

Does Deliberation Matter?

A Study of Deliberative Democracy in São Tomé e Príncipe's National Forum *

September 2004

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Abstract

Advocates of a more deliberative form of democracy reject the claim that 'talk is cheap' and postulate that free and earnest deliberation about collective decisions can transform preferences so that they become less rooted in narrow self-interest and more based on a reflective and public-spirited perspective. The transformative power of deliberation has not been given sufficient empirical attention to establish whether that postulate is correct, or whether talk is indeed cheap. This study presents results from a survey on São Tomé e Príncipe's National Forum, a grand exercise in deliberative democracy. A multiple regression analysis reveals that deliberation did indeed matter in this case, in ways that cannot be ascribed to mere information effects. Not only does genuine deliberation transform preferences; it transforms them in the direction hypothesised by the deliberative democracy literature. While the opinions of non-deliberators are closely linked to their individual situations, individual characteristics have no explanatory power for the attitudes and preferences of those who participated in deliberative sessions and felt they could freely express their opinion.

* This study would not have been possible without the collaboration of a great number of great people. I am very grateful to President de Menezes, Reverend Marques, and the rest of the São Tomé e Príncipe National Forum Executive Committee for letting my colleagues and myself assist them in designing the National Forum process. Macartan Humphreys and Willam Masters have been great collaborators in this project since its inception. Clara Albuquerque, Joshua Chaffin, Paulo Cunho, Jan Hartman, Eduardo Leoni, Jessika Trancik, Christine Weydig worked tirelessly to help prepare the Forum, and Camille Naquet-Radiguet did a stellar job to get the survey off the ground. The staff at the São Tomé e Príncipe National Statistics Institute were fantastic in setting up the survey in a minimum of time, in particular the director, Dr. Albano, and Teodora Sousa. The author is grateful to the Open Society Institute, the United Nations Development Program, and the United States Department of State for financial support. This project was approved by the Columbia University Internal Review Board for Human Subjects Research as protocol number IRB-AAAA7928.

I. Introduction

Does deliberation matter? In spite of a vigorous literature about the possibilities for more inclusive deliberation to address the shortcomings of liberal democracies, insufficient empirical research has been devoted to the actual effects on the individual preferences that feed into democratic aggregation processes such as voting. This paper reports an analysis of the recent National Forum in the West African nation of São Tomé and Príncipe, the study of which allows us to answer the empirical questions of whether deliberation works as presupposed by the advocates of deliberative democracy. This National Forum was quite an unprecedented exercise in political deliberation in that it was a real national, political exercise (unlike academic studies of small deliberative groups such as juries); it was inclusive in attempting and mostly succeeding to bring in all those who wanted to participate (unlike ‘deliberative polls’ which even when national, only involve a random sample of individuals); and its proceedings and the outcomes of deliberative sessions were duly documented, including with an individual-level survey conducted before and after Forum meetings to assess their impact. The Saotomean experience, beyond its effects in the country itself, holds the promise of educating us on what deliberation can and cannot be expected to do, and this paper is the first in a series of analyses of whether and how the deliberative component of the National Forum mattered.

The next section discusses what is at stake in such an analysis, and points out how many of claims in the deliberative democracy literature rely on unverified empirical assumptions. In particular, deliberation will not have its promised effects if talk is ‘cheap’ and at most affects beliefs, unable to transform fundamental preferences (as opposed to preferences over means to ends, which could alter when beliefs change). Moreover, even if deliberation does effect

preference transformation, the case for more deliberative democracy requires that the transformation be systematically in the direction of ‘better’, more reason-based and public-spirited perspectives.¹ Section III narrates São Tomé and Príncipe’s National Forum in detail. Section IV describes the nature of the data and the empirical methods used to address two principal questions: Does deliberation matter? And: Do preferences change in the direction hypothesised by deliberative democrats—towards preferences less determined by individual interests? Section V presents the results of the empirical analysis and shows that in the case of the Saotomean exercise in deliberative democracy, the answer is ‘yes’ to both questions. Section VI concludes and offers perspectives for further research.

II. Deliberative democracy and preference formation

In the recent ‘deliberative turn in democratic theory’ (Dryzek 2000) an ample literature has come forth to shed light on the shortcomings of democracy as we know it in modern societies, and to analyse how more discussion and deliberation could improve those shortcomings. The deliberative democracy research has been both theoretical and applied: Its contributors have concerned themselves just as much with the abstract theorising of democracy as voting or preference aggregation as it has been most elaborately analysed by social choice theory (and the problems associated with theorising it as such), as they have been interested in the practical workings of actual democratic institutions. The claims made by the deliberative democrats are thus a fertile mix of theoretical analysis, empirical assumptions, and normative argument. To illustrate the variegated nature of the literature, consider the following list of potential or hoped-for effects of deliberation, culled from two

¹ If deliberation made preferences more parochial, irrational, and selfish, more deliberation would presumably be a bad, not a good thing. So it is not enough that talk not be cheap—if it were, deliberation would be mostly irrelevant—it has to matter in the right way. It is whether this twin requirement holds up that the paper investigates.

contributions to Elster's edited volume on deliberative democracy (Elster 1998).

