Will Trump win again in the 2020 election?  
An answer from a sociophysics model

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Abstract

In 2016, Trump was unanimously seen as the loser in the November 8 election. In contrast, using a model of opinion dynamics I have been developing for a few decades within the framework of sociophysics, I predicted his victory against all odds. According to the model, the winning paradoxical martingale of 2016, has been Trump capability to activate frozen prejudices in many voters by provoking their real indignation. However, four year later, Trump “shocking” outings do not shock anymore, they became devitalized, losing their ability to generate major emotional reactions. Does this mean that this time around he will lose the 2020 election to Biden, as nearly all analysts, pundits and commentators still predict? No, because although frozen prejudices will remain frozen, this time the spontaneously activated prejudices are benefiting to both Biden and Trump. The main ones are the fear of the other candidate policy and the personal stand facing a danger. In addition, since Trump presidency having polarized a large part of American voters into narrow-minded anti-Trump and narrow-minded pro-Trump, those I designate in my model as inflexibles, will also drive the dynamics. Both effects, prejudices and inflexibles can either compete or cooperate making their combination within each state, to determine the faith of the state election. Tiny differences can make the outcome. Based on my rough estimates of associated proportions of inflexibles and prejudices, the model predicts Trump victory in the 2020 November election.

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1 Introduction

Dealing with the 2020 American presidential election with the incumbent republican candidate Donald Trump being challenged by the democrat Joe Biden, it is of a central importance to go back four years ago when Trump won the 2016 presidential election defeating Hillary Clinton against all odds.

Then, till 2016, November 8, Trump was predicted to lose the election by almost every analyst, scholar, pundit and polls. Even beforehand, most of them were labelling Trump as a political bubble, which was set to collapse during the Republican nomination campaign, anticipating he would even not last till the end of the process of republican nomination.

In contrast, using a model of opinion dynamics [1] I have been developing for a few decades within sociophysics [1–5], I did predict Trump coming victory against all odds [6]. It is worth to notice that I myself did not believe my prediction could be right but the model was yielding Trump victory. More precisely, I did not predict his victory, I showed why keeping on infuriating millions of American was a a winning strategy for him. And indeed he kept on with his repeated shocking statements and he eventually won.

The prediction was based on both the effect of prejudices in the dynamics of opinion and Trump’s capacity to modify the hierarchy of hidden prejudices to activate the one favoring him, which otherwise were frozen among most voters. In particular, it has been his repeated shocking statements, which have put ahead frozen prejudices many voters have.

I should mention that Allan Lichtman, an historian from American University in Washington, did also predicted 2016 Trump victory using a binary scheme of 13 keys [7]. Afterwards, he got an intensive media coverage. I did not, demonstrating not many people read the International Journal of Modern Physics B where the paper was published.

Back to the current 2020 Presidential campaign. Up to few weeks ago, most media, analysts, scholars, pundits and polls have kept assessing Trump would lose this coming election [8]. Are they right this time?

Indeed, during the last four years they have been anticipating Trump will not complete his mandate. They also started prophesying an impeachment, convinced it will lead to Trump eviction. The impeachment was eventually implemented by the Democrats at the Congress but without the expected destitution of Trump with the Republicans clearing at the Senate. On the contrary, the whole process has been beneficial to Trump.

Democrats and anti-Trump analysts have been blind to the reality entrenched within wishful thinking with the underlying conviction that Trump “stole” the 2016 victory. Accordingly, not much effort has been done to understand how and why he did win the election. And here we are with Trump running for a second mandate.

