized segments were insufficient to statistically test this hypothesis (McKelvie, 2018).

The main purpose of the present paper is to carefully examine what occurred on January 20, 2009 when Chief Justice John Roberts Jr. administered the Oath of Office to President- Barack Obama. This particular ceremony is worthy of scrutiny because errors were more numerous on this occasion than in previous ceremonies in which errors occurred (McKelvie, 2018). Over the years, Chief Justices and Presidents have made speech errors when stating the Oath (see McKelvie, 2018 for details). However, they had not been considered sufficiently serious to have the Oath retaken. The Oath has been retaken on two previous occasions, but this occurred because of the objection that the people who administered the Oath did not hold the office of Chief Justice. On the present occasion (January 20, 2009), the Oath was retaken on the following day (January 21, 2009). As observed above, it is clear from the Constitution that the President has already assumed office when the Oath is administered, but it is also clear the Oath must be taken before any duties are performed. Although there are no official specifications in the Constitution that the Oath must be taken without error in order for the administration to be valid, there was considerable discussion of this matter, indicating that there was uncertainty about the implications of the errors for the status of the new President (Baron, 2017). Because of this uncertainty, the Oath was retaken, with Roberts's blessing (Baron, 2017; Jacobs, 2013). White House Counsel Greg Craig was quoted as saying that "We believe that the oath of office was administered effectively and that the President was sworn in appropriately yesterday…But the oath appears in the Constitution itself. And out of an abundance of caution, because there was one word out of sequence, Chief Justice Roberts administered the oath a second time" (Barack Obama retakes oath after mistakes at inauguration, 2009). This shows why it is interesting to examine why the errors occurred.

In this paper, I first scrutinize how Roberts administered the oath on January 20, 2009: I describe his mistakes and consider how they have been interpreted. This includes a critical discussion of the explanation offered by Pinker (2009). In particular, I analyze the errors in terms of models of memory and a model of speech acts, with particular reference to the literature on false memory. I also comment on President Obama's responses. Then I briefly compare how Roberts administered the Oath to Obama on January 20, 2009 with what he did on four subsequent occasions [readministration to Obama on January 21, 2009; January 20 and 21, 2013 (Obama) and January 20, 2017 (President Donald Trump)].

The research method adopted here meets the requirements of a descriptive single-case study because it is an enquiry of a phenomenon in a real-life or natural context (Yin, 1981, 2012): the focus is on the behavior of Chief Justice Roberts when he administered the Presidential Oath of Office. Information was obtained from archival records, which are a common source of case study data (Yin, 2012). The paper contributes to scientific knowledge by showing how the behavior of the Chief Justice might be accounted for by the theoretical models of memory and of speech acts and how it is consistent with research on memory errors. This leads to suggestions for future practices when the Chief Justice administers the Oath.

Models of Memory and Research on Memory Errors

Memory tasks can be prospective or retrospective (Cuttler, Connolly, LaForce, & Lowy, 2018; Piefke & Glienke, 2017). In a prospective task, the goal is to remember and execute delayed intentions, which usually involve performing a particular action at a specific time (time-based), perhaps in response to a specific cue (event-based) (Anderson & McDaniel, 2017; Gilbert, Hadjiparion, & Raselison, 2013; Piefke & Glienke, 2017; Shelton & Scallin, 2017; Smith, Hunt, & Murray, 2017). Cues may also occur spontaneously (McDaniel, Umanatti, Einstein, & Waldum, 2015). If the action is prompted by a cue, this involves bottom-up processing. If the action is not prompted by a cue, it is under the complete control of prospective memory, which involves top-down processing (McDaniel et al., 2015). One factor that may affect prospective memory is stress. A review of this research yielded mixed results, with evidence of positive effects, negative effects and no effects of stress on both time-based and event-based memory (Pieflke & Glienke, 2017).

When the Presidential Oath is administered, prospective memory applies to the Chief Justice, who must remember to cite the Oath during the inauguration ceremony. The memory will be time-based, because the action must occur at a particular point in the ceremony, but will also be event- or cue-based, because the Chief Justice is

officially introduced to administer the Oath. Prospective memory also applies to the new President, and is mainly event-based, because he must remember to cite the Oath in response to what the Chief Justice says.

