

The Nancy Pelosi Game: to Reveal or Not to Reveal

Jonathan Day, Casey LaFrance, Steven Fuller

Political Science Department, Western Illinois University, Macomb, IL, USA

Abstract On January 24, 2012, Democratic Minority Leader Nancy Pelosi revealed that she had secret information against Newt Gingrich that would keep him from becoming president. However, this appears to be counterproductive. If she believes Newt Gingrich is the weakest GOP candidate, she should not reveal she has secret information against him, but instead hope that he becomes the nominee so that President Obama has the best chances of winning re-election. We analyze this in the form of a two person game and find that Nancy Pelosi's chosen strategy was optimal through a wide range of possible outcomes.

Keywords Politics, Game Theory, Campaigns, Elections

1. Introduction

Just hours before President Obama's State of the Union Address and four days away from the South Carolina Republican Primary, Congresswoman Nancy Pelosi made her prediction clear concerning Newt Gingrich. Just a few years after doing a climate change commercial together, Congresswoman Nancy Pelosi created some controversy with comments about Newt Gingrich and his chances of being the next President of the United States.

In an interview with CNN, John King asked about the possibility of Newt Gingrich being President. Congresswoman Pelosi responded "That will never happen." When Mr. King asked why, Congresswoman Pelosi claimed "He's not going to be President of the United States." Pelosi then continued, "Let me make just make my prediction and stand by it, it isn't going to happen" (Pelosi, 2012, January 24). Mr. King asked why she was so sure and she responded with "there is something I know. The Republicans, if they choose to nominate him that's their prerogative. I don't even think that's going to happen" (Ibid).

The following day on NBC's Today, Ann Curry asked Mr. Gingrich about Congresswoman Pelosi's "there is something I know" comment. He responded "She lives in a San Francisco environment of strange fantasies. I have no idea what's in Nancy Pelosi's head. If she knows something, spit it out. Tell us what it is. I have no idea what she's talking about" (Gingrich, 2012, January 25).

One question is: Why wouldn't Nancy Pelosi reveal the information she has against Newt Gingrich? Assuming she has information against Newt Gingrich, the most likely

reason is because she is saving this for the general election. This is a very strategic move in that there is no reason to prevent a weak candidate from winning the nomination. However, the puzzle is why would she reveal even that she has secret information?

Wouldn't this lower the probability of Newt Gingrich being the nominee and therefore not be a strategic move? In order to analyze this puzzle, we employ game theory to help us understand whether or not this was Nancy Pelosi's best move.

2. The Game

There are two players in this game: Nancy Pelosi and GOP voters. Each player has two strategies. Nancy Pelosi could either reveal that she has secret information that would keep Newt Gingrich from winning the presidency or she could not reveal that she has secret information. GOP voters also have two strategies¹: They can vote for Mitt Romney or they can vote for Newt Gingrich².

2.1. Nancy Pelosi's Preferences

We know that Nancy Pelosi's preferences are that she desires Barack Obama to win re-election over any GOP candidate. Thus, in the general election, she would prefer the weaker candidate to go against President Obama so that the probability of the president winning re-election is greater.

¹ While there were four GOP candidates at the time of this event, we will limit our analysis for now down to the two clear front runners in the election as of this event: Mitt Romney and Newt Gingrich. In a Rasmussen Reports poll (January 24, 2012), Rick Santorum was 12 points behind Mitt Romney and 19 points behind Newt Gingrich, nationally. Ron Paul was 6 points behind Rick Santorum, nationally. There is also the strategy of GOP voters abstaining, but we eliminated this strategy as a possibility because it is dominated by voting for your preferred candidate.

² Other interesting games to look at include: Kalandrakis, T. 2007 and Harsanyi JC. 1973a.

* Corresponding author:

jp-day@wiu.edu (Jonathan Day)

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We also know from her interview that she believes Newt Gingrich is the weakest candidate because she has information that would guarantee Newt Gingrich would never be president. So we can infer from these last two premises that she would prefer Newt Gingrich to be the GOP nominee. We will make the payoff for Nancy Pelosi if Mitt Romney gets the nomination at four and the payoff if Newt Gingrich gets the nomination at ten. We arrive at these payoffs by taking into account the probability that each GOP candidate defeats President Obama and the value of a President Obama re-election. We will assess the value of a President Obama re-election for Nancy Pelosi is ten and the probability that Barack Obama wins the presidency against Newt Gingrich, in Nancy Pelosi's view, at 100%. The payoff then for Nancy Pelosi in a Newt Gingrich nomination is ten. We will estimate the probability of President Obama defeating Mitt Romney at 40%, so the payoff for Nancy Pelosi in a Mitt Romney nomination is four. While these estimations are arbitrary, the analysis of the game is not changed even under varying assumptions as long as a Newt Gingrich nomination is preferred by Nancy Pelosi over a Mitt Romney nomination. We believe this is a very reasonable assumption given the confidence Nancy Pelosi has that Newt Gingrich could never be president.