Emblematic of this celebrating Trump defeat has been the paper and video about Allan Lichtman new prediction published in the New York Time on August 5, 2020. In a video, Lichtman using his 13 "keys" scheme, has predicted Trump losing this coming election in an interview [7]. And as to exorcise last election “curse”, the journalists presenting the video, wrote: “Right now, polls say Joe Biden has a healthy lead over President Trump. But we’ve
been here before (cue 2016), and the polls were, frankly, wrong. One man, however, was not. The historian Allan Lichtman was the lonely forecaster who predicted Mr. Trump’s victory in 2016” (https://www.nytimes.com/2020/08/05/opinion/2020-election-prediction-allan-lichtman.html). The unwritten conclusion being this time Game is over, Trump will lose the election. Yet, the whole media coverage has a taste of “déjà vu” from the 2016 campaign, which ended with Trump victory.

What about the coming November 3, 2020 election? According to the model I used to make the prediction, the winning paradoxical martingale implemented by Trump has been his on going capability to activate frozen prejudices many voters had by provoking their real indignation. However, four year later, Trump “shocking” outings do not shock anymore, they lost their ability to generate major emotional reactions turning devitalized. Does this mean that this time around he will lose the 2020 election to Biden, as nearly all analysts, pundits and commentators still predict?

No, because although frozen prejudices will remain frozen, this time the spontaneously activated prejudices are benefiting to both Biden and Trump. The main ones are the fear of the other candidate policy and the personal stand facing a danger.

In addition, during his mandate Trump has polarized a large part of American voters into narrow-minded anti-Trump and narrow-minded pro-Trump, those I designate in my model as inflexibles [10]. And the model shows that inflexibles have a drastic effect on the dynamics of opinion. Numerous works have investigated the role of inflexibles [11–18].

Both effects, prejudices and inflexibles can either compete or cooperate making their combination within each state, to determine the faith of the state election. Tiny differences can make the outcome [19]. Based on my rough estimates of associated proportions of inflexibles and distribution of active prejudices, the model predicts Trump victory in the 2020 November election.

The rest of the paper is organized as follows. Section 2 contains a few words of caution about the positioning of the work. The Galam model of opinion dynamics is presented in Section 3. It reviews the local update among a group of discussing agents, the prejudice driven tie breaking effect, the inflexible effect, and the update equation. Section 4 is about the 2016 prediction. The winning strategies for the 2020 election are elaborated in Section 6. The prediction for the 2020 election winner is given in Section 7. The possible role of hidden voting and hidden abstention is briefly mentioned. Concluding statements are made in Section 8.

### 2 Words of caution

As a caution it is of importance to emphasize that I am not dealing with a choice being wrong or right. I am not advocating for one candidate or the other.

Within the field of sociophysics, I am focusing on identifying the hidden mechanisms, which drive the dynamics of opinion between two competing choices, in particular to anticipate the
one, which will eventually ends up above 50%.

Having the frame for the generic dynamics of opinion, I apply it to the case of American Presidential elections 2016 and 2020.

It is worth to remind that sociophysics is the use of concepts and techniques from Statistical Physics to describe some social and political behaviors. It aims neither at an exact description of the reality nor to substitute to social sciences but to provide an additional different and rather counter intuitive vision of the social reality [?]. One main topic is opinion dynamics.

3 The Galam model of opinion dynamics

Two choices A and B are competing among agents like for a Presidential race with Clinton or Trump (2016) and Trump or Biden (2020). I consider heterogeneous agents with two psychological traits with floaters and inflexibles. It is also possible to add a third trait with contrarians, which I do not consider in the present study.

- Floaters are agents having an opinion and advocating for it but they are susceptible to shift opinion if given convincing arguments
- Inflexibles are agents (stubborn, committed) never shift its opinion.
- Contrarian are agents take a contrary choice to the (local or global) majority. They are not included in the present work.

The dynamics of opinion is initiated at time $t_0$ with each agent having made a choice, either A or B. I do not investigate what mechanisms lead to these respective individual choices. I only consider the initial proportions $p_0$ and $(1 - p_0)$ of support for respectively A and B at a time $t_0$. External events, which can act directly on single individuals to influence at diverse degrees their current choice are included in the making of $p_0$. However, at time $t_0$ all external influences are cut off and the value of $p_0$ is obtained from polls.