For retrospective memory, the goal is to recall or recognize previously-learned information, facts or events (Cuttler et al., 2018). There are various models of retrospective memory [e.g., the "Feature Model", Buchner & Brandt, 2003; Search of Associated Memory (SAM) Model, Retrieving Effectively from Memory (REM) Model, Malmberg, Raaijmakers, & Shiffrin, 2019]. All have been debated, but the most popular one to stand the test of time (Baddeley, Hitch, & Allen, 2019) is Atkinson and Shiffrin's (1968) multistore model. According to this model (also known as the modal model; Baddeley et al., 2019; Malmberg, et al., 2019), memory consists of three stores: the sensory register, the short-term store, and the long-term store. The sensory register is fleeting, the short-term store retains information for approximately 30 seconds unless it is continually rehearsed, and the long-term store retains information for longer periods of time. Forgetting from the long-term store is attributed to retrieval failure (Shiffrin & Atkinson, 1969). During the inauguration ceremony, short-term memory would apply to the President, who is required to repeat what the Chief Justice has just said. Long-term memory would apply to the Chief Justice if the Oath is cited from memory as opposed to being read.

Recall from long-term memory can be accurate or inaccurate. Accuracy increases with deep processing or elaboration of the material to be learned during initial encoding (Craik & Lockhart, 1972). Accuracy also increases if the original context (e.g., physical surroundings, mood) during encoding is reinstated at recall (Parker, Dagnall, & Coyle, 2007; Smith, Glenberg, & Bjork, 1978; Ucros, 1989). This has been accounted for by the encoding specificity principle, according to which recall improves if there is overlap of the processes that occur during encoding and at retrieval (Tulving & Thomson, 1973; Zeelenberg, 2005).

For inaccurate recall, various kinds of error have been identified from research, but the most common ones are based on meaning (semantic errors) or on sound (acoustic errors). It has been suggested that errors from long-term memory are semantic and errors from short-term memory are acoustic (Baddeley, 1966), but there is evidence of both kinds of coding in each memory system (Gruneberg & Sykes, 1971).

With regard to semantic errors, researchers have shown that recall from long-term memory often involves reconstruction of the original information (McKelvie, 2018). For example, Bartlett (1932) found that when people repeatedly recalled stories, distortions appeared that were consistent with their past experiences (stored as "schemas" in memory). Demonstrating another kind of "false memory", Roediger and McDermott (1995) found that when people were presented with a list of words around a common theme (say, "pillow", "night", "bed" for the theme "sleep"), they would often incorrectly recall the theme, even though it did not appear on the list. In addition, Brewer and Treyens (1981) found that when recalling what they had seen in an office, people would sometimes report items that were not there, but would be expected in an office. As an explanation, they proposed an "office schema" that facilitated correct recall for items in the office, but also drove the recall errors. In these examples, theoretical accounts emphasize the role of previous memory structures (e.g. schemas, gist) in distorted recall. Like Brewer and Treyens, Schacter, Guerin, and St. Jacques (2011) argue that these structures usually operate adaptively, increasing memory accuracy, but that they can also create memory errors. Errors may also arise from acute arousal and stress, which can have a negative influence on successful retrieval of information from long-term memory (Lindau, Almkvist & Mohammed, 2016; Piefke & Glienke, 2017; Shields, Sazma, McCullough, & Yonelinas, 2017; Wolf, 2017). This is similar to performance anxiety, which can occur when a person must present in public. It can cause a variety of negative effects, including memory errors and vocal stumbles (Merritt, Richards, & Davis, 2001).

Model of Speech Acts

Motley (1986) has constructed a general model of speech acts (lexical selection) in which the long-term memory storehouse for words (the mental lexicon) consists of a network of nodes (words or ideas) connected by associations (see also McKelvie, 2018). Active nodes determine what is spoken. Consistent with the previous discussion of memory errors, the associations among nodes may be based on meaning (semantic) or on sound (acoustic). Nodes can also be activated by *nonlinguistic* associations, for example from arousal or emotion (Motley, 1986). This is consistent with the negative effect of stress on long-term memory retrieval (Lindau, Almkvist & Mohammed, 2016; Wolf, 2017). In addition, unconscious psychodynamic associations are part of the network (Motley, 1986).

In summary, the Chief Justice must employ prospective memory to present the Oath to the President. If the Oath is not read, the Chief Justice must also employ retrospective memory to recall it and cite it. The utterance will be based on long-term memory storage of the text, and on other associations. Recall may be accurate, but from the research on false memory, these semantic associations may involve schemas, perhaps prompting errors. From Motley's model, the speech acts may be accurate, but could also be distorted by nonconscious semantic or acoustic

associations, and by unconscious psychodynamic emotional associations. From the research on arousal and performance anxiety, retrieval and pronunciation may be impaired if the Chief Justice is under stress.

Administration of the Oath of Office by Chief Justice John Roberts

Method

As noted above, the research method was a case study that focused on the administration procedures of Chief Justice John Roberts. Data were obtained from archives, which were publicly available video or audio recordings of the swearing-in ceremonies.

