Twitter Thread by Lyman Stone ■■■

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reading the self-important and vaguely-cultish textbooks by bayesians makes me want to go out and kill a sufficiently large number of bayesians that i can estimate the mean pitch of their screams

"when we have multiple models, we should choose one using Bayesian statistics"

no

you should do both and publish an appendix showing robustness tests, you cultist

"but my bayesian model takes 4 weeks to process i can't run 1,397 robustness tests"

yes

exactly

"it's #Actually impossible to use predictive accuracy to test model validity because we can't observe future values!!!"

omg

this is a real critically acclaimed textbook im barely even paraphrasing here

i don't trust quantitative methods where people say, "this method has been in use for centuries!"

that is a solid argument for perhaps a theological proposition

it is not highly compelling for code

and yes I will be live-tweeting my Frequentist zealotry all term you're so, so welcome

i should not the paragraph after "centuries!!!" literally begins with a reference to Hindu cosmology so "it's a religious sect" is not a lampoon im just pulling out whole cloth and also the book begins with Golems, so

i am not actually opposed to bayesian modelling

i am simply opposed to bayesians

love textbooks that say, "the way we should do statistics is to ensure that every student individually understands every mathematical development of the last 8,000 years"

in fact what we should do is seek to develop tools which allow practitioners to *forget* the underlying math, and yet still advance their disciplines and the statistical methods themselves

given limited human processing power, the objective of progress of knowledge must be that prior technologies and knowledge becomes irrelevant and sufficiently automated that it need no longer be learned

you should not teach people to use an abacus!

wow great minds think alike https://t.co/Ka1h5qaKv3

in practice, and I know this will hurt a lot of feelings, the actual scientific standard for statistical quality is simply whatever the current revision of Stata is divided by 2, or whatever the most popular new R packages were a decade ago

by the way i have a recent anti-Bayesian chip on my shoulder because I'm writing a rebuttal for a paper which used an off-the-shelf Bayesian model in a Very Bad Way to make extremely strong conclusions based on like n=82

they literally said, "we used bayesian models because it lets us make extremely strong conclusions from very little actual data"

and im like

no

no that is not what it lets you do

"our sample sucked and told us nothing in conventional models, so we used a model that lets us assume away the more inconvenient parts of our data, and now our results are what we wanted to be!"

what bayesians say bayesianism isn't

but

what the papers using their models do

in fairness some good bayesians have criticized the model underlying the paper im criticizing.... which points to the fact that "bayesian" just means "leaves votive offerings at the altar of bayes" not "uses some specific credible methodology"

look the fact that your stats models have schools of thought named after the prophets "We are Logical Coxian Bayesians, not Judean Peoples' Front Bayesians!" is maybe a problem

and yes i know that Bayesians like to refer to frequentists as Fisherians but we don't call ourselves Fisherians because *we're not a cult*

oh hey by the way I'm a Lutheran

okay we're doing a globe-spinning analogy about probability and im made because spinning hand-sized objects with color-coded differences isn't even a random sample! a normal human can stick their finger on a spinning globe and hit either land or water at will!

likewise, spinning an object will not create a random rotation and land and water are not randomly distributed so your final distribution of land and water landing points may not be random

i know i'm overthinking this but if you're writing a textbook about statistics and trying to give a random example ***give an actually random example***! not one which is obviously not random!

by the way folks

you should have strong prior im not actually a bayesian-murderer, strong enough that your model should never permit the conclusion that im actually a bayesian-murderer, meaning you should be able to tell the first tweet was a joke

of course, while im not a bayesian-murderer, i suppose i could be a bayesian murderer

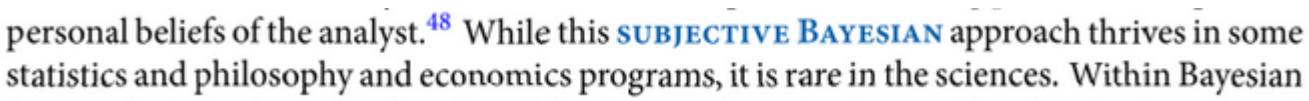
there was also a metaphor about marbles, but the marbles were in a garden, and also Borges was involved, because of course Borges was involved because he always is. It was convoluted. Like Borges. https://t.co/9jZLEyNV9n

> ^This is why you should stick to coins, dice and cards without trying to get too "relatable"
>
> — Flaky Puff\U0001f308\u270b\u261d (@DecadentPuff) January 13, 2021

SHADE THROWN

wow

that's something


personal beliefs of the analyst.[48] While this SUBJECTIVE BAYESIAN approach thrives in some statistics and philosophy and economics programs, it is rare in the sciences. Within Bayesian

the next sentence talks about "social sciences" separate from economics so lolololol

did you know that in centuries nobody has every used bayesian priors to lie

Rethinking: Prior, prior pants on fire. Historically, some opponents of Bayesian inference objected to the arbitrariness of priors. It's true that priors are very flexible, being able to encode many different states of information. If the prior can be anything, isn't it possible to get any answer you want? Indeed it is. Regardless, after a couple hundred years of Bayesian calculation, it hasn't turned out that people use priors to lie. If your goal is to lie with statistics, you'd be a fool to do it with priors, because such a lie would be easily uncovered. Better to use the more opaque machinery of the likelihood. Or better yet—don't actually take this advice!—massage the data, drop some "outliers," and otherwise engage in motivated data transformation.

the above tweet is proof that, in fact, while we always thought Scotsmen were rare, True Bayesians are even rarer!

this textbook literally says "Linear regression is the 'geocentric model' of applied statistics" i.e. comparing it to Ptolemaic astronomy and then says, "so you need to learn and understand it first to move on to other things."

astronomers be like ???????

if anyone can point me to the core course in astronomy programs on geocentrism id be very interested