2.2. GOP Voters' Preferences

The GOP voters' preferences are harder to determine. However, we can assume two facts given polling data. First, that in the mind of GOP voters, Mitt Romney has a greater chance of winning the general election against Barack Obama than any other GOP candidate (CBS, 2012, January 18). Second, we know that ideologically GOP voters prefer Newt Gingrich to Mitt Romney (Tantaros, 2012, February 2). Given these two facts we can construct payoffs for GOP voters. We take the probability that each candidate can defeat Obama and multiply that by the value that GOP voters would get from having that candidate as president. Let us say that before the game begins that in the mind of GOP voters, the probability of Newt Gingrich defeating Barack Obama is 30% and the probability of Mitt Romney defeating Barack Obama is 60%. We will also assume the value of Newt Gingrich being president for GOP voters is ten, since he is the more conservative candidate and the value of Mitt Romney being president at five.

If Nancy Pelosi does not reveal that she has secret information against Newt Gingrich that would keep him from becoming president, then the payoffs for GOP voters is the probability that each candidate will win the presidency multiplied by their value. Given the values that we set, GOP voters have a payoff of three in voting for Newt Gingrich and three in voting for Mitt Romney. This means that it is essentially a coin toss for whom they decide to vote.

On the other hand, if Nancy Pelosi reveals that she has secret information against Newt Gingrich, then we can assume two changes to GOP assessments. First, GOP voters may believe that the probability of Newt Gingrich winning

the general election is smaller. Second, GOP voters may increase the value they put on Newt Gingrich, seeing him as the nemesis of the Democrats. Newt Gingrich makes this point when he responds to Nancy Pelosi's comments: "I much rather be attacked by Nancy Pelosi than endorsed by her so I was kind of grateful that she took the right position for a left wing democrat" (Gingrich, N. 2012, January 26).

The value and the belief in the probability that Mitt Romney could defeat Barack Obama would stay the same. Let us say that after the GOP voters learn Nancy Pelosi has secret information, they believe that Newt Gingrich now just has a 25% probability of defeating Barack Obama, but they place the value of Newt Gingrich being president at sixteen. We now have all of the information we need for the Nancy Pelosi Game.

3. The Solution

In Figure 1 (located in the Appendix), we sketch out the tree for this game. Nancy Pelosi moves first. She can either reveal she has secret information against Newt Gingrich that would keep him from becoming president or she can not reveal that she has secret information. After she makes her move, GOP voters then decide what to do. They can either vote for Mitt Romney or they can vote for Newt Gingrich.

To solve this game we can use backward induction. If Nancy Pelosi chooses not to reveal that she has secret information against Newt Gingrich, then Mitt Romney and Newt Gingrich each have a 50% chance of becoming the nominee. Nancy Pelosi's payoff in this case is seven, the average of the two possible outcomes. If Nancy Pelosi chooses to reveal that she has secret information against Newt Gingrich, then GOP voters prefer Newt Gingrich and he becomes the nominee. Nancy Pelosi's payoff in this case is ten. Thus, according to this model, Nancy Pelosi should reveal that she has secret information against Newt Gingrich and this is what she did.

3.1. Alternate Assumptions

One criticism may be that the result is determined by the assumed values that we place on the payoffs. This is indeed true. So now we will show that the chosen strategy of Nancy Pelosi is her best move in light of many possible assumed payoff values.

For example, let us change the value of the two possible results if Nancy Pelosi does reveal that she has secret information: The GOP voters' belief in the probability that Newt Gingrich could win the nomination and the value that the GOP voters put on Newt Gingrich being president. In Figure 2 (located in the Appendix), we show a range of possible results. We exclude the possibilities that the believed probability of Newt Gingrich defeating President Obama increases and the value of Newt Gingrich to GOP voters as president decreases, since these are extremely unlikely. We show three probabilities that GOP voters might believe that Newt Gingrich will defeat Barack Obama if he

becomes the nominee given Nancy Pelosi sharing that she has secret information. We also show a range of possible values that a Newt Gingrich nominee would provide GOP voters as president given Nancy Pelosi sharing that she has secret information.

Out of all the alternate assumptions shown in Figure 2, 78.8% of them would support Nancy Pelosi's decision as being optimal. The game is also not affected by any level of value that Nancy Pelosi places on Newt Gingrich and Mitt Romney becoming the nominee, provided that she places more value on Newt Gingrich being the nominee over Mitt Romney.

