

A Game with Words: Rhetorical Citizenship and Game Theory

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PART I: Rhetoric and Game Theory

Introduction

The idea of rhetoric as a contest or a game goes back to the very cradle of rhetorical theory in ancient Greece. Famous rhetoricians like Gorgias performed in a context that can aptly be characterized as a game, participating in debates or displaying their proficiency and giving impromptu replies (cf. Slethaug 1995, pp. 64-65). Moreover, the parallel between persuasive speaking and a game seems to operate as a conceptual metaphor in our intuitive understanding of rhetorical behavior, like in political discourse. Think for instance of Julius Caesar's (in)famous *Alea iacta est* ("The die has been cast"). The first part of this paper takes its point of departure in this omnipresence of game metaphors in rhetorical contexts and will explore the theoretical question whether we can use the model of mathematically formalized game theory for rhetorical criticism.

This conception of rhetoric will in turn allow us to demonstrate game theory's remarkable critical potential to address the systemic structures in which rhetorical citizenship is carried out. In an era that is driven by individualistic concerns with rhetorical effectiveness, our game-theoretical reflections offer a vantage point to question the so-called "natural" character of the rhetorical situations in present-day politics as stemming from a rational response to the arbitrary rules of the political game. Specifically, we will analyze current electoral dynamics as a rational result of the particular way in which we cast our political votes, and we will show how an alternative voting system can more effectively reward constructive political discourses.

State of the art

Game theory has often been integrated in non-exact fields like psychology or social studies. In sociolinguistics, for instance, it is used to explore interpersonal dynamics like politeness, vagueness and deniability (Pinker 2008, pp. 373-425). In political studies, a whole subfield of political game theory has been developed, which researches specific political games such as jury voting, veto threats, etc., alongside more general social dynamics like collective choice or negotiating (McCarty and Meirowitz 2007). Game theory has also found its way into literary studies, where it is used to illuminate the rational choices made by characters in literary narrative.¹ Yet for all this reflection on game theory's broad potential, the secondary literature does not appear to have considered the specific question of game theory and rhetorical criticism. Three contributions seem to broach the topic, without however really going into it.

Before discussing a particular example of conflict rhetoric from the Korean War, Bennett explains "basic game theory concepts and its potential relationship with rhetorical criticism" (Bennett 1971, p. 34). However, his parallel remains rather limited, as Bennett focuses on the link between speaker/player and speech/move. In this way, his paper uses game theory to interpret the *results* of rhetorical behavior rather than the dynamics of rhetorical behavior itself.

Herman (1998) describes how the interactive strategies of communal behavior observable in classical Athens are the same as those simulated by a computerized model of the Iterated Prisoner's Dilemma. Still, Herman's contribution amounts to an analysis of socio-political interaction, not public speaking.

Finally, Zamora Bonilla (2006) interestingly develops a game-theoretical model to analyze how scientists choose different claims as interpretations of the results of their research in a rhetorical context. However, Zamora Bonilla focuses exclusively on the rhetoric of science without really considering rhetorical behavior in general and does not describe the basic parallels between the mathematical game model and rhetorical theory.

It thus becomes clear that the fundamental question of the possibilities of game theory as a hermeneutic model to interpret rhetorical discourse is as yet unresolved.

¹ See Brams (2011). Cf. de Ley (1988), who engages with Brams' earlier ideas of game theory and literature, and Slethaug (1995), which deals with the general critical notion of "game" and "play," and therefore far exceeds game theory *stricto sensu*.

A basic exploration

In mathematical game theory, a “game” is usually defined as “a description of strategic interaction that includes the constraints on the actions that the players *can* take and the players’ interests, but does not specify the actions that the players *do* take. A *solution* is a systematic description of the outcomes that may emerge in a family of games. Game theory suggests reasonable solutions for classes of games and examines their properties” (Osborne and Rubinstein 1994, p. 2). In other words, games consist of players who make choices that lead to actions with consequences or outcomes, bound by rules or constraints, and motivated by interests or preferences. Comparing that to a basic definition of rhetoric, viz. Bitzer’s analysis of the rhetorical situation (Bitzer 1968) – in short “the necessary condition of rhetorical discourse,” which “needs and invites discourse capable of participating with situation [sic] and thereby altering its reality” – we can already see clear parallels between rhetoric and game theory.