I then model the dynamics of individual shifts of opinions driven by informal discussions among small groups of people arguing about choices A and B during the on going campaign till the voting day. In case a major external event does occur, it will impact directly individual choices with a rescaling of the respective supports thus creating a new initial state. When that happens, a new measure of a new initial value $p_0$ is performed and the dynamics is reactivated.

3.1 The local update among a group of discussing agents

The cognitive and psycho-sociological processes leading to one person to shift opinion while discussing an issue informally in a small group of agents, are not know and complicated. I make it simple, the “physicist way” with one person one vote + local majority rule to have all the group members to adopt the initial majority choice. Applying a local majority rule creates a local group polarization. It is worth to note that while stubborn agents do vote
as floaters do, contrary to floaters, they do not follow the majority keeping on their initial individual choices.

The dynamics is then implemented by first randomly distributing all agents in a series of small groups of various sizes ranging from 1 to L where L is rarely larger than 6. Second, all groups are updated according to majority rules. A new value of A support $p_1$ is obtained. Third, groups are dispersed and all agents are reshuffled. The three preceding steps are then iterated and so on and so forth yielding,

$$p_0 \rightarrow p_1 \rightarrow p_2 \rightarrow p_3 \rightarrow \cdots \rightarrow p_n,$$

where $n$ corresponds to voting time $t_n$. Having $p_0$ I aim to anticipate if $p_n > \frac{1}{2}$ (A winning the election) or $p_n < \frac{1}{2}$ (A losing the election). In the last weeks before the vote, the campaign intensifies with people discussing more and more often among themselves, which means more updates for a given time duration.

### 3.2 The prejudice driven tie breaking effect

While majority rule is fine and always applies for odd size groups, it cannot operate for an even size group at a tie. In such a case, a physicist would likely decide to keep the tie before the reshuffling of agents to preserve the symmetry between A and B.

However, here we are dealing with humans and at a tie, the collective confrontation of individual opposite views gets trapped in a balanced state with both choices being equally choosable. I then postulate that this tie creates a collective doubt where rationality cannot operate to make a choice between A and B. The postulate sounds counterintuitive since a priori, aggregating more arguments is expected to provide a more rationalized choice. However, it happens that at a tie, the addition of opposite arguments results into an incapacity to motive one choice over the other. At a tie, aggregation of information neutralizes the information content. The choice is thus made “randomly” as with flipping a coin. No reason for the choice made.

But at this moment, I make the hypothesis that indeed the “flipping coin” is biased along the prejudices activated spontaneously and unconsciously by the issue at stake. Therefore, the tie is resolved at the benefit of the choice which is naturally in tune with the prejudiced activated by the issue at stake but says perceived as chosen by chance.

Once, above hypothesis is done, the next step is to implement it by identifying the prejudice actually activated to rise the local doubt since prejudices of a given social group are numerous and diverse. Moreover, people are unaware of most of them them and in addition, different issues rise different prejudices among the same people. Examples of prejudices are sexism, homophobia, racism, religious beliefs, precaution principe, societal vision.

Different issues activate spontaneously different prejudices within the same social group. For instance, a group at a tie with respect to the agreement of a reform proposal, does chose to reject the proposal driven by a natural “Tip to the Status Quo", choosing to keep what
was before. In contrast, the very same group at a tie about choosing a new high tech product, naturally chooses the new product guided by a natural “Tip to the Novelty”.

We can also extend the tie breaking effect to a distribution of different prejudices for an heterogeneous population with a probability $k$ for choice A and $(1-k)$ for choice with $0 \leq k \leq 1$. For instance, groups of size 4 yield the update equation,

$$p_1 = p_0^4 + 4p_0^3(1-p_0) + 6kp_0^2(1-p_0)^2,$$

whose iterations are shown in Figure (1) for $p_0 = 0.25$ and $p_0 = 0.75$ with $k = 0$ and $k = 1$.

