

The Ellsberg Urns and CQA
Gib Bassett
June 21, 2023

Daniel Ellsberg died last week. He was 92. He was famous for the Pentagon Papers; see the NYT obituary.

Ellsberg was a featured speaker at the 2016 CQA meeting in Chicago. The program is reproduced in Figure 1. His topic was the other reason for his renown: The Ellsberg Paradox. The paradox was described in the *Quarterly Journal of Economics* in 1961, but Ellsberg had discussed it with eminent decision theorists¹ since at least 1957. In 1954 Ellsberg had enlisted in the United States Marine Corps and served as a platoon leader and company commander in the 2nd Marine Division, and was discharged in 1957 as a first lieutenant; Wikipedia. After the Marines he went to work at Rand before enrolling at Harvard for his PhD. The Pentagon Papers were in the future.

Ellsberg's CQA title *Risk, Ambiguity, and Decision* is similar to his *QJE* article; *Risk, Ambiguity, and the Savage Axioms*. The paradox features a distinction between risk and ambiguity. It reveals a human tendency to prefer more certain/less ambiguous choice even if it violates expected utility. The thought experiment asks you to consider a choice situation in which (i) a ball is drawn from an urn with 50-50 split between green and purple and (ii) an urn with an unknown proportion of green/purple balls.

Dan Glickman did Ellsberg's introduction. Dan G. was instrumental in Ellsberg's invitation. To make the Paradox tangible, Dan G. brought two glass urns filled with gum balls to the podium, one filled with an equal number of green and purple gumballs, the other with an unknown proportion of green and purple gum balls hidden by a veil. Dan G. bought the vases/urns and gumballs the night before.

After Dan G.'s introduction and Dan Ellsberg's presentation lunch loomed. What to do with the gumballs and urns? I offered to put them in my office awaiting a decision. They are still there; Figure 2. Students wonder why I have two vases filled with gum balls.

I had the opportunity to sit next to Ellsberg at the CQA dinner that evening; Figure 3. I recall him saying that Savage was not impressed by the paradox.

¹In addition to Savage: A. Madansky, T. Schelling, L. Shapley, S. Winter, K. Arrow, G. Debreu, R. Schlaiffer, P. Samuelson, J. Marschak, N. Dalkey, H. Raiffa.

PS: A year later Glickman emailed:

Mon 12/18/2017 4:23 PM

Gib,

On Thursday, I attended the Premiere of the new Spielberg movie "the Post" about the publishing of the Pentagon Papers. Dan Ellsberg is a supporting character in the film and was the man of the hour at the premiere. I acted as Dan's friend and "social concierge" for the night. I got to speak with Spielberg and introduced (!) Warren Buffett, Jeff Bezos, and Bruce Greenwood to Dan. We all spoke about Dan's economic work. I told Spielberg that my quibble with the film was that it should have been titled "the Ellsberg Paradox". Buffett and I spoke about intransitive dice, Ed Thorp and Fama. Earlier, I met Janet Yellin and George Akerlof (who I didn't know was married to Yellin). We spoke about onion/movie futures and behavioral economics.

Hope to see you in Philly!
Merry Christmas!
Dan

[So many celebrities! We're gonna need a bigger boat...]

References

NYT. Daniel Ellsberg Obituary. https://www.nytimes.com/2023/06/16/us/daniel-ellsberg-dead.html?campaign_id=9&emc=edit_nn_20230617&instance_id=95393&nl=the-morning®i_id=74021166&segment_id=135981&te=1&user_id=224403435f314e15f17b0ee5b22821e

Ellsberg, D. (1961). Risk, Ambiguity, and the Savage Axioms. *The Quarterly Journal of Economics*, 75(4), 643–669. <https://doi.org/10.2307/1884324>

Figure 1



Figure 2



Figure 3