Rhetorical discourse can be interpreted as a game in which speakers are players and the rhetorical situation provides the constraints on the actions the players can take. These actions lead to consequences with certain pay-offs, or, rhetorically speaking, to discourse capable of participating with the situation or altering reality.

Utilitas and rational decision-making

It is worth exploring just how deep the conceptual similarity goes between rhetorical discourse and games. When rhetoric is viewed from the perspective of the speaker, rhetorical theory recognizes the crucial importance of *utilitas*, i.e., the fact that all rhetorical actors are partisan, serving their own particular interests, based on their estimation of the rhetorical situation at hand (see Lausberg 1990, §1060).² Similarly, game theory operates from the basic premise that it studies the behavior of a *rational* decision-maker – “‘rational’ in the sense that he is aware of his alternatives, forms expectations about any unknowns, has clear preferences, and chooses his action deliber-

² We are aware that our conception of rhetoric here only takes the speaker’s rational perspective into account, and thus focuses on the speaker’s estimation of his audience rather than on the actual interaction between the speaker and the audience. In the conclusion to this paper, we will further reflect on the limits and consequences of this approach.

ately after some process of optimization” (Osborne and Rubinstein 1994, p. 4). Accordingly, defining a player’s rational choice is the first step of any game-theoretical analysis.

In short, we can say that rational choice and optimization can be applied to rhetorical *utilitas* in three different ways:

- (1) The speaker is certain of the consequences of his actions and accordingly takes the action that offers the maximal consequence.
- (2) The speaker is uncertain of the consequences of his actions, but does know the range of possible consequences and their probability vis-à-vis his actions, and accordingly takes the action that maximizes an expected result.
- (3) The speaker is uncertain of the consequences of his actions and does not know the range of possible consequences nor their probability vis-à-vis his actions. Still, he takes the action that he assumes will maximize an expected result, based on a subjective idea of the possible consequences of his actions and their probability.

In other words, rhetorical optimization happens in one of the following three ways:

- (1) The experienced rhetor knows that only in very simple cases can he be certain of the consequences of his rhetorical choice. An example of this is the choice to argue against nuclear energy before an audience of *Greenpeace* members.
- (2) More often, however, the models of uncertainty apply to the rhetorical situation (even in situations that might at first seem quite straightforward). Indeed, in many cases the rhetor will be conscious of his uncertainty of the outcome of his rhetorical choices. However, he will often have information about a number of possible outcomes and their respective probability. An example of this is the rhetorical choice to hold a fairly left-wing speech before an audience of non-specified students, among whom the rhetor expects there to be more left-wing than right-wing supporters.
- (3) Finally, there is the case in which the rhetor’s information on the possible outcomes of his actions and their probability is imperfect. A concrete manifestation of this is the situation where a rhetor is unaware of the fact he is speaking to a different audience than the one expected.

Rhetoric as a strategic game

In previous literature, rhetoric tends to be compared to games of the so-called ‘strategic’ type (players choose their strategies simultaneously and independently). The classical example of a strategic game is the *Prisoner’s dilemma*, where the police offer two arrested criminals the same deal: if one man betrays his partner, and the other remains silent, the betrayer goes free and the one that remains silent receives the full one-year sentence. If both remain silent, both are sentenced to only one month in jail for a minor charge. If they betray each other, they both receive a three-month sentence.

In this game, both players have the same options, i.e., either *betray* or *remain silent* (B; RS). This game is then often visualized in terms of a matrix (Table 1):

TABLE 1 THE PRISONERS’ DILEMMA

	B	RS
B	3/3	0/12
RS	12/0	1/1

As appears from the Table 1, a player’s best decision is to betray when the other does not betray, since he will be free instead of spending a month in jail. Moreover, when the other betrays the player’s best decision is *also* to betray, since he will be sentenced to three instead of twelve months. Each player thus gets a higher pay-off when betraying the other, regardless of the latter’s decision. As this game is symmetrical, we may conclude that the best action for both players is to betray (the so-called *Nash equilibrium*). This is not a matter of the safest bet, but of the mathematical reasoning of each individual player: the optimal decision is to *betray*, although the lowest combined sentence (two months, one for each) would be reached if they cooperated.