### 3.3 The inflexible effect

An inflexible does take part in the local making of the majority but never shifts in case its choice is minority in the group. It is worth to stress that an inflexible does not contribute more than a floater to the local majority. it has only one vote as every other agent.

Noting $a$ and $b$ the respective proportions of inflexibles holding opinion A and B, the proportions of floaters become $(p_0 - a)$ for A and $(1-p_0 - b)$ for B. While the dynamics modifies $p_0$, $a$ and $b$ are fixed and do not change during the campaign. The values $a$ and $b$ satisfy the constraints $0 \leq a \leq 1$, $0 \leq b \leq 1$, $0 \leq a+b \leq 1$.

Figure (2) illustrates the inflexible effect for the case of one sided inflexibles ($b = 0$) with groups of size 3, $p_0 = 0.20$, and $a = 0, 0.05, 0.15, 0.20$ when iterating the associated Equation,

$$p_1 = p_0^3 + 3p_0^2(1-p_0 - \frac{1}{3}) + a(1-p_0)^2.$$

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Figure 1: Iterations of Eq. (2) for $p_0 = 0.25$ (left) and $p_0 = 0.75$ (right) with $k = 0$ and $k = 1$. 

Figure 2: Illustration of the inflexible effect for one sided inflexibles with groups of size 3, $p_0 = 0.20$, and $a = 0, 0.05, 0.15, 0.20$ when iterating the associated Equation.
3.4 The update equation

In my previous study I could study the combination of tie breaking and inflexible effects alone only for group size 2. For size 3 it was only inflexibles (Eq. (3)) and only tie breaking for size 4 Eq. (2).

However, recently with my colleague Cheon we have been able to derive analytically a universal update equation in a five dimensional parameter space \( (k, a, b, c, r) \) where \( c \) the proportion of contrarians (not included in this study: \( c = 0 \)) and \( r \) is the group size [20].

To make the analysis simpler and yet incorporate local majority, tie breaking prejudice and inflexible effects, I choose here to have all discussing groups with a size 4. The associated update equation writes,

\[
p_1 = p_0^4 + 4p_0^3 (1-p_0) + 3a(1-k)p_0(1-p_0)^2 - 3bkp_0^2(1-p_0) + 6kp_0^2(1-p_0)^2 + a(1-p_0)^3 - bp_0^3,
\]

which yields the series in Eq. (1) by iteration.

The associated dynamics is revealed solving the fixed point equation \( p_1 = p_0 \). Two scenarios are obtained, either one tipping point \( p_t \) located between two attractors \( p_A > \frac{1}{2} \) and \( p_B < \frac{1}{2} \) or one single attractor \( p_s \). In the first case, \( p_0 > p_t \) leads to reach \( p_A \), i.e., A wins the election while \( p_0 < p_t \) lead to reach \( p_B \), i.e., A loses the election. The second leads to \( p_s \) whatever is the initial value \( p_0 \). It of importance to stress that both \( p_t \) and \( p_s \) can be located above or below \( \frac{1}{2} \) depending on \( k, a, b \).

Earlier studies found that the tie breaking prejudice effect produces only first scenario with \( p_A = 1, p_B = 0 \) and \( 0.23 \leq p_t \leq 0.77 \) as a function of \( k \). In contrast, inflexibles produce the two scenarios depending on two critical values \( x_1 > 0 \) and \( x_2 < 0 \). In the range \( x_2 \leq x \leq x_1 \)
the tipping point dynamics prevails while for \( x < x_2 \) or \( x > x_1 \) the dynamics is monitored by one single attractor. First case has \( p_A \neq 1 \) and \( p_B \neq 0 \) and second one has \( a < p_s < 1-b \). In the present study, I incorporate both effects which can combine to favor the same choice or compete each one favoring a different choice. The tie breaking effect is smooth as a function of \( dk \) but the inflexible effect is much more drastic and non linear as a function of \( x \).

