

Donald Trump's inauguration speech:

Expert System analyzed the new American president's speech to highlight the similarities and differences between President Bush in 2001 and President Obama in 2009



Expert System analyzed the inaugural address of President Donald Trump in Washington, D.C. during the official inauguration ceremony at the White House on January 20, 2017.

Using the Cogito cognitive software that automatically understands words and entire phrases, the analysis highlights the distinguishing linguistic features of Trump's speech, and compares them with the speeches of his two predecessors, George W. Bush in 2001 and Barack Obama in 2009, at the beginning of their terms.

By analyzing the full text in English of Trump's speech, Expert System wanted to address the following questions:

*How would Trump's speech be characterized from a linguistic point of view?
And, how does it differ from the inaugural speeches of Bush and Obama?*

Main concepts:

Expert System's semantic analysis highlighted all of the main concepts from the three speeches. In Trump's speech, "American" and "America" were more relevant (also because this was part of the slogan repeated several times at the end of the speech). Instead, Bush spoke predominantly of "country" and "story", and Obama's speech highlighted concepts of "work" and "generation."

The patriotic appeal of "American" was more relevant than in Bush's or Obama's speeches.

Bush spoke mainly to the people (citizens) and Obama mainly to "people", like the new president.

While Obama often mentioned women (woman), Bush did not frequently refer to women. Trump referred to women twice, but always together with men ("men and women" in one case with "forgotten" and in the second case, related to the military).

Trump and both his predecessors gave great importance to the possessive pronoun "our" and to the noun "nation", which conveys a message of unity.

Obama expressed concepts related to environment (planet, earth), while Bush mainly referred to the topic of justice (justice, law) in his speech. Trump instead focused more on the verb "protect" and on the concept of "dream."

In addition to "can", Obama drew heavily on the present ("now", "today"), "new" and the "future" as concepts much more so than Bush. Instead, Trump mentioned the verb in its negative form "cannot."

While Bush cited "immigrants" and Obama mentioned "Muslims", the words of the 45th president of the United States referred to "Islamic" but he did not mention the infamous word "wall."

Trump did not emphasize democracy, a concept that was present in Bush's speech ("democracy", "democratic") but not in Obama's 2009 speech. Obama's speech referred to situations of "crisis" and of "fear" ("fear", "threat"). Trump doesn't mention "crisis" and gives less importance to the concepts of "fear" and "threat" but, as written above, focused on the aspect of "protection."

Obama cited positive concepts (prosperity, success), while Trump also focused on positive concepts, he more frequently mentioned "success."

Trump, like Bush, recalled concepts related to "poverty" even if less frequently.

Evident in Bush's inaugural speech was the reference to the presidential role and the commitment that it entails ("president", "promise", "honored", "responsibility"), which was not as significant in Obama's speech. Instead, the new president referred more generally to the concepts around commitment.



The main concepts in President Donald Trump's 2017 inaugural speech

Which emotions were transmitted in the inaugural speeches? The main sentiment that emerged from Trump's address was "success". For Bush, it was "courage" and for Obama, the main sentiment was "hope."

The artificial intelligence algorithms of Expert System's technology allow us to understand the main emotions conveyed in the speeches. Trump's words embodied emotions such as "success", "commitment" but also "fear".

In Bush's inaugural address, the main emotions conveyed were courage, hope, compassion and understanding. Obama's 2009 inaugural address featured a variety of contrasting emotions: "Foremost", "hope", followed by "action", "fear", "courage", "success", "effort", "anxiety" and "trust".

Linguistic style: Legibility and lexical richness in Trump's speech

Trump's speech contained less than 1430 words, which was shorter than Bush's (1,592 words) and that of Obama (2,395). Trump used short phrases (slightly more than 17 words per sentence), a feature somewhat common to Bush, who used an average of slightly more than 18 words per sentence, where instead Obama used sentences of a higher than average length (more than 22 words per sentence).

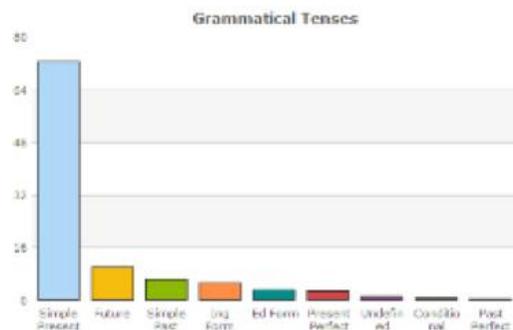
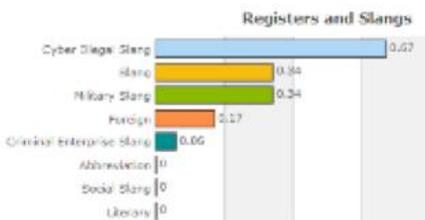
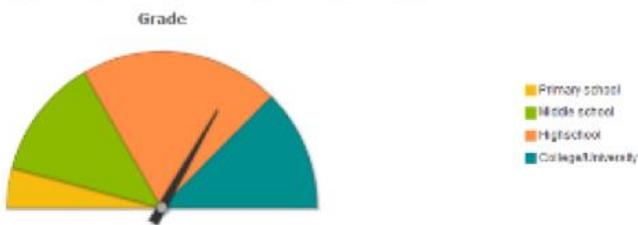
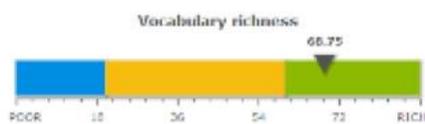
Analyzing the syntactic structure of the texts, Trump's speech was as easy to read and understand as Bush's whose speech was rated as medium-difficult in terms of legibility. Instead, Obama's speech was considered "very difficult."

