An Introduction to Perusall

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Harvard University

[1] GaryKing.org

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How does it work?

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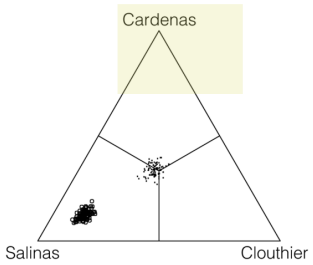
Perusall All comments A Page 358

Domínguez and McCann in the first place: the electoral outcome itself. In particular, if every voter thought the PRI was weakening, which candidate would have won the presidency? To answer this question, we coded each voter as thinking that the PRI was weakening and let other characteristics of the voter take on their true values. Then we used the predicted value algorithm to simulate the vote for each person in the sample and used the votes to run a mock election. We repeated this exercise 100 times to generate 100 simulated election outcomes. For comparison, we also coded each voter as thinking the PRI was strengthening and simulated 100 election outcomes conditional on those beliefs.

Figure 3 displays our results. The figure is called a "ternary plot" (see Miller 1977; Katz and King 1999), and coordinates in the figure represent predicted fractions of the vote received by each candidate under a different simulated election outcome. Roughly speaking, the closer a point appears to one of the vertices, the larger the fraction of the vote going to the candidate whose name appears on the vertex. A point near the middle indicates that the simulated election was a dead heat. We also added "win lines" to the figure that divide the ternary diagram into areas that indicate which candidate receives a plurality and thus wins the simulated election (e.g., points that appear in the top third of the triangle are simulated election outcomes where Cárdenas receives a plurality).

In this figure, the o's (all near the bottom left) are simulated outcomes in which everyone thought the PRI was strengthening, while the dots (all near the center) correspond to beliefs that the PRI was weakening. The figure shows that when the country believes the PRI is strengthening, Salinas wins hands down; in fact, he wins every one of the simulated elections. If voters believe the PRI is weakening, however, the 1988 election is a toss-up, with each candidate having an equal chance of victory.

FIGURE 3 Simulated Electoral Outcomes



Coordinates in this ternary diagram are predicted fractions of the vote received by each of the three candidates. Each point is an election outcome drawn randomly from a world in which all voters believe Salinas' PRI party is strengthing (for the "o"s in the bottom left) or weakening (for the "·"s in the middle), with other variables held constant at their means.

question by estimating a censored Weibull regression (a form of duration model) on a dataset in which the dependent variable, Y_i, measures the number of years that leader i remains in office following the onset of war. For fully observed cases (the leader had left office at the time of the study), the model is

$$Y_i \sim \text{Weibull}(\mu_i, \sigma)$$

$$\mu_i \equiv E(Y_i|X_i) = (e^{X_i\beta})^{-\sigma}\Gamma(1+\sigma) \qquad (6)$$

where σ is an ancilliary shape parameter and Γ is the gamma function, an interpolated factorial that works for continuous values of its argument. The model includes four explanatory variables: the leader's pre-war tenure in years, an interaction between pre-war tenure and democ-
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What are the advantages of using a Weibull model as opposed to kinds we have discussed in class (like Poisson, Normal, etc)? Feb 26 6:18 pm 1

As it notes, the Weibull is a time to event model (a duration model), so it's a natural fit for looking at the years someone remains in office following a war. More broadly, it's related to the Exponential distribution, which is typically what you think of when you're trying to model time. But unlike the Exponential, the Weibull has a shape and scale parameter (whereas in the Exponential the shape is always presumed to be 1). Feb 29 11:35 am 2

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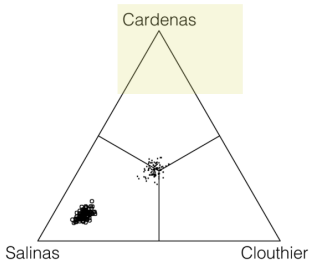