4 The 2016 prediction

With respect to the 2016, November 8, my claim is that Trump victory was neither an accident nor the result of some manipulations. It was the outcome of a non-linear dynamics, which obeys quantitative laws. And indeed, I could predict Trump victory using the Galam model of opinion dynamics (SG [arXiv:1609.03933] (2016); Int. J. Mod. Phys. B 31(10) 1742015 (2017).

Trump 2016 election rises the following questions:

(i) How comes he won while making repeated shocking statements, which infuriated millions of people?

(ii) How comes Trump campaign, which went against all making sense principles has turned successful?

During the 2016 campaign, first identification of the prejudices which were naturally activated in case of a tie, leads among others to: Trump is not shaped to be President, Trump has not political knowledge for foreign affairs, Trump does not fit to the job, Trump has no political experience. It implied \( k = 0 \) for Trump, which makes his \( p_t \) very high. Accordingly, even with initial high support \( p_0 \), his support was doomed to shrink. On this basis, applying the model to Trump led me join the overwhelming shared conclusion that he will be defeated during the primary campaign. Trump was doomed to lose.

But at the beginning of March 2016 I had the chance to be in the US for a conference and I realized that Trump was “playing” with my model along a novel path I never envision before. I first thought that prejudices are given and it is not possible to modify them on a short time scale. But Trump was innovating with my model implementing an original scheme to modify the activated prejudices.

Indeed, Trump shocking statements were infuriating many people pushing them to initiate more debates to condemn his statements. But at the same time, this emotional reaction was unfreezing deep locked prejudices, which were present in many of those infuriated voters. The emotion to condemn the statements brought in front line frozen prejudices, which become the ones activated at a tie.

However, the process is twofold. First Trump was losing votes, and second he was turning the tie breaking at his the benefit. Therefore, to have the follow up debate increases his support, the starting new support had to be located above the new tipping point created by the change of the activated prejudice. As a result, to win in a given state required both the
Figure 3: Iterations of Eq. \( \text{(2)} \) with first \( p_{0,1} = 0.75 < p_t \approx 0.77(k = 0) \) followed respectively by (left) \( p_{0,2} = 0.22 < p_t \approx 0.23(k = 1) \) and (right) \( p_{0,2} = 0.24 > p_t \approx 0.23(k = 1) \).

existence of a minority of openly prejudiced people to ensure the new \( p_0 \) to be above the new \( p_t \) and a substantial proportion of agents sharing the frozen prejudice. Figure (3) exhibits the two failure and success cases with first \( p_{0,1} = 0.75 < p_t \approx 0.77(k = 0) \) followed respectively by \( p_{0,2} = 0.22 < p_t \approx 0.23(k = 1) \) and \( p_{0,2} = 0.24 > p_t \approx 0.23(k = 1) \).

5 The 2020 prediction: setting

After four years with Trump president, people got used to his repeated shocking statements and no no more indignation is generated by them, making the frozen prejudice effect obsolete for the 2020, November 3, campaign. Does it means Trump will be losing the election? The answer is no.

With no unfreezing mechanism, the naturally activated prejudices will determine the tie breaking. However, this time the naturally activated prejudices are distributed at the benefit of both candidates. Among them stands the fear of the other candidate, fear for a second Trump term, fear for socialism and chaos. Depending on the population, one fear will be more present than the other.

During those four years of Trump presidency, he managed to create a very high level of polarization among voters with millions stubborn anti-Trump and millions pro-Trump voters. Alike the natural prejudice effect, the inflexible effect is available on both sides.

Therefore, what matters is the differences in both the distance from \( \frac{1}{2} \) for \( k \) and the respective proportions of inflexibles. To have a more immediate reading of the various cases, I define the differences \( dk \equiv k - \frac{1}{2} \) and \( x \equiv a - b \). Then, \( dk > 0 \) means a prejudice advantage
to A and $dk < 0$ a prejudice advantage to B with $-\frac{1}{2} \leq dk \leq \frac{1}{2}$. For inflexibles, $x > 0$ means more inflexibles for A than for B and $x < 0$ less inflexibles for A than for B. The constraints on $a$ and $b$ yield $2a - 1 \leq x \leq 2a$.