For President Barack Obama on January 20, 2009, video of the ceremony was viewed in the YouTube compilation (Medea's Biggest Fan, 2017) and separately (presidentialoath, 2019). For Obama on January 21, 2009, the ceremony was heard in Makindacu (2009). For Obama on January 20, 2013, the ceremony was observed in the YouTube compilation (Medea's Biggest Fan, 2017) and in a video of this ceremony only (Official swearing-in of President Obama, 2013). For Obama on January 21, 2013, the ceremony was viewed in the YouTube compilation (Medea's Biggest Fan, 2017). Finally, for President Donald Trump, the ceremony was viewed in a video of his inauguration ceremony (Trump Inauguration, 2017).

Results and Discussion

Swearing-in of President Obama on January 20, 2009

First, I present a transcript from NBC and ABC (Zimmer, 2009a; see also Baron, 2017), followed by four accounts of what occurred (Zimmer, 2009a, 2009b; Pinker, 2009; media reaction). Second, I present my transcript based on multiple personal viewings of the video. Third, I offer a detailed analysis of the events, and discuss Zimmer's and Pinker's accounts. In the transcripts, I show *Roberts' words in italics* and **both Roberts' and Obama's errors in bold**. An error is defined as any change to a word in the official Oath (incorrect or incomplete pronunciation of a word, change in the placement of a word, or replacement of the words by another word. I code the errors by "R" for Roberts and by "O" for Obama.

Here is the official wording of the Oath in the four segments that have been employed in some Oath administrations:

"I (NAME) do solemnly swear (or affirm)
that I will faithfully execute the office of President of the United States,
and will to the best of my ability,
preserve, protect and defend the Constitution of the United States."

Here is the NBC/ABC Transcript (Williams, 2009; Zimmer, 2009a):

ROBERTS: *Are you prepared to take the oath, Senator?*
OBAMA: I am.
ROBERTS: *I, Barack Hussein Obama…*
OBAMA: **I, Barack**…(O1)
ROBERTS: *… do solemnly swear…*
OBAMA: I, Barack Hussein Obama, do solemnly swear…
ROBERTS: *… that I will execute the office of president **to** (R1) the United States **faithfully**…(R2)*
OBAMA: … that I will execute…
ROBERTS: *… **faithfully** (R3) the office of president of the United States…*
OBAMA: … the office of president of the United States **faithfully**…(O2)
ROBERTS: *… and will to the best of my ability…*
OBAMA: … and will to the best of my ability…
ROBERTS: *… preserve, protect and defend the Constitution of the United States.*
OBAMA: … preserve, protect and defend the Constitution of the United States.
ROBERTS: *So help you God?*
OBAMA: So help me God.
ROBERTS: *Congratulations, Mr. President.*

Zimmer's analysis. Here are Zimmer's two accounts of what happened. To ensure precision, I quote them in full. Italics and boldface are his. First, Zimmer (2009a) writes:

> In the embedded clause of the oath, the adverb *faithfully* is properly positioned after the auxiliary will (**1**). If you miss the adverb as it is placed in the official wording, you have two more chances for inserting it in a coherent fashion: placing *faithfully* after the verb *execute* (**2**) or placing it at the end of the clause (**3**):
>
> that I will **1** execute **2** the office of President of the United States **3**
>
> Roberts does indeed miss the opportunity to put *faithfully* in position **1**, perhaps thrown by Obama repeating the opening phrase of the oath earlier than expected. In Roberts' first attempt, *faithfully* ends up in clause-final position **3**. Obama seems to realize that the placement is wrong, but repeats the first of the clause all the way through to the verb: *that I will execute*. There's no possibility of getting *faithfully* back to position **1** at this point, but Roberts gets as close as he can by placing it in position **2**, immediately after the verb, in his second attempt. Obama ignores the self-repair, however, and ends up repeating the misplaced version that Roberts originally supplied, with *faithfully* in clause-final position **3**."

> There was one other minor slip-up on Roberts' part: in his first run-through of the embedded clause, he got a preposition wrong, saying "I will execute the office of president **to** the United States," rather than **of**. A less noticeable speech error, but nonetheless the type of thing that happens when one speaks from memory without written prompts, as Roberts apparently did.

Second, Zimmer (2009b) writes:

> "*Faithfully* got removed from the spot between *will* and *execute* in Roberts' rendering, moved to the end of the clause. Then, when Obama hesitated, Roberts tried again, placing *faithfully* immediately after *execute*. Obama ended up saying it the first (wrong) way, with *faithfully* at the end."(Zimmer, 2009b)

Pinker's analysis. Pinker (2009) explains Roberts' errors by referring to his reputation as a stickler for grammar (see also Zimmer, 2009b). The official oath contains a split infinitive ("to faithfully execute") which has been regarded as a grammatical error. Pinker states that the practice was based on Latin, where verbs cannot be split (see also Zimmer, 2009), and that, while "the ungrammaticality of split verbs is an urban legend", the Texas Law Review Manual on Usage and Style rules against the split. However, the manual has been severely criticized (Lindgren, 1990) and, ironically, contains a number of splits in its text.