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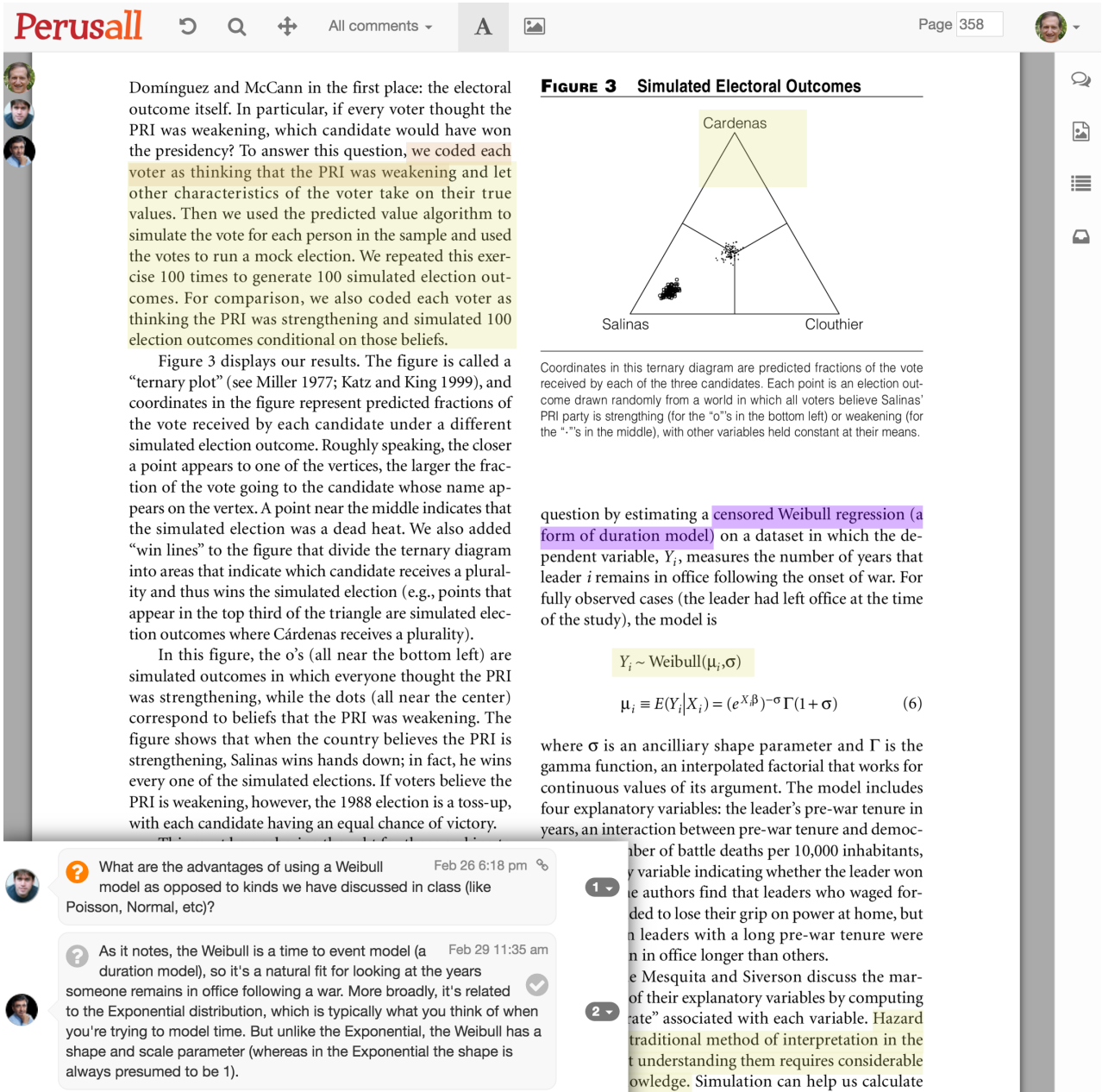