When rhetoric is interpreted as a strategic game, it is tempting to replace the actions to *betray* or *remain silent* by to *persuade* (P) or *not persuade* (NP). However, unlike betraying or remaining silent, which are real-life actions, persuading or not persuading are not *actions* one can strategically choose to perform *in reality*. Rhetorically speaking, it would make more sense if we could define a game where to persuade or not are the *consequences* of the game. This would take the following basic form: players can choose

from a set of rhetorical actions (e.g., to use a certain argument, style, ...), which have the consequence, respectively, of persuading or not persuading. Importantly, we could then also introduce the aforementioned *certainty/uncertainty* governing P and NP as consequences of certain actions. This model would then describe the actual rhetorical game more aptly, as it can conceptualize a speaker who strategically chooses that rhetorical action which maximizes the expected result. However, two problems remain. First, this model no longer allows for an analysis of the players' interaction, as we do not know the effect of pairing the players' actions, unlike what was the case in the *Prisoner's dilemma* or our first model. And second, the main result of the present model is that it poses the crucial question of the relation between actions and consequences. In other words, to understand the strategy of the rhetorical game we need to know which actions are more likely to persuade. Starting from a Bitzerian view of rhetorical discourse as a response to a rhetorical situation, this paper is especially interested in the analysis of how rhetorical persuasion is generated, not of the analysis of interaction and strategies where the outcome, persuasion or non-persuasion, is a given fact.

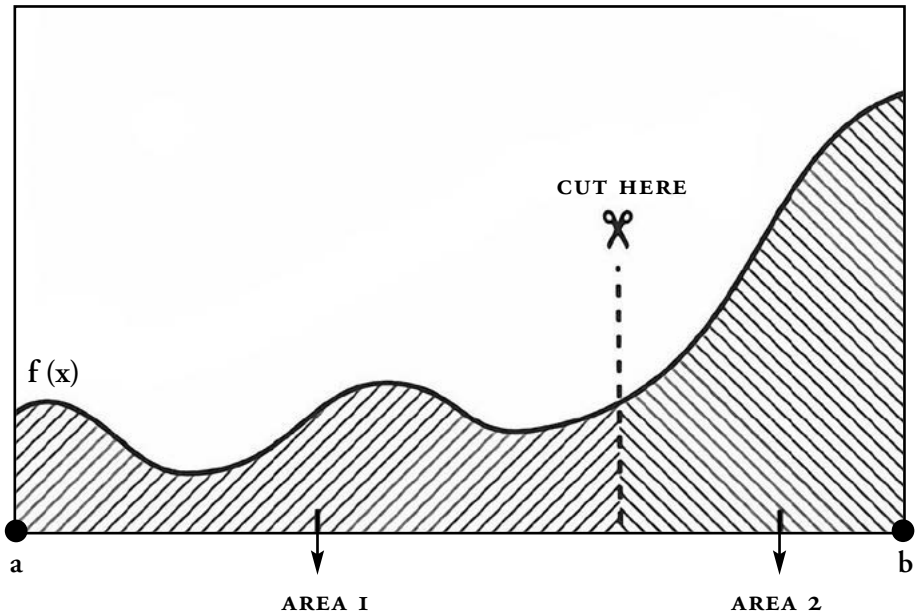
PART II: Location games

Rhetoric as a location game

A more fruitful model for our specific purpose is the *location game* (see Hotelling 1929 and Downs 1957): imagine a stretch of beach (say 100 m long), limited by rock at both ends. On this beach there are two people (P₁ and P₂) with hot dog stands, offering the same products at the same prices. The beach is evenly filled with bathers (i.e., they are uniformly distributed), and they always buy hot dogs from the nearest stand. What is the optimal position for a stand? This is a symmetrical game, and the Nash equilibrium results when both players position themselves in the middle. Moreover, as long as, e.g., P₁ is *not* exactly in the middle (say, somewhere to the left), it is better for P₂ to position himself between the middle and P₁, as this implies that he gets all the customers to his right (who are closer to him than to P₁) plus half of the customers between both players. As a matter of fact, the *worst* that can happen to a player who chooses the middle of the beach is a tie, making this strategy dominant.