3.2. Alternate Strategies

At the time of this event, there were four possible GOP candidates left. What if we add the other two GOP candidates in the model? Do the results change? In addition to this question, there is also one more major strategy by Nancy Pelosi. What if she revealed the secret? We construct a new game adding in these additional strategies and we present this expanded version of the Nancy Pelosi game in Figure 3. We put the probability that Rick Santorum or Ron Paul would defeat the president in the view of Nancy Pelosi at 50%. This means the payoff for Nancy Pelosi if Rick Santorum or Ron Paul win the nomination is five. We also place the payoff of Rick Santorum or Ron Paul winning the nomination at two for GOP Voters. We believe this accurately reflects that these two candidates were slightly less desirable to GOP voters than Newt or Mitt at the time of this

event. Also, we place the payoff of a Newt Gingrich nominee for GOP voters if the secret is revealed at zero, since after Nancy Pelosi reveals the secret they would know he was not electable. The reason this is not the case if she only reveals that she has a secret is because GOP voters have good reason to believe she may be bluffing.

If Nancy Pelosi doesn't reveal she has secret information, she should expect a payoff of seven, since it would be a toss-up for GOP voters between Romney and Gingrich. If Nancy Pelosi reveals that she has secret information, she should expect a payoff of ten, since GOP voters would prefer Gingrich and for her, he is the weakest nominee. Finally, if she reveals the secret information, then she would expect a payoff of four because GOP voters would vote for Romney and for Nancy Pelosi he is the strongest GOP nominee. Therefore, given all the possible strategies and the payoffs associated with them and since Nancy Pelosi has secret information, she should reveal that she has a secret, but not reveal the secret.

This means that the results remain the same even after adding in the additional strategies (two additional candidates for GOP voters and the possible strategy of revealing the secret for Nancy Pelosi). This result would continue to hold for all values where the other two candidates, Rick Santorum and Ron Paul, are less desirable than Mitt Romney and Newt Gingrich.