Although it may be appropriate *not* to split the infinitive in some situations (e.g., when the adverb is not extremely important; Pinckert, 1986), it is appropriate in others (e.g., to emphasize the adverb, and where it is natural to split; Neely, 1978; Pinckert, 1986), writers on style and grammar agree that splitting the infinitive is not a proscriptive error (Fowler, 1968; Johnson. 1982; Schiess, 2015).

Because Roberts did not read the oath, Pinker argues that his grammarian memory kicked in, distorting his recall. This account is consistent with the research on false memory showing the effect of schemas on recall and with Motley's model of speech acts based on active nodes. In Roberts's case, these nodes would be associated with grammar memory. It is also consistent with other evidence that errors in recall can be determined by past associations (e.g. Schacter et al., 2011). Pinker argues that Roberts' grammar schema ("inner copy editor", Pinker, 2009) placed "faithfully" later in the sentence. According to Pinker, Roberts had made other mistakes in not giving quotations correctly. For example, in one of his judgments, he quoted a line from Bob Dylan's "*Like a Rolling Stone*": "When you ain't got nothing, you got nothing to lose." However, Roberts said: "When you got nothing, you got nothing to lose."

Media reaction. Media reaction to these flubs was considerable, with some commentators assigning blame to Obama (e.g., Associated Press), some to Roberts (e.g., NBC, ABC networks), and some to both (Pelofsky, 2009; Zimmer, 2009a). When Obama was seen to be at fault, he was blamed for putting Roberts off his stride by coming in early. When Roberts was seen to be at fault, interpretations ranged from memory failure due to stress and arousal, lack of intelligence, or unconscious conflict about having to inaugurate a person who had voted against his nomination as Chief Justice (Pinker, 2009; Senate Vote #245 in 2005 (109th Congress) (2005); United States Senate, n.d.). These suggestions are consistent with the evidence that memory can be influenced by arousal and emotion (Lindau, Almkvist & Mohammed, 2016; Merritt et al., 2001; Piefke & Glienke, 2017; Shields, Sazma, McCullough, & Yonelinas, 2017; Wolf, 2017), and with the contention that the speech errors might have a psychodynamic basis (Motley, 1986).

My transcript. For convenience, I separate the transcript into three parts. I also include some descriptive comment.

Part 1:
ROBERTS: *Are you prepared to take the oath, Senator?*
OBAMA: I am.
ROBERTS: *I, Barack Hussein Obama...*(very brief pause with tone of his voice going slightly down....)
OBAMA: **I, Barack** (O1)
ROBERTS: (continuing and overlapping slightly) *do solemnly swear*
OBAMA: I, Barack Hussein Obama, do solemnly swear

Part 2:
ROBERTS: *that I will ...*pause....*execute the office of President **to*** (R1) *the United States **faithfully*** (R2)
OBAMA: that I will execute....(nods at Roberts)
ROBERTS: ***the off**...*(R3) ***faithfully*** (R4) ***the Presd.*** (R5) *office of President of the United States*
OBAMA: nods again during "***the off**...**faith***", smiles (grimaces?) during "**the Presd**. *office*", then mumbles "**the off**." (O2?) (or perhaps "the office") of President" during "*of President of the United States*" then continues "of the United States **faithfully**." (O2 or O3)

Part 3:
ROBERTS: *and will to the best of my ability,*
OBAMA: and will to the best of my ability,
ROBERTS: *preserve, protect and defend the Constitution of the United States*
OBAMA: preserve, protect and defend the Constitution of the United States.
ROBERTS: *So help you God?*
OBAMA: So help me God.

Detailed analysis. As noted above, I constructed this transcript after viewing the video many times. As a reliability check, I then asked four other faculty members (two in psychology and two in political studies) to watch the video and then compare the NBC/ABC transcript with mine. I did not tell them why I sought their judgments. For two people, the NBC/ABC transcript appeared first and for two people my transcript appeared first. All four individuals agreed that my transcript was a more accurate rendition of what occurred. Another commentator's transcript also matched mine (NoMan, 2009).