To illustrate the large spectrum of unexpected dynamics produced by a combination of tie prejudice breaking and inflexible effects I show in Figures (4,5,6,7) four series of emblematic cases with $r = 4$ as a function of both $dk$ and $x$. The cases with $p_s = \text{frac12}$ are chosen to show how tiny changes in either $dk$, $x$ or both will make the winner. In the cases with $p_s = 0.50$, any tiny change in either $pk$ or and $x$ makes the victory.

1. Figure (4) shows four different one sided inflexibles ($a = x, i.e., b = 0$) with balanced prejudices $dk = 0$ for group size 4. The arrows show the dynamics starting from $p_0 = 0.40$. Top left: $a = 0$ yields $p_A = 1, p_t = \frac{1}{2}, p_B = 0$. Top right: $a = 0.08$ yields $p_A = 1, p_t = 0.44, p_B = 0.093$. Bottom left: $a = 0.13$ yields $p_A = 1, p_t = 0.37, p_B = 0.18$. Bottom right: $a = 0.16$ yields $p_A = 1$, A always wins.

2. Figure (5) shows four different cases with $a = 0.30$ and group size 4. The arrows show the dynamics starting from $p_0 = 0.40$. Top left: $x = 0, dk = 0.01$ yields $p_s = 0.51$ (A wins). Top right: $x = -0.01, dk = 0.01$ yields $p_s = 0.49$ (A loses). Bottom right: $x = -0.05, dk = 0.01$ yields $p_s = 0.44$ (A loses). Bottom left: $x = -0.05, dk = 0.13$ yields $p_s = 0.51$ (A wins).

3. Figure (6) shows four different cases with $a = 0.36$ and group size 4. The arrows show the dynamics starting from $p_0 = 0.40$. Top right: $x = 0.01, dk = -0.04$ yields $p_s = 0.50$. Bottom right: $x = -0.02, dk = 0.08$ yields $p_s = 0.50$. Bottom left: $x = -0.03, dk = 0.11$ yields $p_s = 0.50$.

4. Figure (7) shows four different cases with $a = 0.40$ and group size 4. The arrows show the dynamics starting from $p_0 = 0.40$. Top left: $x = -0.06, dk = 0.32$ yields $p_s = 0.50$. Top right: $x = -0.06, dk = 0.40$ yields $p_s = 0.50$. Bottom right: $x = -0.06, dk = 0.41$ yields $p_s = 0.51$ (A wins). Bottom left: $x = -0.08, dk = 0.40$ yields $p_s = 0.49$ (A loses).

6 The 2020 prediction: winning strategies

What to conclude from above results, which allow envisioning novel disturbing strategies to win a major political vote, including the 2020, November 3, American presidential election? Different approaches have been elaborated for other problems [21,22].