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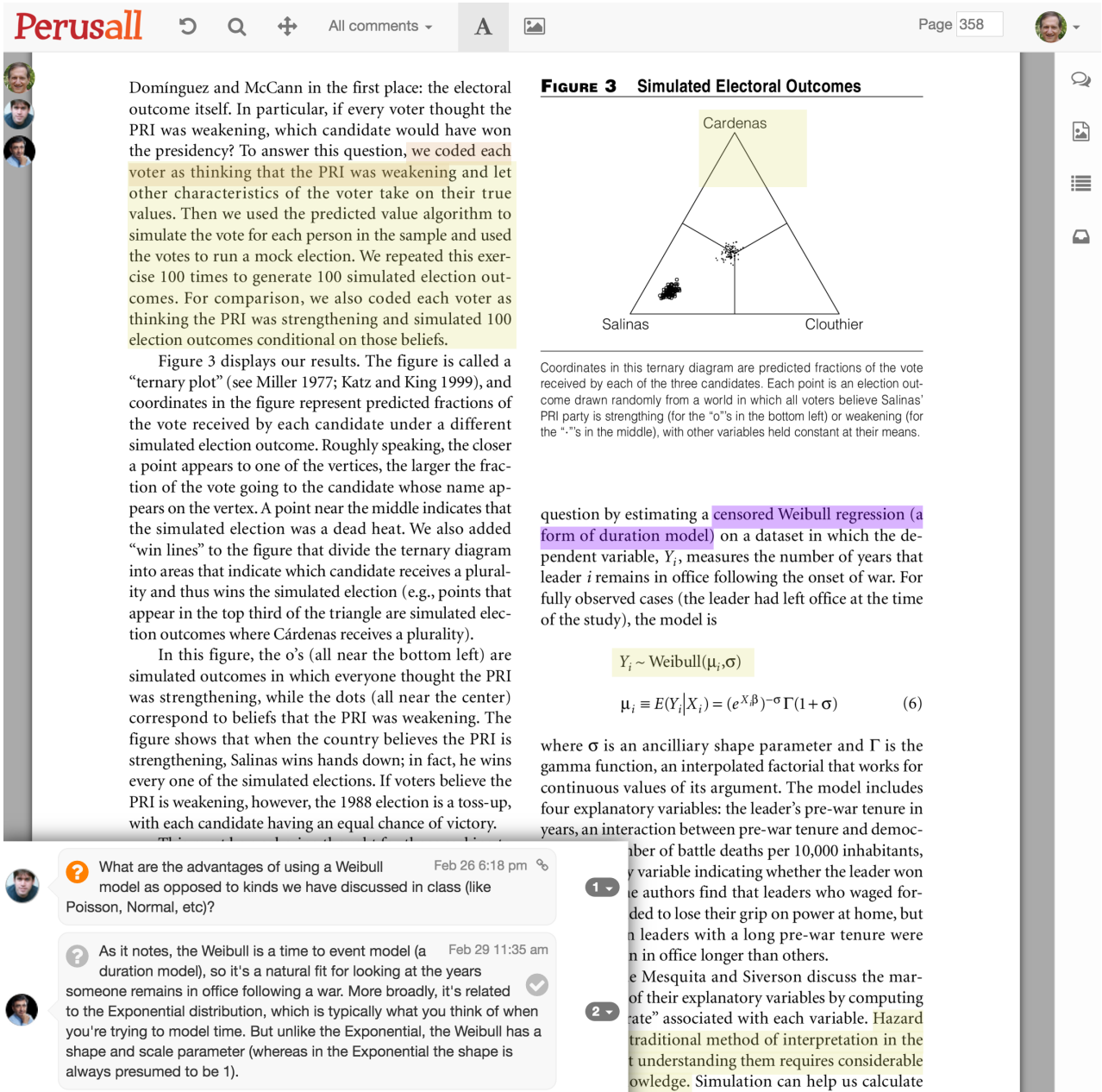

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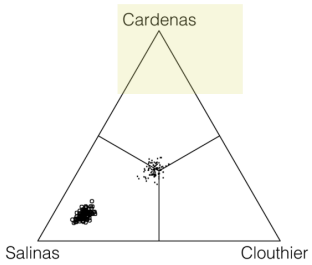
Figure 3 displays our results. The figure is called a "ternary plot" (see Miller 1977; Katz and King 1999), and coordinates in the figure represent predicted fractions of the vote received by each candidate under a different simulated election outcome. Roughly speaking, the closer a point appears to one of the vertices, the larger the fraction of the vote going to the candidate whose name appears on the vertex. A point near the middle indicates that the simulated election was a dead heat. We also added "win lines" to the figure that divide the ternary diagram into areas that indicate which candidate receives a plurality and thus wins the simulated election (e.g., points that appear in the top third of the triangle are simulated election outcomes where Cárdenas receives a plurality).

In this figure, the o's (all near the bottom left) are simulated outcomes in which everyone thought the PRI was strengthening, while the dots (all near the center) correspond to beliefs that the PRI was weakening. The figure shows that when the country believes the PRI is strengthening, Salinas wins hands down; in fact, he wins every one of the simulated elections. If voters believe the PRI is weakening, however, the 1988 election is a toss-up, with each candidate having an equal chance of victory.

Figure 3 Simulated Electoral Outcomes



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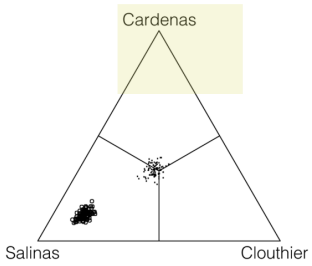

