

# Generate plots from bayesian models

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## Load data

```
files = c('../data/posterior/empirical_posterior.rds',
           '../data/posterior/distilgpt2_posterior.rds',
           '../data/posterior/gpt2_posterior.rds')

all_summary = list()
i = 1
for(f in files){
  posterior_summary = readRDS(f) %>%
    mutate(diff = b_conditionunambiguous) %>% ## create relevant columns
    summarise(mean = mean(diff),
              lower = quantile(diff, 0.025)[[1]],
              upper = quantile(diff, 0.975)[[1]]) %>%
    mutate(model = ifelse(grepl('distilgpt2', f), 'distilgpt2',
                          ifelse(grepl('gpt2', f), 'gpt2', 'empirical')))

  all_summary[[i]] = posterior_summary
  i = i + 1
}

all_summary = dplyr::bind_rows(all_summary)

ggplot(all_summary,
       aes(x=model, y=mean, color = model)) +
  geom_point() +
  geom_errorbar(aes(ymin=lower,
                   ymax=upper),
               width=0.7,size=1.2)

## Warning: Using `size` aesthetic for lines was deprecated in ggplot2 3.4.0.
## i Please use `linewidth` instead.
## This warning is displayed once every 8 hours.
## Call `lifecycle::last_lifecycle_warnings()` to see where this warning was
## generated.
```