Contrary to what could be a priori expected the focus to win a voting majority is not to convince a maximum of floaters. For each candidate, the main instrumental keys appear to be twofold, act on increasing the share of the naturally activated prejudices which are in tune with it and produce the maximum of stubbornness among its supporters. Then, the goal is to initiate a large number of small group informal discussions.
Figure 4: Four different one sided inflexibles \((a = x, i.e., b = 0)\) with balanced prejudices \(dk = 0\) for group size 4. The arrows show the dynamics starting from \(p_0 = 0.40\). Top left: \(a = 0\) yields \(p_A = 1, p_t = \frac{1}{2}, p_B = 0\). Top right: \(a = 0.08\) yields \(p_A = 1, p_t = 0.44, p_B = 0.093\). Bottom left: \(a = 0.13\) yields \(p_A = 1, p_t = 0.37, p_B = 0.18\). Bottom right: \(a = 0.16\) yields \(p_A = 1, A\) always wins.
Figure 5: Four different cases with $a = 0.30$ and group size 4. The arrows show the dynamics starting from $p_0 = 0.40$. Top left: $x = 0, dk = 0.01$ yields $p_s = 0.51$ (A wins). Top right: $x = -0.01, dk = 0.01$ yields $p_s = 0.49$ (A loses). Bottom right: $x = -0.05, dk = 0.01$ yields $p_s = 0.44$ (A loses). Bottom left: $x = -0.05, dk = 0.13$ yields $p_s = 0.51$ (A wins).
Figure 6: Four different cases with $a = 0.36$ and group size 4. The arrows show the dynamics starting from $p_0 = 0.4$. Top left: $x = -0.05, dk = 0.16$ yields $p_s = 0.5$. Top right: $x = 0.01, dk = -0.04$ yields $p_s = 0.50$. Bottom right: $x = -0.02, dk = 0.08$ yields $p_s = 0.50$. Bottom left: $x = -0.03, dk = 0.11$ yields $p_s = 0.50$. 
Figure 7: Four different cases with $a = 0.40$ and group size 4. The arrows show the dynamics starting from $p_0 = 0.40$. Top left: $x = -0.06, dk = 0.32$ yields $p_s = 0.50$. Top right: $x = -0.06, dk = 0.40$ yields $p_s = 0.50$. Bottom right: $x = -0.06, dk = 0.41$ yields $p_s = 0.51$ (A wins). Bottom left: $x = -0.08, dk = 0.40$ yields $p_s = 0.49$ (A loses).
On this basis, as seen from the series of Figures (4, 5, 6, 7), what matters are both excesses of prejudices and inflexibles measured by respectively $dk$ and $x$. Even tiny excesses are instrumental to win. When both $dk > 0$ and $x > 0$ for the same candidate, according to the model, this candidate is almost sure to win the election in the corresponding state. When $dk > 0$ and $x < 0$ or $dk < 0$ and $x > 0$ both effect compete making the outcome more uncertain.

- Increase stubbornness The four years of Trump presidency have polarized the American society at a very high level. Today, millions of American are either stubborn anti-Trump or stubborn pro-Trump and it is difficult to get solid figures of their respective proportions. However, the beginning of the campaign for the democrat nomination has disclosed very large gaps between Sanders and Biden supporters.
  
  This observation suggests that not every stubborn anti-Trump voter is a stubborn pro-Biden. The lack of total overlap between stubborn anti-Trump and stubborn pro-Biden voters produces some advantage for Trump with respect to his stubborn pro, which can become significant at least in a few swing states.
  
  Moreover, contrary to Biden, Trump has been very active on the ground with many meetings to rise the degree of stubbornness of his supporters.

- Increase prejudices Among prejudices which could be activated during the 2020 campaign, I identified fear and personal stand, two major ones which can benefit to each candidate depending on respective psychological traits of agents.
  
  1. Fear about the other candidate election.
     
     Both Biden and Trump have been waiving the fear about consequences of having the other candidate elected. Depending on the social groups, there exists a fear of Trump or a fear of Biden.
     
     However, the fear of Trump has been eroded in part since people know what he does. Thus, Trump generates more stubborn anti-Trump than fear. Moreover, his claim of “law and order” mitigates the fear of a second mandate by producing a sense of credible reassurance among some voters, who are afraid of the possible chaos and massive immigration, which could follow Biden election.
     