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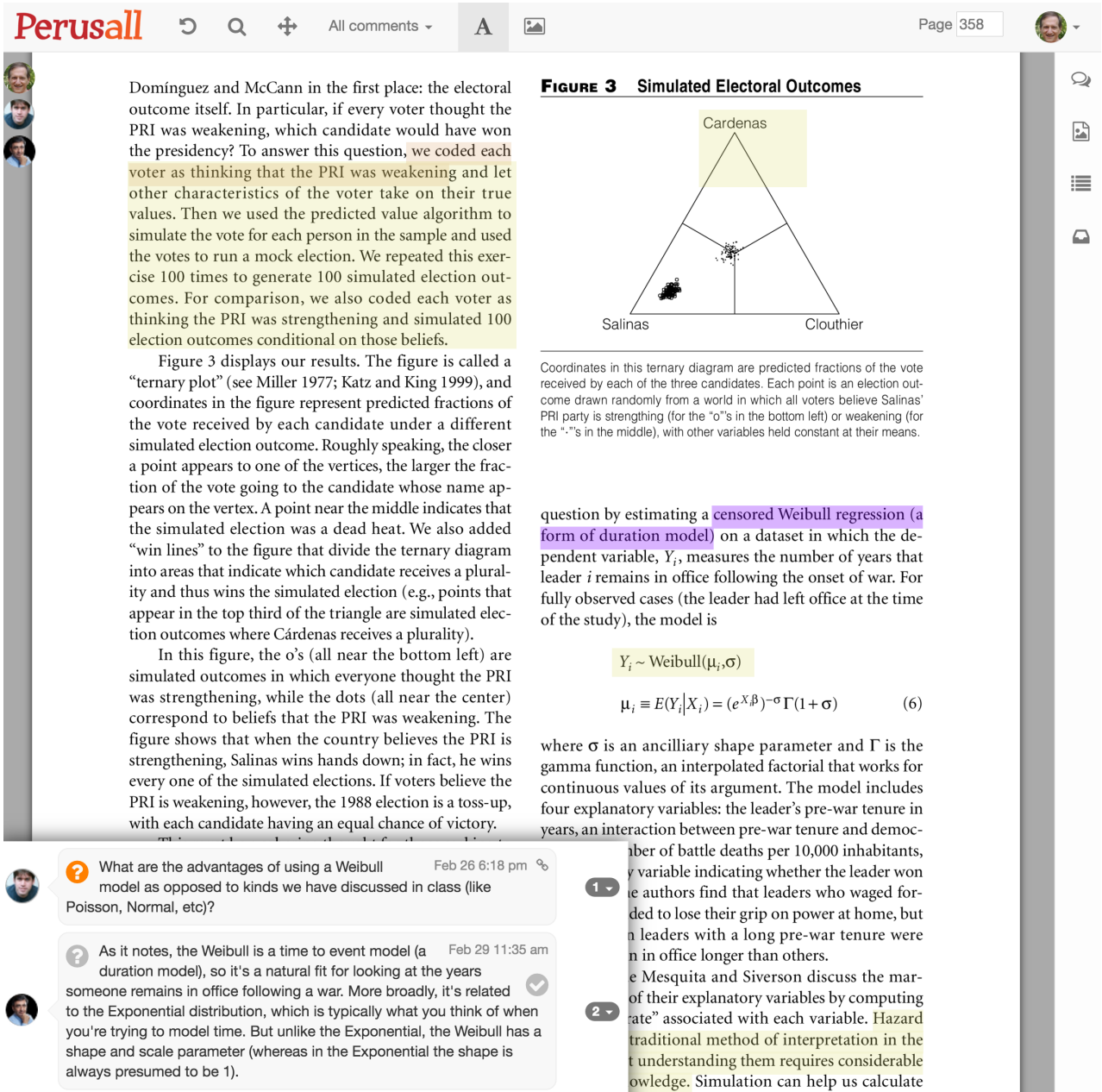