Note that the model above starts from a *uniformly distributed* crowd. This condition is obviously not always fulfilled, and to model an *arbitrary* distribution of people mathematicians use density functions $f(x)$. The value

FIGURE 1 THE LOCATION GAME



$f(x)$ in a point x (say, between 0 and 100) is then interpreted as a measure of the number of people at that point in the domain. However, this does not change the core of the mathematical analysis: in case the crowd is distributed in terms of a *known* density function $f(x)$ there still exists a Nash equilibrium, which can be found by solving an *integral equation* (one needs to locate the point x with the property that the number of people up to that point is half of the total crowd). Thinking of this density as a curve (see Figure 1), the solution for the non-uniform location game is then to be understood as the point where one can cut the picture in two pieces (along a vertical line) in such a way that the *area under the curve* is the same on both pieces (area 1 and area 2 are equal in the picture).

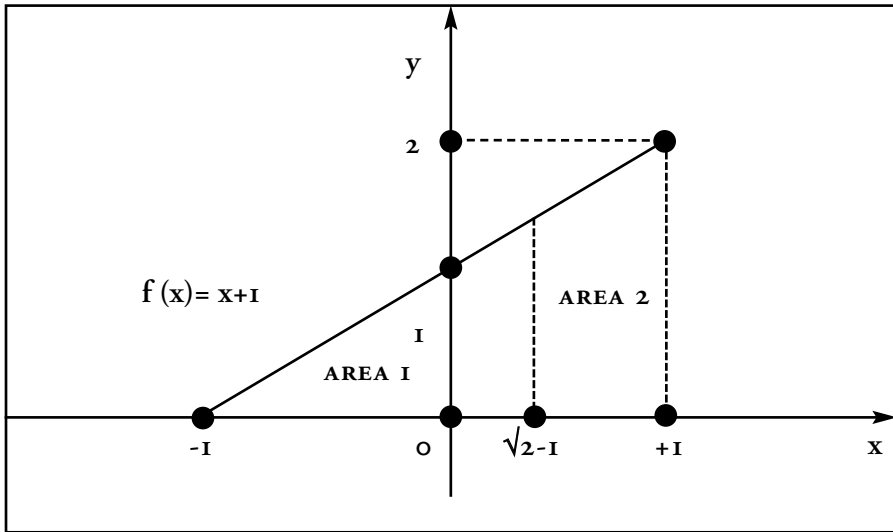
In order to see how the location game helps to model the rhetorical game, it suffices to adapt Downs' argument (Downs 1957, p. 142, using Hotelling's "spatial market" to analyze political ideologies as market shares and political parties as positions within that market), defining rhetorical behavior as manifesting itself in a spatial market of beliefs and convictions and choosing a certain position to claim a share of the market. Indeed, rhetorical theory

teaches that persuasion always occurs against the background of shared common knowledge, on the basis of which new truths or values may be generated through rhetorical discourse. In this way, we can map the audience as a market of truths and values (represented by a density function) and the speakers, defending a specific set of truths and values, as positions within that market.

Besides offering an interesting way to analyze rhetorical situations and responses, the location game model of rhetorical behavior reveals the rhetorical importance of *the middle position*. For instance, when speaking to an audience with a symmetrical distribution of people in favor of and against certain environmental policies (i.e., a symmetrical density function), a “green” speaker wanting to abolish nuclear energy will best use a set of truths and values that is neither too green nor the opposite, in order not to alienate too many in his audience. At the same time, game theory shows what this middle position really means, as it is not necessarily the same as the “middle of the beach” position. Indeed, when facing a distribution of people that is *not* symmetrical, the mathematical analysis teaches us that we may actually find another value representing the rhetorical position that will best serve as a pivot of common knowledge. For example, when speaking before an audience of university students on the matter of freedom of speech, there will be almost no people holding the opinion that freedom of speech is a bad thing and a steadily increasing number of people believing in the absolute value of freedom of speech. The ideal position for a speaker is therefore not neutral, but a markedly positive one. We will refer to this position as “the middle,” to be understood as the point “where to cut the paper.” Figure 2 shows the formal density function for this example, and the analytical solution to the location game (the cut is to be made at a point on the horizontal axis defined as the square root of two minus one).

