

Here is the citation for a recent article: Tang, Kevin & Jason A. Shaw. 2021. Prosody leaks into the memories of words. *Cognition* 210. 104601. <https://doi.org/10.1016/j.cognition.2021.104601>.

Here is the abstract for the article: The average predictability (aka informativity) of a word in context has been shown to condition word duration (Seyfarth, 2014). All else being equal, words that tend to occur in more predictable environments are shorter than words that tend to occur in less predictable environments. One account of the informativity effect on duration is that the acoustic details of probabilistic reduction are stored as part of a word's mental representation. Other research has argued that predictability effects are tied to prosodic structure in integral ways. With the aim of assessing a potential prosodic basis for informativity effects in speech production, this study extends past work in two directions; it investigated informativity effects in another large language, Mandarin Chinese, and broadened the study beyond word duration to additional acoustic dimensions, pitch and intensity, known to index prosodic prominence. The acoustic information of content words was extracted from a large telephone conversation speech corpus with over 400,000 tokens and 6000 word types spoken by 1655 individuals and analyzed for the effect of informativity using frequency statistics estimated from a 431 million word subtitle corpus. Results indicated that words with low informativity have shorter durations, replicating the effect found in English. In addition, informativity had significant effects on maximum pitch and intensity, two phonetic dimensions related to prosodic prominence. Extending this interpretation, these results suggest that predictability is closely linked to prosodic prominence, and that the lexical representation of a word includes phonetic details associated with its average prosodic prominence in discourse. In other words, the lexicon absorbs prosodic influences on speech production.

Write a one-page response paper that (1) Summarizes the major findings of the article; (2) Discusses the relevance of the article for a German learner of English; (3) Suggests a term paper topic based on the article

The article "Prosody leaks into the memories of words" by Tang and Shaw (2021) investigates the influence of predictability or informativity on word duration, pitch, and intensity in Mandarin Chinese. The authors analyze a large speech corpus and subtitle corpus to show that, similar to English, words with low informativity tend to have shorter durations. Additionally, they find that informativity has significant effects on maximum pitch and intensity, which are two acoustic dimensions related to prosodic prominence. Based on these findings, the authors suggest that the lexicon includes phonetic details associated with a word's average prosodic prominence in discourse.

For a German learner of English, this article is relevant as it sheds light on how prosody affects the representation of words in speech production. Prosody, or the patterns of stress and intonation, is an essential aspect of spoken language that contributes to conveying meaning and emotions. Therefore, understanding the relationship between predictability and prosodic features can help learners improve their pronunciation and communication skills. For instance, learners

can practice identifying and producing the prosodic patterns of frequently used words to enhance their fluency and naturalness.

Based on this article, a potential term paper topic could be to investigate the impact of prosody on second language vocabulary acquisition. Specifically, the paper can explore how exposure to prosodically varied input affects learners' ability to remember and produce words in a foreign language. The study can use experimental methods to manipulate the predictability and prosodic features of target words and measure learners' retention and production accuracy. Such a study can contribute to our understanding of how prosody shapes the mental representation of words and inform language teaching practices.

Now rewrite the second paragraph to be more explicit about how understanding prosody can help a German learner of English. Include two examples.

For a German learner of English, understanding the relationship between predictability and prosodic features, as discussed in the article by Tang and Shaw (2021), can have several benefits in improving their pronunciation and communication skills. Firstly, knowledge of prosody can assist learners in distinguishing between words with similar spellings but different stress patterns, such as "present" (noun) and "present" (verb). By understanding the prosodic prominence associated with each word, learners can produce them with the correct stress and intonation patterns, which enhances their comprehension and intelligibility. Secondly, recognizing the prosodic cues that signal speaker attitude or intention, such as rising intonation at the end of a question or falling intonation at the end of a statement, can help learners convey their intended meaning effectively. Thus, by practicing and becoming more attuned to the prosodic patterns of English words and phrases, German learners can improve their fluency, accuracy, and overall communication abilities.

Now rewrite the paper, with the new paragraph, in the style of an intelligent student who is not confident about their abilities

The article "Prosody leaks into the memories of words" by Tang and Shaw (2021) investigates the impact of prosodic features on word duration, pitch, and intensity in Mandarin Chinese. Although the study provides interesting insights into the relationship between predictability and prosody, I am not entirely sure how this information could be useful for me as a German learner of English. However, the article suggests that understanding prosody can enhance pronunciation and communication skills. For instance, recognizing stress patterns can help distinguish between words that are spelled similarly but have different meanings, like "present" (noun) and "present" (verb). Additionally, becoming aware of the prosodic cues that signal speaker attitude or intention can improve my ability to express my intended meaning accurately. Despite my current uncertainty, I believe that further exploration of the impact of prosody on second language vocabulary acquisition, as suggested in the article, can be a worthwhile research topic. By investigating how prosody influences the mental representation of words, we can develop more effective language teaching methods that help learners improve their prosodic fluency and naturalness in English.