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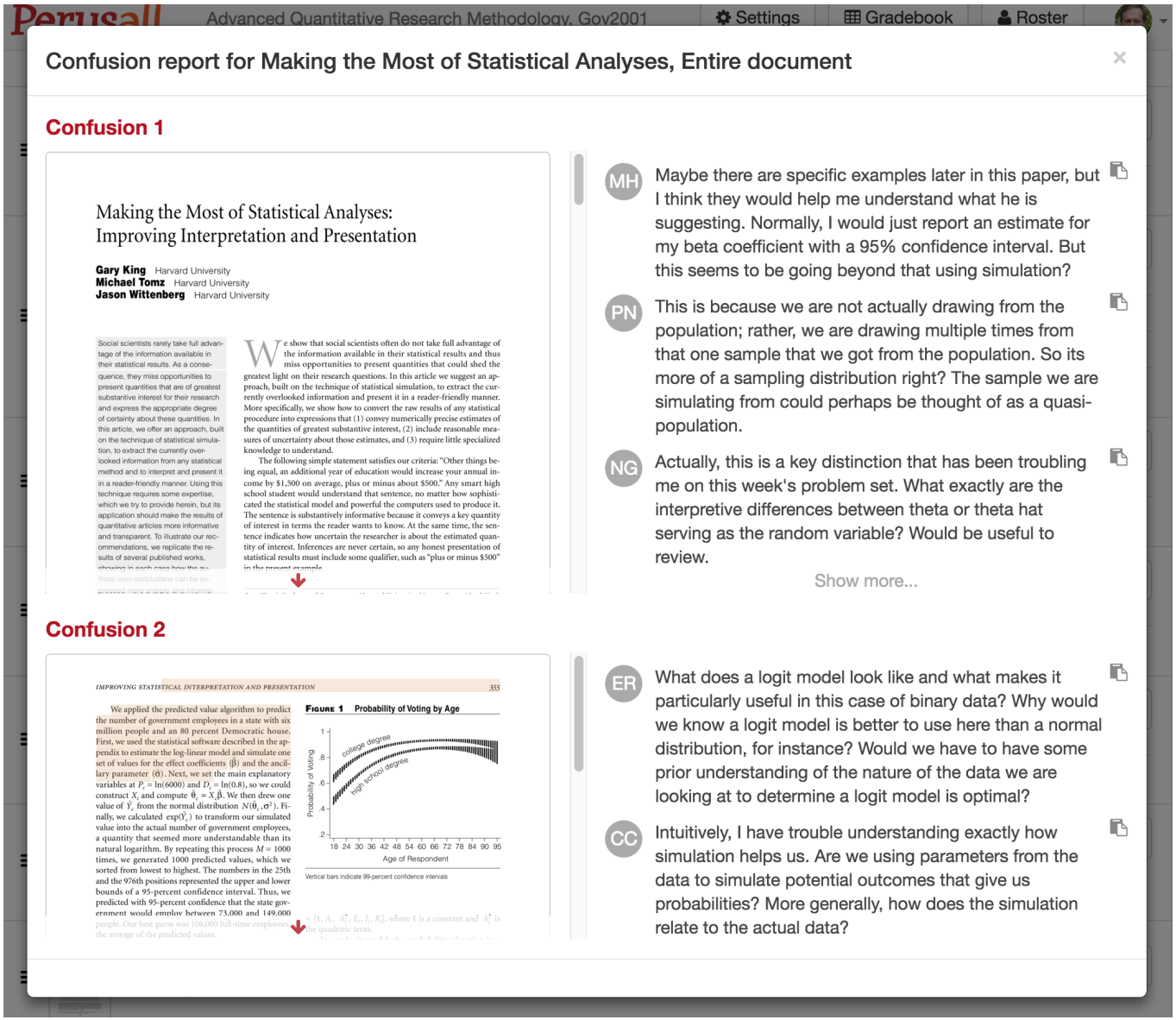

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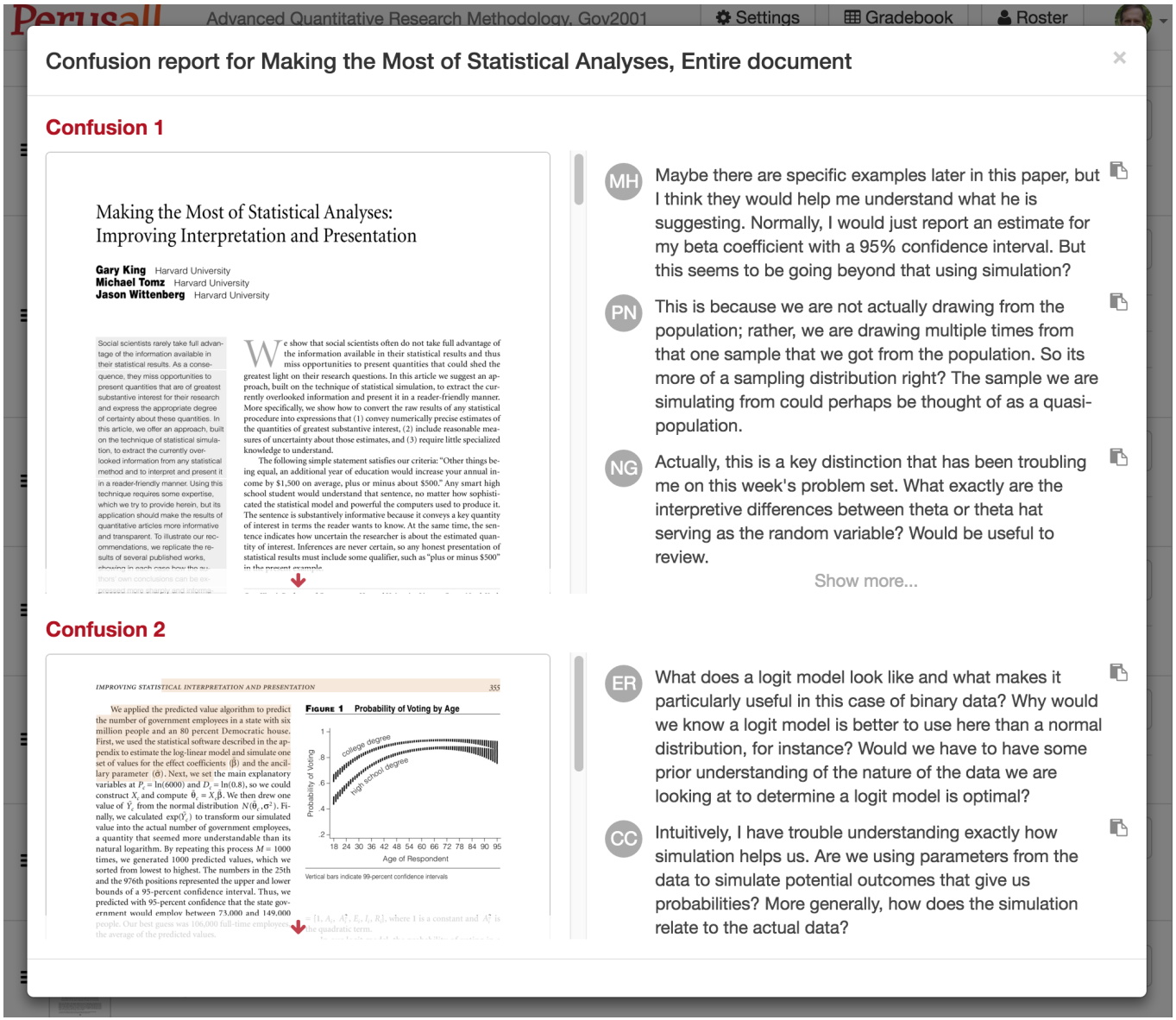