APPENDIX

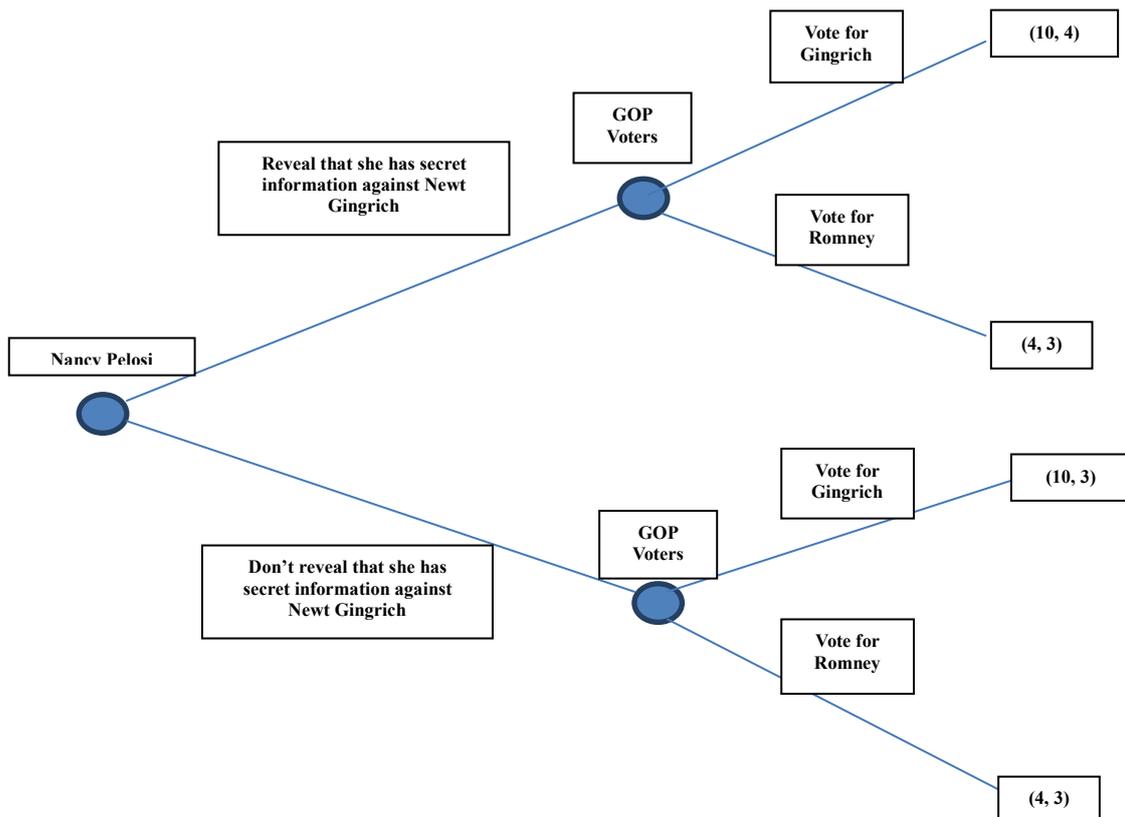


Figure 1. The Nancy Pelosi Game

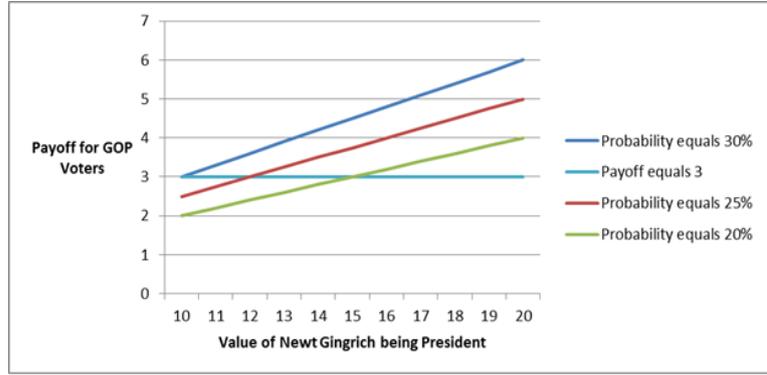


Figure 2. Alternate Assumptions of GOP Voters

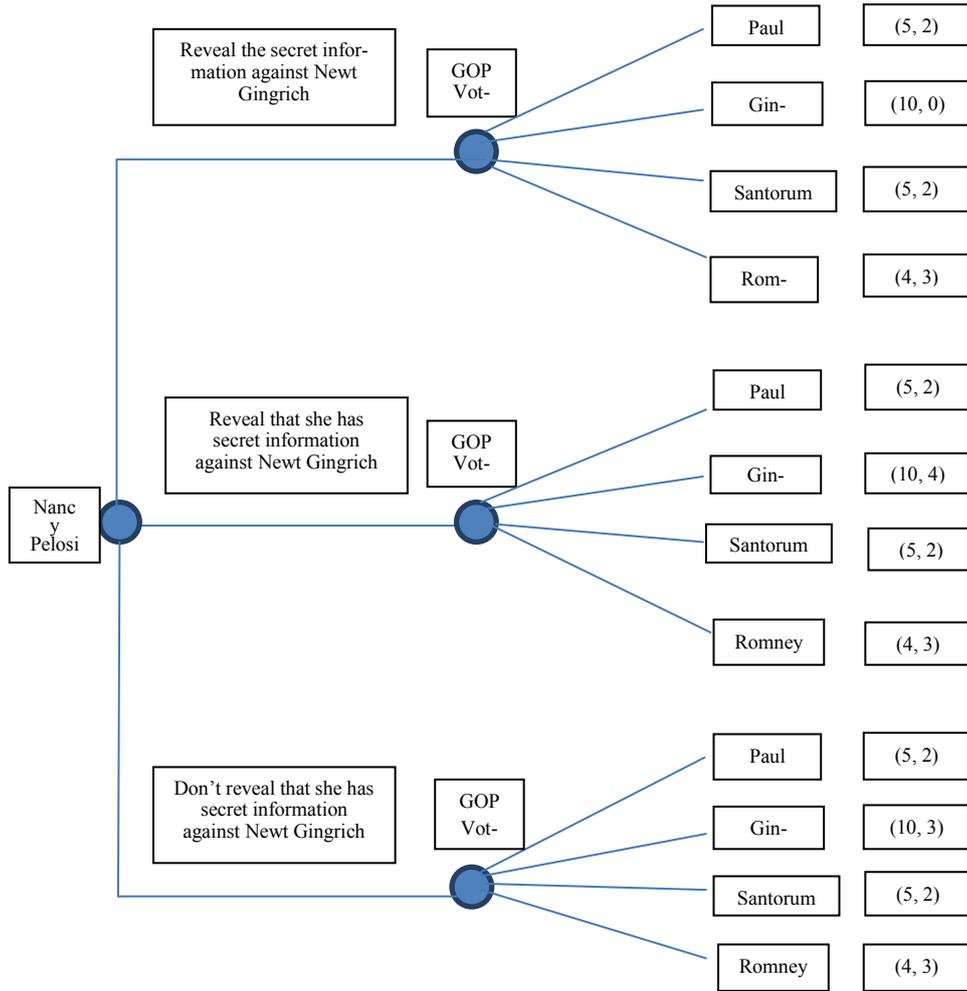


Figure 3. The Nancy Pelosi Game Expanded

4. Conclusions

We have shown that the supposed counterproductive statement of Nancy Pelosi revealing that she has secret information which would keep Newt Gingrich from being president is actually an optimal strategy if she wants Newt Gingrich to be the nominee. This strategy is optimal under many different possible outcomes from her statement. This game also shows how it is possible to get your preferred

outcome by choosing a seemingly counterproductive strategy.