Bush showed a higher lexical richness (68.75) than Obama (51.85), and the new president ranked slightly below Bush.

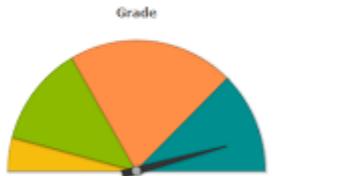
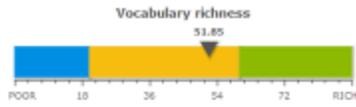
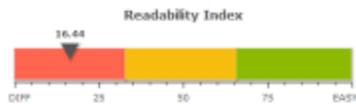
Considering the readability and the type of vocabulary used, we can estimate the level of education necessary for understanding the text. Trump’s and Bush’s speeches were ranked as understandable by high school graduates, while Obama’s was more fit for college graduates.

Trump followed his predecessors in their use of words that were beyond the standard short, common nouns, adverbs and conjunctions, but he was above average in terms of the use of nouns.

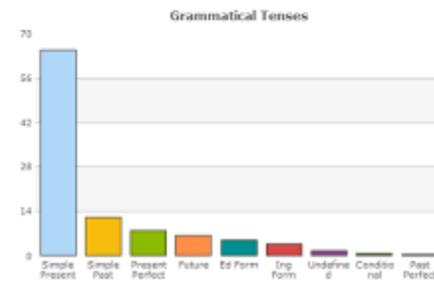
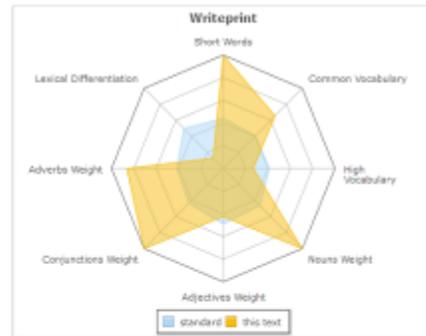
All three used the present tense most frequently, while Bush and Trump also used future tense and Obama most often used the past tense.



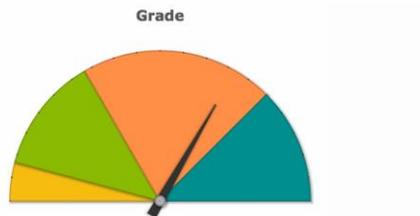
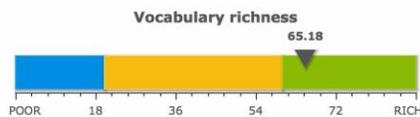
The linguistic style of President George W. Bush’s 2001 inaugural speech



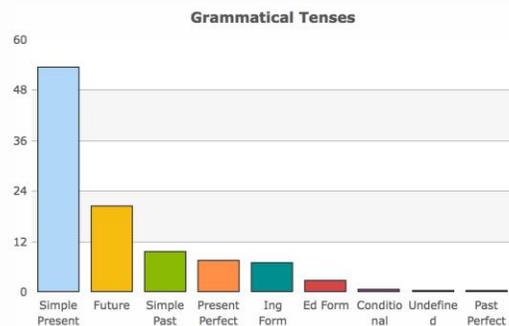
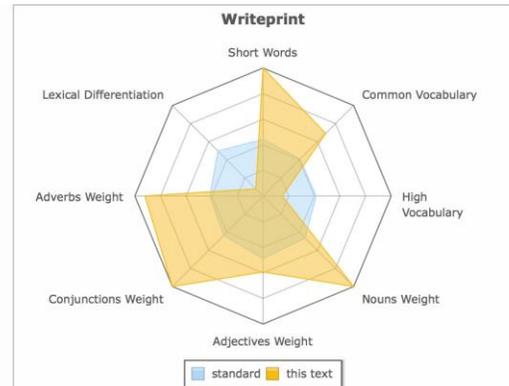
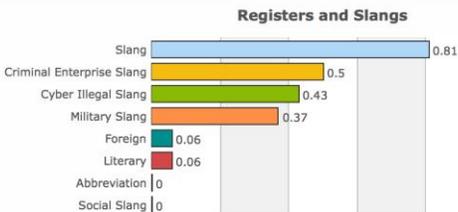
- Primary school
- Middle school
- Highschool
- College/University



The linguistic style of President Barack Obama's 2009 inaugural speech



- Primary school
- Middle school
- Highschool
- College/University



The linguistic style of President Donald Trump's 2017 inaugural speech