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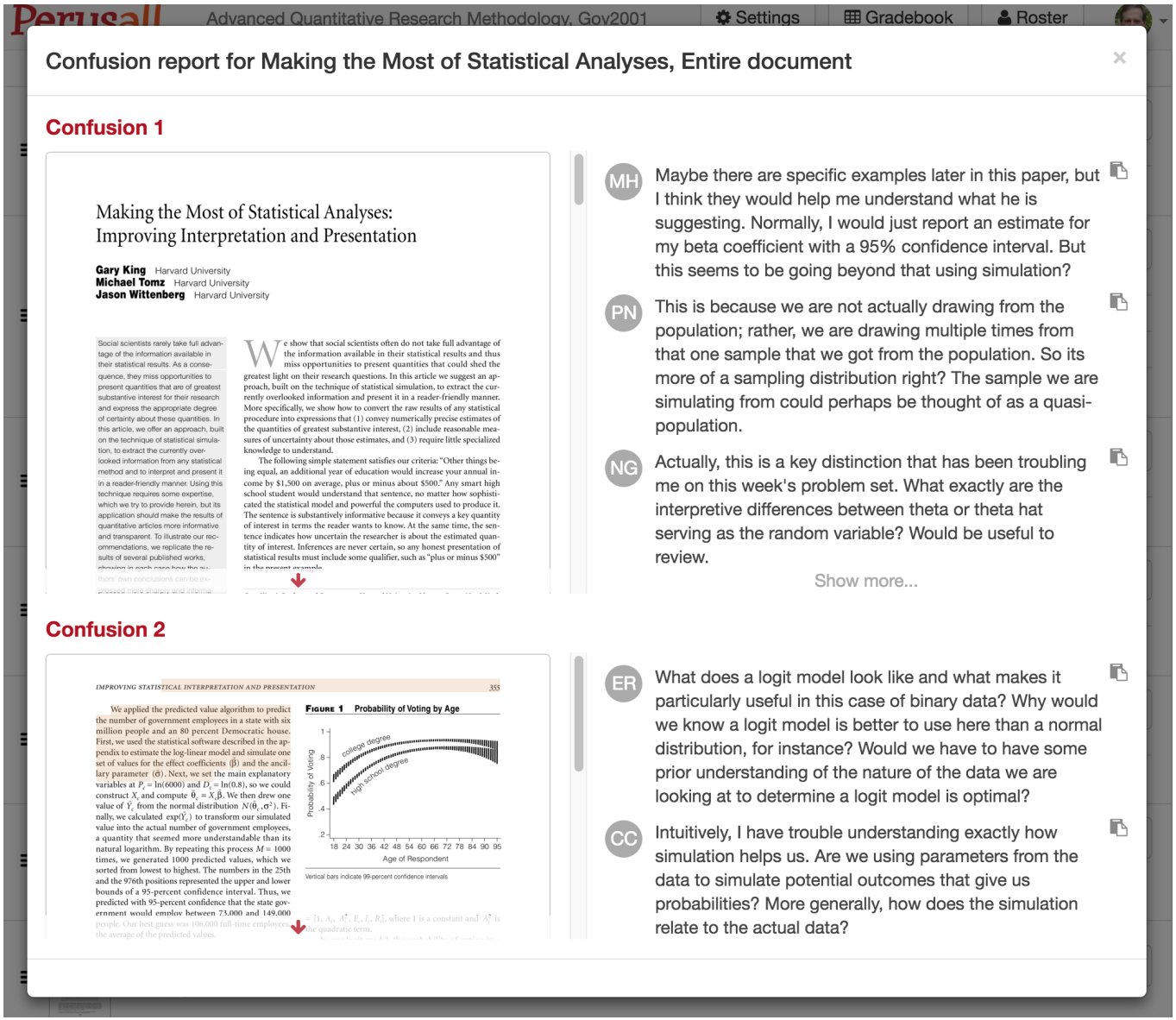