Considering the six variations (ready warning, instructions for hands, instruction to repeat, reading, number of segments, you/I), Chief Justice Roberts asks if Obama ("you" and calling him "Senator") is prepared to take the Oath. He does not mention hands or to repeat what he says, and neither he nor Obama reads the Oath, which Roberts presents in four segments. Logically, reading and employing fewer segments places a greater burden on memory and may increase the likelihood of errors (McKelvie, 2018).

For the three parts of my transcript, I describe and comment on the sequence of events.

Part 1. Clearly, Obama started early. This was mentioned by Zimmer (2009a), but not by Pinker (2009). Obama starts to repeat his name ("I, Barack") after Roberts says it, but stops as Roberts continues with the first part of the oath. Perhaps Obama was too eager and/or nervous. Possible evidence for this is that he laughed and made a jocular remark as he mounted the podium (referring to the placement of a platform for his daughters and possibly wife to stand on). He may also have expected Roberts to stop after saying his name [see also one of the comments following Zimmer's (2009a) analysis]. Another possibility is that Obama reacted to a perceived cue from Roberts, who seems to pause slightly after "Obama", with the tone of his voice descending slightly - a hint that he was about to stop.

Obama's early entry at this point is not unusual. From the YouTube compilation (Medea's Biggest Fan, 2017) in 1965, Lyndon Johnson opened his mouth after his name was said, but he did not speak. In 1989, George H. W. Bush went further and started saying "I" after his name was pronounced. In 1993, Bill Clinton opened his mouth after hearing his name but, like Lyndon Johnson, he stopped. However, later, after "execute", Clinton started to speak. Previous Chief Justices had stopped at this point. This one (William Ruhnquist) did not, but the tone of his voice fell. As with Chief Justice Roberts and Obama, Clinton may have been responding to this cue.

Obama stopped at "Barack" when Roberts continued with "*do solemnly swear*". Perhaps Roberts should have stopped when he heard "Barack" and allowed Obama to say his name. Obama then repeated what Roberts had said ("I, Barack Hussein Obama, do solemnly swear").

Part 2. Neither Zimmer (2009) nor Pinker (2009) remark on it, but Roberts pauses after "will"…., where "faithfully" should be. Perhaps he recognized that something should appear here. He then completes the phrase, making *two* mistakes. First, as Zimmer (2009a, 2009b) and Pinker (2009) observe, he says "faithfully" at the end of the phrase instead of after "will". Second, as noted by Zimmer but not by Pinker, he says "to" instead of "of". That is, whereas the official oath reads "I will faithfully execute the Office of President of the United States", Roberts says "*I will* …(pause)….*execute the office of President to the United States faithfully*".

At this point, Obama starts "that I will execute", without the pause that Roberts made between "will" and "execute", then stops. "Faithfully" should appear before "execute" but Roberts did not say that. Obama repeats what Roberts did say: "*that I will execute*". As Zimmer (2009a) suggests, Obama may have stopped because he realizes that "faithfully" is missing. Perhaps Obama should only have said "that I will", giving Roberts a clear signal to say "faithfully execute". However, Obama does give another cue: He nods at Roberts as if to say: "Something is wrong here." or "Would you please repeat this….(correctly)"?

Here, Roberts should have responded to Obama's "execute" with "faithfully execute the office of President of the United States", giving Obama a perfect model to imitate. However, Roberts says: *"the off… faithfully the Presd. office of President of the United States".* Here, the transcript from NBC and ABC (*"faithfully the office of president of the United States"*) is incorrect. Roberts actually begins with "***the off..***". He is starting to repeat what he said before when he followed "execute" with "*the office of President **to** the United States **faithfully**.*" However, he catches himself at "**the off**." and puts "faithfully" next. This is earlier than before and shows that Roberts is trying to complete the phrase that Obama has begun with "execute". Zimmer (2009a, 2009b) is mistaken here, because he claims that Roberts did place "faithfully" immediately after "execute". Roberts did say "faithfully" after Obama had said "execute" and nodded at Roberts, but not immediately after. As just noted, he said "**the off**." then he said "**faithfully**". At no point does Roberts himself say "execute faithfully" (or the correct version "faithfully execute").

Immediately following "**faithfully**", "***the Presd***," pops up. It seems that Roberts was going to say "the President", but stopped because, putting aside the "**the off.**" error, "faithfully the President" as a combined phrase with Obama would have been "that I will execute (from Obama) *faithfully the President of the United States"* (from Roberts)! So Roberts stops saying "President" and returns to "*office of President of the United States*". This gives the following complete phrase from both of them: "that I will execute (from Obama) "***the off… faithfully the Presd. office of President of the United States***" (from Roberts).