So, the location game model teaches that when the speaker is aware of his opponent’s position (and the density function), the optimal strategy is to stay as close as possible to his opponent’s position, yet slightly more towards the “middle.” When the speaker is not aware of his opponent’s position, the optimal strategy is to take the “middle” position. However, speakers do not always take the optimal position and therefore necessarily alienate a part of their audience, e.g., when they are forced to take a position that is not ideal in the spectrum of common knowledge. For instance, when a conservative Christian politician has to address a group of Gay Rights activists, it is im-

FIGURE 2 WHAT THE “MIDDLE” POSITION REALLY MEANS



possible for the speaker, considering his convictions, to take the optimal position (markedly on the right, see the example above). Even if this speaker were to choose a neutral position, an almost impossible concession on the part of the Christian conservative, it is clear that the Christian speaker's results would be considerably worse than if he had taken the optimal position.

Location games in hyperspace

So far, our model has focused solely on the dimension of *logos*. Applying Aristotle's terminology, persuasion obviously also comprises the components *ethos*, *pathos* and *lexis*. Indeed, while a rhetor might lose the location game in terms of argumentation (*logos*), he might win it, and therefore compensate for his loss, on the level of authority (*ethos*), emotional appeal (*pathos*) or speaking competence (*lexis*). All of these can individually be conceived as location games, which have to be mathematically combined to make up the whole rhetorical game. While the game-theoretical approach thus tries to analyze rhetorical behavior as rational choice, it does not reduce rhetoric to mere rationality. By analyzing highly emotional aspects such as *ethos*, *pathos* and *lexis* as individual, but mutually interacting parts of the rhetorical "equation," so to speak, this model aims to account as fully as possible for the realities that govern the rhetorical and indeed rational choices made by speakers.

Formally, this leads to a location game in several dimensions (i.e., in *hyperspace*), in which we switch from a density function $f(x)$ in *one* variable x to a density function $f(x_1, \dots, x_n)$ depending on *several* variables. As for the rhetorical application mentioned above, it seems worth considering density functions depending on *four* variables. Although this is much harder to represent graphically, it can be handled conceptually using multivariate analysis. In a sense, the location game is then to be understood in terms of vendors looking for the best position in a park (2 dimensions) or a building (3 dimensions). Let us, for simplicity's sake, stick to the former example. Although we can now only take two relevant parameters into account (e.g., *logos* and *pathos*), this does have the advantage that we can graphically represent the mathematical details. Density functions $f(x_1, x_2)$ can now be likened to a (not necessarily aesthetically pleasing) cake: the "number of people" is then proportional to the volume of the piece of cake, whereas finding a Nash equilibrium amounts to cutting the cake in equal halves. Despite the simplicity of this metaphor, it already illustrates the main difference from the previous situation: even perfectly symmetrical cakes can be cut in two equal halves in several ways (along the length of the cake, or orthogonally to this direction).

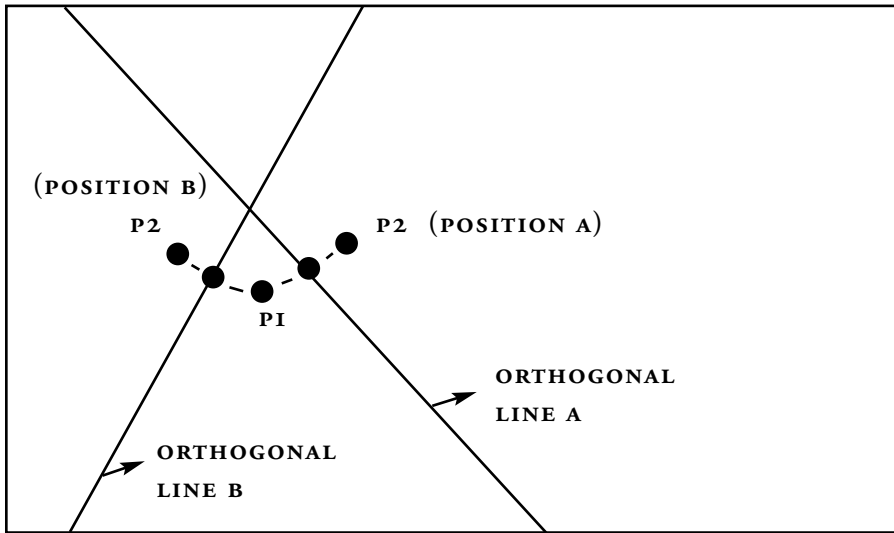
More formally, this is due to the observation that the relative position between 2 players is now fixed in terms of two parameters: there still is the *relative distance* between the players, measured along the line connecting them. But the big difference is that also the *orientation* of the players can change. This is important, because as the orientation changes (think of a player as "walking on a circle centered around the other player") the line along which the cake will have to be cut also changes. This is illustrated in Figure 3, in which two different positions for player 2 (P2) result in two different cutting lines (the full lines).