While this strategy by Nancy Pelosi makes it more likely for Newt Gingrich to win the nomination, we by no means think that this guarantees Newt Gingrich the win. For one, the likely impact that this has on GOP voters is most likely very temporary and very small. Second, the media coverage, primary schedule, campaign spending, and campaign performances have the greatest effect on who becomes the

nominee. But, what this does show is that Nancy Pelosi chose her best strategy given the possible strategies she could have chosen. In future research, a similar game to this one could also be extended to other possible situations, such as economic markets, diplomacy, war, and alliances.

Finally, as a research note, while creating uncertainty about a candidate does reduce the desirability of that candidate in the electorate (Alvarez, 1999; Glasgow and Alvarez, 2000) and while electability and candidate personality traits do matter (Rickershauser and Aldrich, 2007; Steger 2007; Kenney and Rice, 1988), recent research indicates that information similar to what Nancy Pelosi may reveal may have little impact on the election (Kilburn, 2005; Bartels, 2003; Funk, 1996).

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REFERENCES

- [1] Alvarez, R. Michael. 1999. *Information and Elections*. University of Michigan Press.
- [2] CBS/New York Times (2012). Full Results of the CBS/New York Times. Published January 18, 2012. Retrieved from: <http://www.nytimes.com/interactive/2012/01/19/us/politics/19poll-documents.html>Bartels, Larry M. 2003. "The Impact of Candidate Traits in American Presidential Elections" in *Leaders' Personalities and the outcomes of Democratic Elections* edited by Anthony King. Oxford Scholarship Online.
- [3] Funk, Carolyn L. 1996. "The impact of scandal on candidate evaluations: An experimental test of the role of candidate traits" *Political Behavior*. 18(1): 1-24.
- [4] Gingrich, Newt. (2012). Interview Remarks. [Video Tape Recording]. Gingrich: Obama Gave Campaign Speech, January 25. Retrieved from: <http://video.today.msnbc.msn.com/today/46129017>
- [5] Gingrich, Newt (2012). Interview Remarks [Video Tape Recording], January 26, 2012. Hannity. Full video available from: www.foxnews.com/hannity
- [6] Glasgow, Garrett and R. Michael Alvarez. 2000. "Uncertainty and Candidate Personality Traits" *American Politics Research*. 28(1): 26-49.
- [7] Harsanyi JC. 1973a. "Games with randomly disturbed payoffs: a new rationale for mixed-strategy equilibrium points" *International Journal of Game Theory*. 2:1-23
- [8] Kalandrakis, T. 2007. "On participation games with complete information" *International Journal of Game Theory*. 35(3): 337-352.
- [9] Kenney, Patrick J. and Tom W. Rice. 1988. "Presidential Prenomination Preferences and Candidate Evaluations" *The American Political Science Review*. 82(4): 1309-1319.
- [10] Kilburn, H. Whitt. 2005. "Does the Candidate Really Matter?" *American Politics Research*. 33(3): 335-356. Full Results of The New York Times and CBS News Poll
- [11] Pelosi, Nancy. (2012). Interview Remarks [Video Tape Recording]. The Truth about Pelosi's Comments. January 24 Retrieved from: <http://johnkingusa.blogs.cnn.com/2012/01/25/the-truth-about-pelosis-comments/>
- [12] Rickershauser, Jill and John H. Aldrich. 2007. "'It's the electability, stupid'" – or maybe not? Electability, substance, and strategic voting in presidential primaries" *Electoral Studies*. 26(2): 371-380.
- [13] Steger, Wayne P. 2007. "Who wins Nominations and Why? An Updated Forecast of the Presidential Primary Vote" *Political Research Quarterly*. 60(1): 91-99.
- [14] Full Results of The New York Times and CBS News Poll-Tantaras, Andrea (2012). Mitt Romney's Conservative Problem. *New York Daily News*, February 2. Retrieved from: <http://www.nydailynews.com/opinion/mitt-romney-conservative-problem-article-1.1015612>