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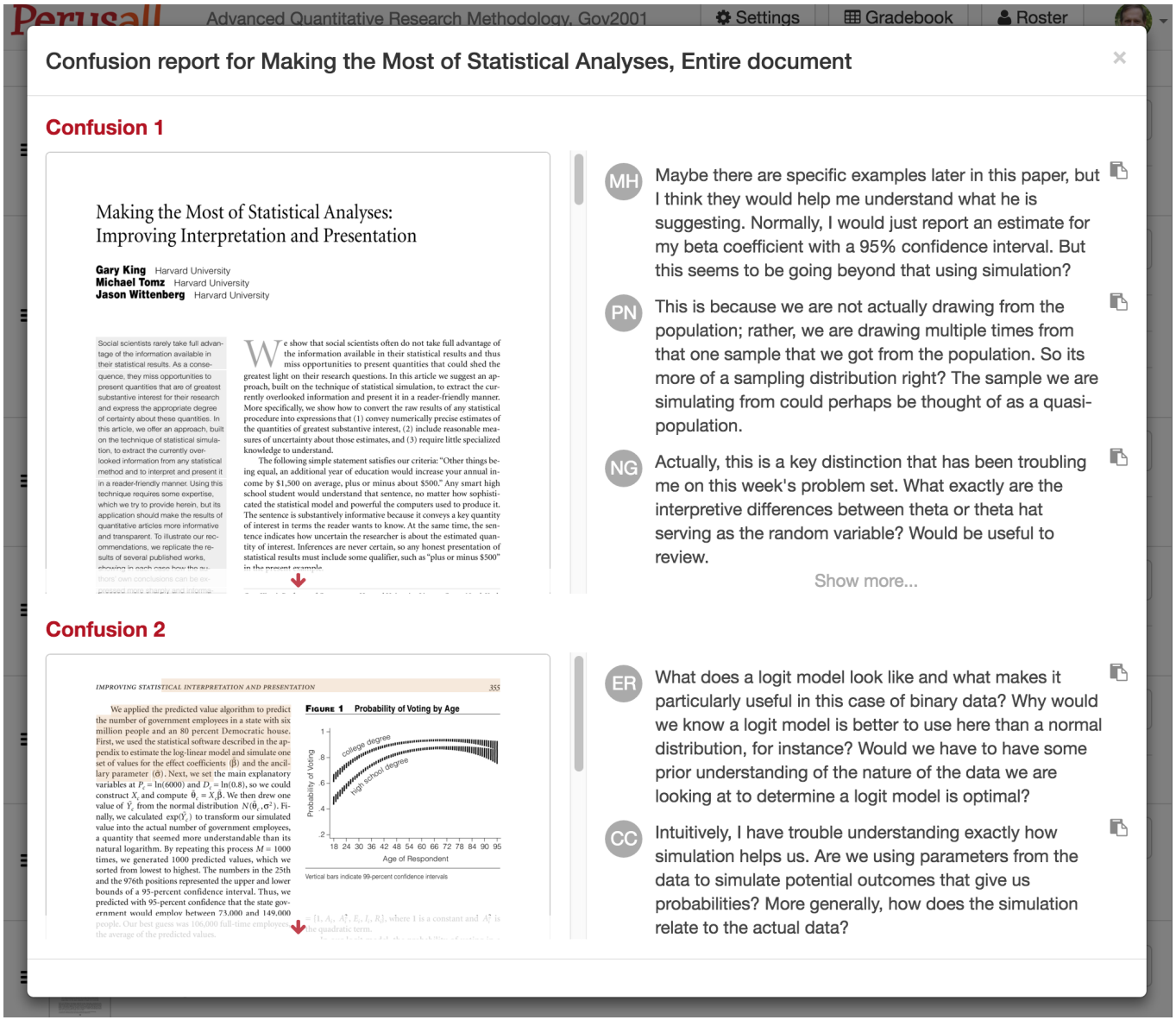