Note that this is not just an image: one can mathematically prove (but this would lead us too far astray) that by optimizing his orientation, a player can turn a loss into a win. The strategy is thus governed by the following principles:

- Optimize your market share by *minimizing the relative distance* in the domain.
- Optimize your market share by *choosing the angle* that maximizes the difference.

Instead of giving a formal proof of this, we will refer to a recent example from

FIGURE 3 A TWO-DIMENSIONAL LOCATION GAME



the 2012 US Presidential election campaign, featuring Barack Obama and Mitt Romney. Struggling to get his message across in the poorer communities, Romney on September 19, 2012, appeared on Univision, the most important Spanish-language television network, to make his case. As media sources pointed out by contrasting photographs taken on the same day,³ Romney's complexion looked artificial, with the shape of protective goggles seemingly printed on his face, causing rumors that Romney had got a spray tan. This was interpreted as an effort on his part to look more Hispanic. This seemingly outlandish rhetorical ploy, obviously intended to strengthen Romney's *ethos*, can be perfectly understood in our hyperspace model. Confronted with an unfavorable position for the *logos*-game on the X-axis (there were obvious limits to the positions Romney could take), Romney's strategy to win the rhetorical game was maneuvering his position in the *ethos*-game on the Y-axis. By trying to look more Hispanic Romney intended to persuade more people than he would have been able to with strictly political arguments. For now the model cannot say *how much* spray tan Romney actually needed to win the debate (this would require knowledge of the density function), but the location

³ See, e.g., http://www.huffingtonpost.com/2012/09/20/mitt-romney-dyed-face-brown-fake-tan-univision_n_1900707.html.

game in hyperspace certainly explains the idea how two rhetorical games can be ‘combined’ for “strategic maneuvering” (cf. van Eemeren 2009 and 2010).

PART III: Politics

As a final part of this paper, we would like to discuss how rhetorical discourses as heard in present-day politics are not automatic results of human nature, but rather of the legislative conditions under which people vote for their democratic representatives. These conditions are largely coincidental, in that a group of people who are convinced that a different system would be better for them has the power to change them.

The ideals of (deliberative) democracy and political deviations

According to certain deliberative democrats such as Rawls and Habermas, democratic ideals are often defined as a reconciliation of ideas on a higher societal level as a result of rhetorical processes of persuasion. We can ask ourselves why, when so many are convinced of the desirability of such a model, there are only few communities who manage to achieve this blissful democratic condition.

One of the problems is that for a society that believes in the values of free speech and open deliberation, it is impossible to exclude any kind of discourse from the deliberation floor, which means that people who resist being persuaded by others cannot be banned from the deliberation floor on system-internal grounds. The need for some kind of adjudication committee undercuts the idea of full freedom, and the ideal of deliberative democracy – that everyone’s opinion should be respected – is no longer possible to maintain. This fact prevents deliberative democratic models from shrugging off their utopian appearance and manifesting themselves in real democratic debates.

We will here suggest a different approach to this problem by looking at politics as a game in which the existing rules define the best strategies for politicians. By suggesting an alternative voting system, we want to open a debate concerning the most appropriate conditions under which the ideals of rhetorical citizenship can be attained in the political sphere.

Politics as a game

It is a sad yet telling cliché that politicians and political parties are mostly perceived to chase their own individual success instead of the common good.

Other popular complaints about politicians are related to their alleged refusal to display ideological consistency; instead they make every impression of simply adjusting their rhetorical strategies to the audience in front of them.