When Obama continues, he nods again when Roberts is saying "***the off***…*faith*", and gives a quick smile or grimace when Roberts is saying "***the Presd***. *office*". Then he slightly mumbles "**the off**. (or the office) of the President" when Roberts is saying "*of President of the United States*". It is not clear to me if Obama says "office" in full. I may be filling in the "ice" in "office". If he did not say "office" (but rather "**the off.**), it is understandable, because *that is what Roberts initially said*. When Roberts does say "*office*" it was preceded by "***faithfully the Presd***."

Finally, Obama, not overlapping with Roberts, finishes the phrase "of President of the United State **faithfully**". He retains "**faithfully**" at the end where Roberts originally placed it. I suggest that Obama did not say "**faithfully**" where Roberts just did because, although Roberts may have been trying to "help" Obama, his statement "*the off… faithfully the Presd. office of President of the United States"* does not make sense. Rather than ignoring Roberts' "self-repair", as Zimmer (2009a) puts it, which implies that Roberts corrected his mistake and Obama did not follow suit, Obama reverts to Roberts's original statement.

Consider Obama's position. Roberts did not issue the instruction "Repeat after me", as had by many previous Chief Justices when they used the first person when administering the oath. However, Roberts also presented the oath in the first person, which implies that Obama was supposed to repeat what exactly Roberts said. Obama is in a dilemma, because he has just heard Roberts say *"the off… faithfully the Presd. office of President of the United States."* His quandary is: "Do I state the oath correctly or do I do what I am supposed to do and repeat what Roberts just said?" Roberts' mangled utterance is not meaningful, so Obama repeats what Roberts said initially. Obama seems to have done his best under the circumstances (see also Rubenstein, 2009). In saying, "that I will execute "**the off**." (or perhaps "**the office**") of the President of the United States faithfully", he is trying to reflect both what Roberts just said (which he is supposed to repeat) and what the Oath states (which he is supposed to recite).

I suggest the following interpretation for Roberts' errors. For the initial mistake with "faithfully", his hesitation after "*that I will……*" and before saying "*execute the office*…." may have been caused by his memory for the Constitution indicating that something should be there. However, nothing was activated from his network of associations because his grammatical memory overrode his Constitution memory. This is consistent with the research on false memory, showing that recall can be distorted by schemas (Brewer & Treyens, 1981; Schacter, Guerin and St. Jacques (2011). However, if the memory node for "faithfully" had been active at this point, his grammatical memory would have placed it immediately after "execute". Putting "faithfully" at the end of the phrase

suggests that this lexical node was blocked, at least briefly, and was re-activated later. It is as if Roberts's lexical network struggled in two ways: to locate the missing element ("faithfully") and to place it somewhere (hopefully, in the correct place). Even if his lexical network re-activated "faithfully" shortly (but not immediately) after "execute", and possibly after the false "to", the only logical place to locate it was at the end: "*that I will …*pause….*execute the office of President to the United States faithfully.*"

Roberts' other grammatical error may be consistent with this idea. After "*that I will…execute the office*", he went on to say "*President **to** the United States*", which he corrects to "*President **of** the United States*" on his next attempt. This error weakens Pinker's argument that the placement of "faithfully" at the end of the phrase was simply due to Roberts's inner copy editor. "To" the United States is not grammatical. If his inner copy editor had been working well, "to" would not have occurred and "faithfully" would have appeared immediately after "execute". Perhaps "to" was a random side effect of his lexical network struggling over the missing element ("faithfully") or, as Zimmer (2009a) suggested, of relying on fallible memory.

Another consideration is that "*President to the United States*" and "*President of the United States*" do not have the same meaning. The latter "of" implies that the person belongs in some sense to the organization or group. Here, it implies that the President belongs to the United States, and probably represents and leads the country. The former "to" implies more that the person is at some distance away from the organization or group. Perhaps the President is in a kind of service relationship to the United States, even as some kind of consultant. For example, we speak of a person being an advisor "to" a group. It follows that it does not make sense to say that person is a leader "to" a group. This suggests that "to" may not only reflect Roberts's struggling lexical network, but also his attitude towards Obama.

Role of attitude and emotion. If Roberts's error on "to" is based partly on his attitude, this would be consistent with a psychodynamic account that offers a darker interpretation of his errors. Given that all republicans and only 50% of democrats voted for his nomination as Chief Justice, and that Obama voted against [Senate Vote #245 in 2005 (109th Congress), 2005; United States Senate, n.d.], Roberts may have a negative attitude towards Obama, and may not have voted for him to be President. Indeed, as noted above, when Roberts uttered "***faithfully the Presd***.", this phrase, if completed, would have been "that I will execute (from Obama) *faithfully the President of the United States*"!