     In addition, the fear of Biden related to his supposed socialist project may be fueled from irrational phantasms among parts of the people as socialism is both unknown and rooted in the former cold war fears, in US history. The fear for
  
  2. Personal stance facing a danger.
     
     While Trump handling of the Covid 19 epidemics has been penalizing him among many voters, his being infected and cured may compensate part of his loose in support. This point relies on the perception of what is the best personal stance for a president facing a danger. The preference for showing strength and being reckless (Trump) versus being cautious and careful (Biden) varies depending on the individual voter psychology, which can be decoupled from the voter political camp.
7 The 2020 prediction: the November winner

From above results the winner in the 2020 November election will be the candidate who will succeed in getting more $dk > 0$ and $x > 0$ in a series of swing states to reach the majority of delegates. However, in each state the various proportions of respective inflexibles (stubborn pro-Biden, stubborn pro-Trump), and leading prejudices (fear of Trump or Biden, reckless or cautious), are unknown. On this basis, I can only make rough estimates to determine winning or losing trends.

From my perception and analysis, Trump will benefit from the fact that blind anti-Trump voters will not be automatically blind Biden voters although they much overlap. As seen above, tiny differences in $x$ can make the outcome. In addition, Trump has been more involved than Biden on the ground with meetings to motivate his supporters, creating more stubbornness. Trump recover from being infected by Covid 19 should also be at his benefit towards $dk > 0$ in comparison with Biden precautionary attitude.

Accordingly, using the Galam model of opinion dynamics, my prediction is that Trump, being more likely to have advantage in both $dk > 0$ and $x > 0$ within sufficient swing states, will eventually win the 2020, November 3 presidential election \[23\].

7.1 Hidden voting and hidden abstention

Independently of the opinion dynamics per se, I evoke two additional mechanisms, which should be working at Trump benefit on the voting days, hidden voting and hidden abstention.

- Hidden voting
  Some voters supporting Trump, do not dare standing openly for their choice, which can be perceived as controversial by their acquaintances. They will then vote for Trump without disclosing neither their voting intention nor their actual vote. While such hidden voters are not present in pro-Trump neighborhood, they could be present in anti-Trump neighborhoods. The phenomena is more likely to occur in favor of Trump than in favor of Biden.

- Hidden abstention
  Some former pro-Sanders voters may found too large the gap between the respective programs of Biden and Sanders. Therefore, although they are anti-Trump, they may tempted to abstain on the voting day.

I had introduced the phenomenon under the name "unavowed abstention" for 2017 French Presidential election where M Le Pen was competing with E. Macron \[24\]. Finally, the phenomenon did occur but surprisingly at Macron benefit \[25\]. However, if hidden abstention takes place it will be only at Biden expense.
8 Conclusion

Using the Galam model of opinion dynamics, I was able to predict successfully the 2016 Trump victory. He had found a martingale to win, which could not be applied by Clinton. However, for the coming 2020 election, according to the same model, the instrumental quantities $dk$ and $x$ to win in sufficient swing state to ensure the victory, are this time available to both candidate. Biden and Trump can increase the stubbornness of their supporters and build up fear for the other candidate as well as promoting either being reckless or cautious and the reinforcing of stubborn supporters. However, my rough estimates are that Trump has advantages along those features, making him likely in the November 3

To conclude, I want to emphasize that my prediction is not about taking risk or becoming a kind of guru if it proves itself right. It is about a hard science approach to model political events.

- If the prediction is successful, it will not mean the model is proved, but that the model does capture some mechanisms at work in the driving of opinion dynamics and more investigation is worth along its path.

- If the prediction turns wrong, it will not mean the model has to be thrown away, but that I missed some important feature, which must be identified and added to it. It can be also due to a wrong estimates of $dk$ and $x$ in some states.

I am not dealing here with a work in progress. It is a field in progress with numerous physicists all over the world working to establish sociophysics on solid ground [26–33]. The associated issues at stake are huge for our future.

I must also stress that the strategies elaborated to win the election are ethically questionable and not glorious. However, if these strategies turn to be valid, it will be an unfortunate but meaningful discovery of the modeling, which may bring into question our view and use of public opinion. These results enlighten the need to unveil the laws governing our collective behavior to avoid being trapped by our archaism in today world of connected people.

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