Do these complaints imply, then, that politicians are *essentially* a class of less moral citizens than ordinary people? We do not think this cynical attitude offers the most appropriate approach. Rather, we would like to focus on the ‘rule book’ of the political game and show how antagonisms and free-rider behavior are inscribed in the electoral system that governs the field of politics.

In order to define politics as a game (in a simplified manner), we can see politicians as the players who undertake (rhetorical) actions in order to maximize their impact on society. The main moment when political power is negotiated in a democracy is during elections. Politicians, both idealists and pragmatists, all have good reasons for not wanting to lose an election.

To complete our formal description of the field of politics: during elections, each voter gives one vote to one particular party. As a result, in our present system it is entirely pointless to be a voter’s second choice, because the voter can only give his vote to the party of his first choice. This aspect has some crucial consequences.

Zero-sum game and its impact on discourses

The voting game as described above has the structure of what we call a “zero-sum game.” We know beforehand how many votes/points will be given, and a political party can only make progress if one or more of the other parties lose votes.

This zero-sum aspect has two important discursive implications for the way in which political parties rationally assess their best strategy. First, parties tend to present their own merits in antagonistic terms, in a fierce competition with other parties. Instead of emphasizing ideological resemblances and looking for ways to collaborate, it is often more beneficial to radically oppose oneself to parties that are nevertheless ideologically quite close to one’s own position (think of the location game: the toughest opponent is the one closest to your own position, not the one who is extremely far away!). These antagonistic tendencies, which seem to annoy many people nowadays, are thus rational responses to the constraints of a system in which votes can only be won if one can convince the voter that one is the single best representative. We can thus label this as a “non-cooperative game.”

A second implication is that, even though political parties would ideally like to gain 100% of the votes, the most rational response to the present political situation in many countries is to focus on a certain segment of the population and win over their sympathy at the expense of other sectors of society. There is as yet no mechanism that prevents politicians from bluntly ignoring the rights and wishes of a substantial part of the population, which contributes to a sense of discontent in many voters, because they do not feel that their political government reflects their societal choices.

Imagining an alternative

In order to see that a voting system does not inevitably need to be a zero-sum game, suppose that everyone were not given just one vote, but could rate each political party on a scale from 0 to 5. The result is that a party can only focus on its proper score and is no longer dependent on how other parties fare to achieve its own maximum score. As a result, parties who collaborate well in a government can all be rewarded by the voting public. Conversely, parties who present themselves in strongly antagonistic terms are not very likely to reach a high score, since the absolute support of a group of hardline believers is quickly leveled out by the punishment of non-believers (unless, of course, the group of believers is so large that the party is still successful; in that case, a democracy has to respect these voters' decision).

It thus appears that a simple change in the voting game could bring about a radical change in the most rational strategy one has to adopt in order to win the political game. By rewarding cooperative strategies, the rules of the game themselves become responsible for installing a certain type of political etiquette that brings us closer to the ideals of deliberative democracy.

This explorative suggestion strongly opposes those political analysts who state that current political behaviors reflect the nature of human beings.⁴ In a sense, these analysts are quite right, but only in so far as it is part of human nature to develop a rational response to a certain situation. The

⁴ One influential example of this trend in thought is generally labeled neoliberalism. In neoliberal discourse, it is maintained that human nature is thoroughly competitive and that liberalist economic logic could be freely applied to the level of politics as well. What neoliberalist thinking ignores is that this way of viewing politics is not natural, but the result of coincidental rules in our legislative system. For a critique on (neo-)liberalism, see, e.g., Bourdieu (1998), or the influential study by Negri and Hardt (2000).

way in which we vote, however, is largely coincidental, in that there is no cogent reason why we must vote in the way we do nowadays, apart from the fact that it is probably the easiest system we can think of. If we believe, however, that there are important reasons to get rid of this voting system in order to reward conciliatory discourses, it is entirely within our power to change the present structures and develop an alternative sense of democracy. We believe that such a decision could strongly improve the citizens' trust in their representatives, and could bring the field of politics more in line with the complexities of our postmodern society, in which paternalistic representation may no longer be an appropriate method to satisfy an individual's viewpoints and desires.