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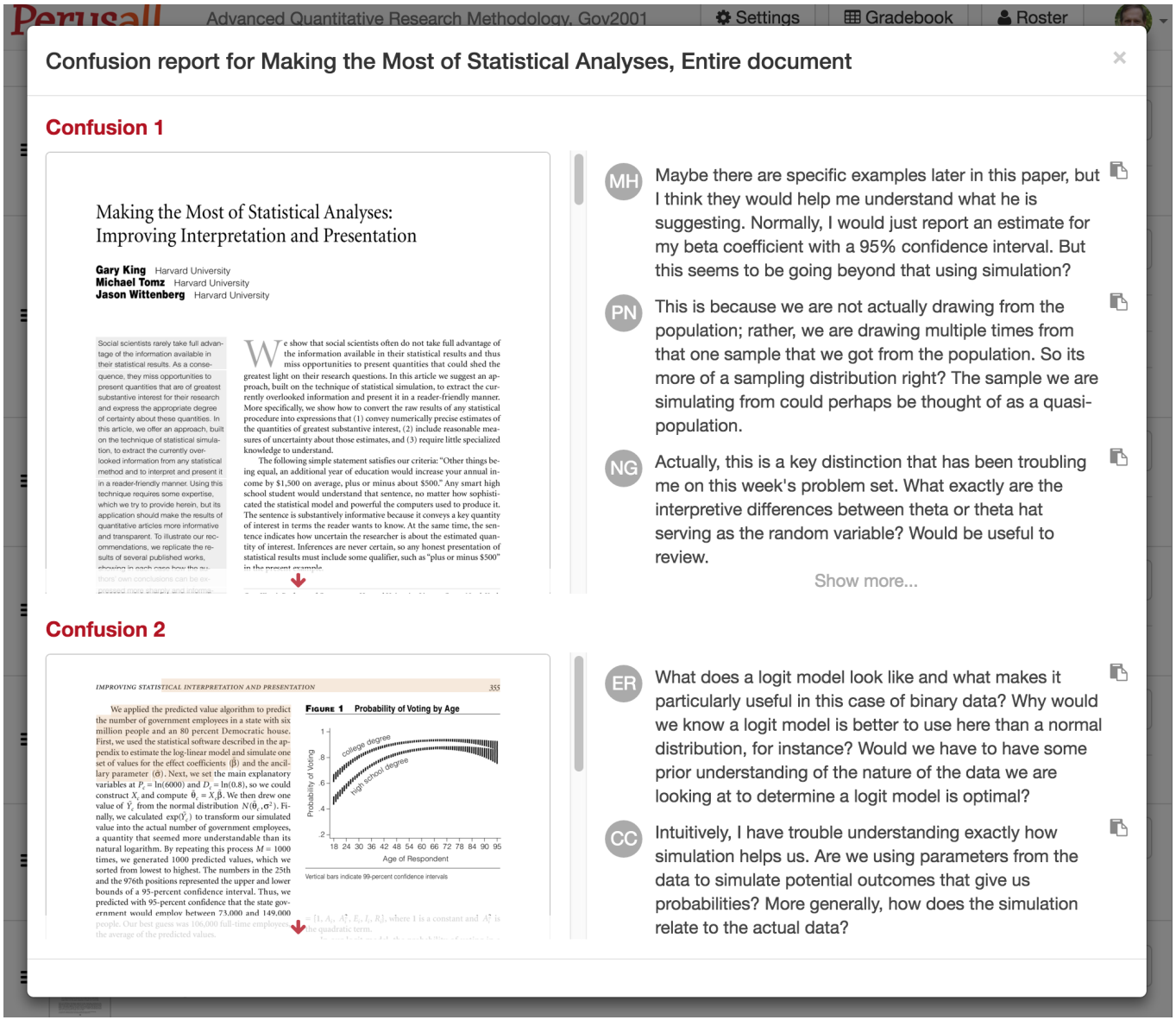

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- Students buy content through Perusall (online or via a code from your bookstore); usually pay less
- Publishers love it (keeps their content central; 100% sell-through, no resales, the ultimate solution to IP piracy)
- Many other features;

Administrative

- Works differently across fields:
  - In technical fields, students use Perusall to understand what the text explains, to get past hurdles
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