Another reason that emotion may have been a factor in Roberts' errors is that this was the first time that he had administered the Oath of Office. Like Obama, he was probably nervous. He may have suffered from performance anxiety, which can cause memory errors and vocal stumbles (Merritt et al., 2001). In addition, he may have been aroused and put off balance by Obama speaking early (just as Chief Justice Warren may have reacted to Johnson suddenly raising his hand). To provide context, I examined the administration of the oath by the Chief Justice who preceded Roberts, William Rehnquist, who administered the oath five times. His began in 1989, with President-elect George H. W. Bush (AP Archive, 2015). Rehnquist *read* the oath correctly in four segments and Bush repeated it correctly, although he started early, perhaps in response to the small decline in the tone of Rehnquist's voice when he said "Bush". In 1993 (Bill Clinton), he read the oath and in 1997 (Bill Clinton), 2001 and 2005 (both George W. Bush), he cited it from memory. He presented the Oath in four segments on the first three occasions, but in seven segments on the last one. He never made an error and every President-elect repeated the oath correctly. Unlike Roberts, who cited the oath from memory the first time he administered it, Rehnquist did not rely on his memory until he was experienced. Indeed, Rehnquist had a reputation for attention to detail: "He was known to check out the inaugural platform before the event, stand on his mark and practice the oath. He would memorize the words, and just to be on the safe side, carry a copy of the oath with him" (Jacobs, 2013). Notably, The Chief Justice before that was Warren Burger, who also administered the oath five times. He always read it and he never made an error.

Part 3. Chief Justice Roberts administered the final part of the oath correctly ("*and will….United States*") and President-elect Obama repeated it correctly.

Summary. By not reading the oath, Chief Justice Roberts left himself open to memory distortion. He committed errors, causing Obama to make mistakes. Indeed, at times they spoke over each other (see also Baron, 2017). I argue that Roberts' errors were partly due to his grammar schema ("internal copy editor", Pinker, 2009) and perhaps also to unconscious emotional processes and to arousal from stress. Obama's performance was not faultless, but I think that he tried to make the best of a difficult situation (see also Rubenstein, 2009).

Swearing-in of President Obama on January 21, 2009

As noted earlier, it is specified in the U. S. Constitution (Twentieth Amendment, Section 1-6) that the President-elect assume the terms of office at noon on January 20 in the year following the election. However, it also

stated (Article II, Section 1, Clause 8) that before entering into the execution of the office, the President must take the Presidential Oath.

Nevertheless, because there was some uncertainty about whether Obama had officially been sworn in (Baron, 2017; Jacobs, 2013), the Oath was retaken the next day (Makindacu, 2009), with Roberts's blessing (Baron, 2017). Obama says that they will take it slowly and carefully. Roberts does not give any instructions. Without video, we do not know whether Roberts reads the oath. However, he again presents it in four segments, but this time he states it correctly and Obama repeats it correctly.

Given the events of 2009, it is interesting to see what Roberts did in 2013 (Obama) and in 2017 (Trump), when, duty bound, Roberts again had to administer the oath.

Swearing-in of Obama in 2013 and President-elect Trump in 2017

In 2013, the oath was taken twice, because January 20 fell on a Sunday. The first administration was conducted in the Blue Room of the White House (see the YouTube compilation, Medea's Biggest Fan, 2017; and separate video of this ceremony only, Official swearing-in of President Obama, 2013). Chief Justice Roberts asks Obama to please raise his right hand (no mention of being prepared) and to "repeat after me". Then he *reads* the oath, in *six* segments. Roberts states the oath correctly and Obama repeats it perfectly.

Here are the six segments employed by Roberts:

"I (NAME) do solemnly swear (or affirm)
that I will faithfully execute
the office of President of the United States,
and will to the best of my ability,
preserve, protect and defend
the Constitution of the United States."

One day later in the public ceremony (Medea's Biggest Fan, 2017), Roberts again asks Obama (not by name) to please raise his right hand (no mention of being prepared) and to "repeat after me". Roberts correctly reads the oath in six segments and, although Obama stumbles slightly on "States", he repeats the correct words in their correct place.

Finally, in 2017, with President-elect Trump, Roberts follows the exact procedure that he adopted in 2013 (Trump Inauguration (2017). He asks Trump (not by name) to please raise his right hand (no mention of being prepared) and to "repeat after me". He reads the oath, in six segments. Roberts states the oath correctly, and Trump repeats it perfectly.

