

An Example R Markdown Document

(A Subtitle Would Go Here if This Were a Class)

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Pop Songs and Political Science

Sheena Easton and Game Theory

Sheena Easton describes the following scenario for her baby:

1. Takes the morning train
2. Works from nine 'til five
3. Takes another train home again
4. Finds Sheena Easton waiting for him

Sheena Easton and her baby are playing a **zero-sum (total conflict) game**.

- Akin to Holmes-Moriarty game (see: von Neumann and Morgenstern)
- Solution: **mixed strategy**

Rick Astley's Re-election Platform

Rick Astley's campaign promises:

- Never gonna give you up.
- Never gonna let you down.
- Never gonna run around and desert you.
- Never gonna make you cry.
- Never gonna say goodbye.
- Never gonna tell a lie and hurt you.

Whereas these pledges conform to the preferences of the **median voter**, we expect Congressman Astley to secure re-election.

Caribbean Queen and Operation Urgent Fury

Billy Ocean released "Caribbean Queen" in 1984.

- Emphasized sharing the same dream
- Hearts beating as one

"Caribbean Queen" is about the poor execution of Operation Urgent Fury.

- Echoed JCS chairman David Jones' frustrations with military establishment.

Billy Ocean is advocating for what became the Goldwater-Nichols Act.

- Wanted to take advantage of **economies of scale**, resolve **coordination problems** in U.S. military.

The Good Day Hypothesis

We know the following about Ice Cube's day.

1. The Lakers beat the Supersonics.
2. No helicopter looked for a murder.
3. Consumed Fatburger at 2 a.m.
4. Goodyear blimp: "Ice Cube's a pimp."

This leads to two different hypotheses:

- H_0 : Ice Cube's day is statistically indistinguishable from a typical day.
- H_1 : Ice Cube is having a good (i.e. greater than average) day.

These hypotheses are tested using archival data of Ice Cube's life.

Example R code

Example R stuff

```
summary(cars)
```

```
##      speed          dist
##  Min.   : 4.0      Min.   :  2.00
##  1st Qu.:12.0      1st Qu.: 26.00
##  Median :15.0      Median : 36.00
##  Mean   :15.4      Mean    : 42.98
##  3rd Qu.:19.0      3rd Qu.: 56.00
##  Max.   :25.0      Max.     :120.00
```

Slide with Plot

```
plot(pressure)
```



ggplot code

```
df <- data.frame(x = rnorm(1000))
x <- df$x
base <- ggplot(df, aes(x)) + geom_density() + scale_x_continuous(limits = c(-5, 5))
base + stat_function(fun = dnorm, colour = "red")
```

Another Plot

