To Mississippi or Not To Mississippi: A Review of Colloquial Clocks

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Abstract

We present the first study of *informal counting*, or the linguistic approximation of one second. For years, we have trusted the word "Mississippi" to correspond with a single second. It is past time to vet this choice and propose a path forward.

First, we quantify how imprecise the word 'Mississippi' is. Second, we evaluate alternatives across a random sample of 24 people (read: our friends). We conclude with recommendations going forward.

Introduction

As mechanical clocks grow more [1] and more [2] precise, we must not let our own internal clocks fall into disrepair. This begins with our word choice in tasks such as hide and seek - namely, "Mississippi". What originated as an adversarial tactic to combat a seeker's nefarious intentions to count too fast has transformed into a timing standard among children and adults alike.

We must question our practically unilateral reliance on the word for a number reasons. First and foremost, Mississippi is in the news frequently (for racism! [3] [4] [5]) so it is not at the top of the list of States That Need Publicity. Second, it was the second state to secede from the Union and therefore both a loser *and* a follower. These are values we need not reward. Third, there is little to prove that the word generalizes across dialects. Fourth, no one really knows how to spell it.

Despite these fundamental flaws, "Mississippi" holds international acclaim as an approximation of a second [4]. We propose three alternatives and evaluate their efficacy: "elephant", "avocado", and "Massachussetts". We choose "elephant" for its popularity in the UK and "avocado" for its crisp syllable structure and its ease of use. Finally, we evaluate "Massachussetts" because if we must time ourselves by a state name that begins with the letter "M", it may as well be our own.

Related Work

The relevant literature is replete with methods to measure time. Namely, real clocks. The unperceptive reader may posit that this task is solved by computers and phones. It is not obvious however, how one measures time in the absence of these tools. This is particularly relevant to early childhood games such as Tag and Hide and Seek.

A German approach to informal counting involves repeatedly say the word "einundzwanzig" — meaning 21 — while they keep the actual count in their head [6]. Some Danes count crates of beer via the phrase "kasse øl" [6]. Boring people count in increments of "one thousand"s. While our consideration of the word "elephant" affords our analysis international representation, we leave evaluation of other popular methods of informal counting to future work.

Time Distribution Depending on Word Choice

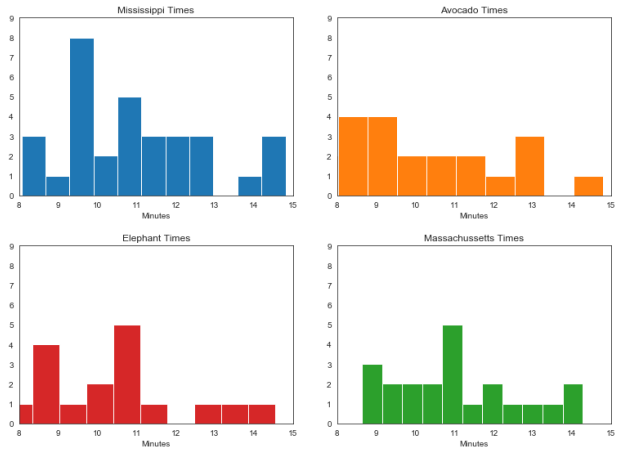

Figure 1:

Experimental Set-Up

We interview 24 people total, 12 male and 12 female. We evaluate the efficacy of each word by measuring the time it takes each subject count to 10 using each word (e.g. "1 avocado, 2 avocado, 3 avocado ..."). We randomly permute the order in which subjects recite the words to account for task fatigue.

Results

We present our results in Figure 1. We also present results for male and female subgroups in Figure 2.

The average amount of time it takes a person to recite

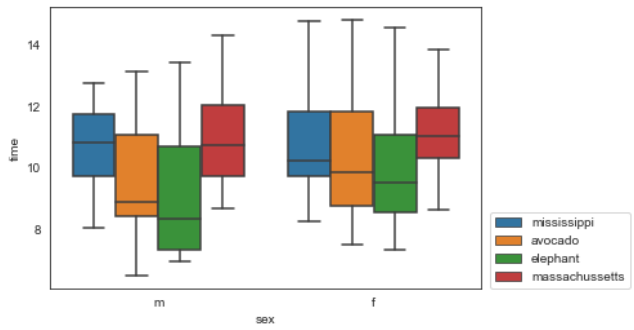

Figure 2: Caption

10 “Mississippi”s is 11.0 seconds with a standard deviation of 1.77 seconds. Thus, “Mississippi” is not only inaccurate on average, but it is also unreliable. This confirms our worst fears and this paper’s hypothesis. The average American plays 16 million games of hide and seek over the course of their childhood, resulting in *years* lost to a faulty timing standard. The need for a replacement is clear and we move on to analyzing three potential replacements: “elephant”, “avocado”, and “massachusetts”.

In a scenario where the gender of the counter is unknown, it is wise to use the word “avocado”, which attains a gender-agnostic average of 10.04 seconds. Breaking these results down by gender, however, reveals that men are most accurate with the word “avocado” (9.64 seconds) while women are most accurate with the word “elephant” (10.02 seconds).

The two hardest words to say – “massachusetts” and “mississippi” — attain the lowest variances, of 1.64 and 1.72 seconds respectively. We suspect this is because speedy talkers simply can’t get around the wily ways of these words.

Discussion

Over countless games of hide and seek, this amounts to minutes lost. We offer evidence that if you have a group of women, ask them to count to 10 in increments of elephants, and average the amount of time it takes them to do so, you have a pretty good approximation of 10 seconds.

We leave the reader with three recommendations. In settings that demand informal counting, the average man should use the word “avocado”, while the average woman should use the word “elephant”. The use of the word “massachusetts” grants the highest consistency by a large margin.

Limitations of this work are abundant. We consider no five syllable words, ignore non-English options and sometimes we started the timer a little too late. Despite these shortcomings, we offer the first foray into research on informal counting. As we regress away from technology, methods for informal counting will play an increasingly important role in day-to-day life. We must be prepared with accurate tools to meet this need and we offer this survey as a starting ground for efforts in this direction.

Contact Us

Informal counting is our true research passion and hearing from you would justify it a little more. Email all of us at dcable@mit.edu, agadient@mit.edu, dataspen@mit.edu, divyas@mit.edu, and dominiquet@mit.edu.

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