Comparisons

There is a clear contrast between what occurred initially in 2009 and in the four other administrations by Chief Justice Roberts (2009, 2013, 2013, 2017; Table 1). Taking the January 20, 2019 inauguration as the baseline, ("population value"[1]) Roberts relied on his memory to cite the Oath in four segments and made five errors. President Obama made two or three errors that were mostly stimulated by Roberts's mistakes. In the four subsequent administrations, Robert read the Oath three times (one was not clear), the mean number of segments in the four administrations was 5.5 (SD = 0.87), which was significantly higher than baseline, $t(3)$ = 3.46, p = .041, and he made zero errors. Thus, the Chief Justice was more likely to make errors with memory and with fewer segments. The relationship between memory and errors is consistent with previous evidence that errors are more numerous when the Chief Justice cites the Oath from memory than when he reads it (McKelvie, 2018).

In contrast to his two or three mistakes in the first ceremony, President Obama also made zero errors in his three subsequent ceremonies. President Trump also made zero errors. In summary, in 2013 and in 2017, by reading the Oath in six segments, Roberts made it easier for Obama and Trump to repeat the Oath correctly.

General Discussion

When Chief Justice John Roberts administered the Presidential Oath of Office to President Barack Obama on January 20, 2009, the citation of the Oath was blighted by a number of speech errors. It was argued that this matter

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[1] I thank a reviewer for suggesting this analysis.

deserves careful scrutiny for two main reasons: because there was some uncertainty about the implications of the errors for the status of the new President and because the mistakes were regarded as sufficiently serious to warrant repeating the administration of the Oath the following day. In the present case study, I offered a scientific interpretation of the errors made by the Chief Justice, and compared them with how he administered the Oath on subsequent occasions.

Table 1

Number of Oath Segments, Number of Errors and Use of Reading or Memory by Chief Justice John Roberts when Administering the Oath of Office

Date	Segments	Errors	Reading/Memory
January 20, 2009	4	5	Memory
January 21, 2009	4	0	?
January 20, 2013	6	0	Read
January 21, 2013	6	0	Read
January 20, 2017	6	0	Read

During the initial presidential inauguration ceremony in 2009, when Chief Justice Roberts cited the Oath from memory, he made errors that were more extensive than the minor slips by previous Chief Justices. In particular, he replaced "of" with "to, and he moved "faithfully" from before "execute" to the end of the phrase. He corrected the first error, but when he tried to deal with the second one, he garbled the text, rendering it meaningless. Obama also made a number of mistakes when he cited the Oath.

It was argued here that Roberts's errors can be understood in terms of memory theory (prospective memory, retrospective memory, memory schemas, effects of arousal) and of Motley's (1986) model of speech errors (linguistic and non-linguistic/psychodynamic associations). In particular, Roberts's false recall of "faithfully" was driven by his grammar schema. His errors may also have been influenced by emotional arousal (perhaps because this was the first time that he had administered the oath). Likewise, Obama's errors may have been due to emotional arousal, but it was argued that they were also the product of his attempts to balance reciting the oath correctly with repeating what Roberts had said.

This theoretical analysis has practical implications for minimizing error. In the future, it would be wise for the Chief Justice to read the Oath and for both parties to ensure that they know in advance exactly how it will be administered. According to Totenberg (2013), Chief Justice Roberts wrote out the oath for the first administration in 2009, marking the places where he would pause for Obama to respond. He sent it to a designated congressional staff member, but Obama did not receive the message. This is unfortunate, because it shows that Roberts had taken steps for a faultless administration of the Oath. He repeated this procedure in 2013, but he made sure that the card on which the information as recorded was shared with Obama (Jacobs, 2013).

An even better strategy would be for the Chief Justice to meet the President in advance and practice the precise protocol. This rehearsal could include an enactment of the way in which the Chief Justice will be invited to cite the Oath, which would provide a cue for prospective memory of what has to be done. Chief Justice William Rehnquist provides a model of how a Chief Justice should prepare: as noted earlier, not only did he carefully memorize the words and carry a copy of the text with him as a backup, he also visited the platform in front of the Capitol Building and rehearsed on the spot (Jacobs, 2013). This would provide a physical and mental context cue to enhance his retrospective memory, consistent with the evidence for context effects and encoding specificity (e.g., Parker, Dagnall, & Coyle, 2007; Tulving & Thomson, 1973).

If the Chief Justice practices with the President, then reads the Oath with more segments, this would minimize anxiety and the cognitive demands on both of them, increasing the chances of a faultless performance. As a bonus, it would also permit them to attend to the *manner* of their delivery. A fine example was set by Chief Justice Warren Burger and President Ronald Reagan in 1981. Chief Justice Burger consulted notes, broke down the Oath into five units, and administered it in measured terms, allowing Ronald Reagan to imbue his recitation with meaningful expression (Conservatism Alive, 2009). The ceremony for the administration of the Oath of Office is a spectacle that deserves attention to both accuracy and to style.

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