Questions for the political game

The model we propose here probably entails its own structural or practical pitfalls. However, we believe that the heuristic value of imagining an alternative to present structures allows us to ask some precise questions about what we expect from our present-day democracies. Some questions that can effectively guide such a discussion about the goals of democracy could be:

- (1) On what level do we believe that the reconciliation of ideological positions in a society should occur? On the level of individual choice (in a nuanced voting system) or on a higher level (as a sum of individual votes)?
- (2) Do we believe that a constructive attitude in politicians leads to better societal results?
- (3) Do we need extreme positions on the deliberation floor (cf. Lund Klugeff 2012), or do they distract from actual results?
- (4) Does our system, which originated from a paternalistic understanding of political representation, still work in our postmodern society?
- (5) Can a redefinition of the political game alter the way in which we think of politics, so that it is less seen as a spectacular clash between opposed ideologies, and more as a creative undertaking in which attempts at reconciliation of positions are generally rewarded during elections and thus encouraged in future enterprises?

PART IV: Conclusion

Given the novel character of this paper, we have had to cover quite a lot of ground before we could demonstrate the effective value of our model for the

study of rhetorical citizenship. Our collaborative work on rhetoric and game theory has indicated to what extent mathematics can help assess the most ideal rhetorical position of a speaker in a given situation. In closing, two final remarks are in order: one methodological, and one ethical.

First, a methodological *caveat*. In trying to analyze rhetorical behavior using game theory, we are not claiming to describe an exhaustive model for all aspects of such rhetorical behavior. What we hypothesize is a model of how speakers gauge their audience and accordingly adapt their rhetorical strategies. Our game theoretical analysis only offers an abstract model of the speaker's rational choices when making a speech, not a concrete interpretation of the audience's particular and often irrational response to that speech. This irrational side has been recognized already in antiquity, for instance in Pseudo-Longinus' account on the sublime, which allegedly has the power to strike a listener like a thunderbolt.⁵

As such, this tool is better suited to map the interaction between different competing speakers than that between one speaker and his audience. The whole of rhetorical deliberation cannot possibly be reduced to the notion of pure *utilitas* upon which the methodological foundation of our theory is based. Yet, quite interestingly, in representing the mental estimation of the audience distribution by the rational speaker, this model implicitly recognizes the interaction of audience and speaker that is fundamental in rhetorical theory; this interaction, however, ought not to be understood in the sense of active participation of the public in the actual speech delivery but in its mere presence as a factor in the orator's assessment of the appropriate rhetorical action.⁶ While this model thus solely seems to focus on the speaker, there is also a distinctive place for the audience in the composition of the orator's discourse, at least for as far as it is conceptualized in the speaker's mind. A similar conception informs the final part of our paper, in which we suggested an alternative way to empower the voting citizens in a democracy to punish selfish political behavior and thus contribute to a more collaborative process of political decision-making.

Finally, this *caveat* will also make clear that while our approach of-

⁵ See Ps.-Long. *Subl.* 1.4.

⁶ This position is not all too different from canonical rhetorical works by Aristotle or Quintilian. It also comes quite close to the function of "public knowledge" in Bitzer (1978).

fers a model of how speakers try to predict their audience's response (since antiquity, oratorical theory has recognized the rhetor's need to do so), the model itself in no way claims such predictive powers. The game-theoretical approach to rhetoric does not interpret the audience as a passive body whose responses can easily be calculated, but only offers a model to understand the speaker's strategic deliberation of his or her audience's opinions, values and emotions.

Second, an ethical remark. As we have tried to show in part III of this study, it is important to realize that even purely "liberalist" rhetoric (understood as a form of rhetoric that searches for the most successful strategy regardless of ethics or moral beliefs) operates on a playing field that is shaped and constrained by laws, tenets, and societal values, and the assessment of the most ideal rhetorical position always needs to happen in consideration of these "rules." It is worthwhile to use this game-theoretical framework to question the conditions under which rhetoric and discourse function in a given society, and to imagine alternative "rules" according to which the ideals of rhetorical citizenship can be more fully realized. We hope this undertaking may inspire others to engage in a similar mode of reasoning, so that we can come closer to a societal model that will reward constructive democratic discourses and acts of responsible rhetorical citizenship.

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