Deliberation might:

1. reveal private information
2. lessen the impact of bounded rationality
3. create stronger consensus for a choice, by revealing the infeasibility of alternatives
4. force or encourage a more impartial mode of justifying demands or claims
5. improve outcome fairness if the rules of deliberation protect minorities
6. help render the ultimate decision legitimate in the eyes of the group
7. do the right thing—there is some intrinsic goodness in deliberation
8. improve the moral or intellectual qualities of the participants

(see also Elster 1998; Fearon 1998; Gambetta 1998)

Naturally, the literature has also offered more pessimistic views of deliberation and the possible problems it may entail. These include the manipulation of public opinion by elite debate (Stokes 1998), 'discursive *machismo*' (Gambetta 1998), and plain deception about one's motivation by those who do not believe in impartial argument to sway those who do (Elster 1998). Yet most of the literature exhibits a marked optimism about the potential salutary effects of deliberation. In addition to the ones listed above, those conjectured effects include a 'civilising influence of hypocrisy' (Elster 1998) by which a deliberator's opinions are swayed in the direction of impartiality by having to appeal to impartial argument in public debate; improved bonds between the governed and the democratic state (Fishkin 1991; Ackerman and Fishkin 2002); and the 'structuration' of preferences so that they become less vulnerable to the aggregation inconsistencies proved by social choice theory (Miller 1992; Dryzek and List 2003).

It is clear that the normative thrust in favour of a more deliberative political decision-making process is heavily laden with empirical assumptions about the way people's preferences are

formed and influenced. Almost all of the hypothesised effects above presuppose the following very general claims:

1. sincere deliberation and discussion about collective decision problems can change people's preferences over the possible solutions
2. the deliberative process transforms preferences *systematically*, in the direction of more reason-based and less self-interested positions.

The latter claim is the stronger one, and it implies the former. At the most general level, it takes the form of stating that deliberation induces preferences that are more reflective, more based on reasoned argument, more considered. This in turn holds the promise of a more consensual politics, for the more preferences are rooted in reason and not in private interests, the more likely they are to be in agreement across people. And the more public-spirited they are likely to be, since parochial interests by themselves do not constitute reasoned arguments for holding a position—at least not the kind of argument that public deliberation can admit. So the case for deliberative democracy rests on deliberation not only making preferences *change*, but making them change *for the better*.

However, even the weaker claim is controversial. In many models of politics (and certainly of economics) talk is 'cheap' and does not have the capacity to affect preferences. That does not mean that talk, communication, and discussion could not affect *choices*—it is obvious that communication and talk can sometimes be used as signals, which may affect the interlocutor's beliefs and with them his or her choices, for the *same* preferences (see Austen-Smith 1990; Austen-Smith 1992). That is, changes in beliefs may affect the means you choose to pursue constant ends. We may call preferences over means and policies 'policy preferences', in distinction to 'deep preferences' that are defined over ultimate ends and values. The claim that 'talk is cheap' can then be rephrased as saying that while policy

preferences might be affected by communication that changes beliefs, ‘deep preferences’ about ends cannot.

Even if talk is cheap, of course, deliberation would not be without effect altogether. In the course of discussion, new facts become known and old ones become better understood. Public discussion is also a way of creating *common* knowledge among the participants. Thus one may hope that deliberation would lead to convergence in the deliberating parties’ beliefs about facts and means-end relationships. But that mechanism is not one from which anyone should expect a movement of preferences in a more considered and rational, public-spirited direction. For one thing, *convergence* in beliefs may well lead to *divergence* in policy preferences.² And even if policy preferences did converge, it is by no means clear that these more consensual policy preferences would be any less rooted in private interests or irrationalities. They might simply be the equilibrium outcome of bargaining, horsetrading, and manipulation. As long as deep preferences are unaffected of what one says and what one hears in debate, deliberators have an incentive to say what will make others go along with what they want. Thus talk becomes strategic, which in turn makes it even more ‘cheap’ and unreliable. This kind of discussion—as strategic communication—cannot by itself produce the preferences changes envisaged by deliberative democracy theorists.

Much of the case for more deliberative democracy therefore hinges on the question of whether talk is cheap. If it is, many of the claims made in favour of deliberation are left

² Elster Elster, J. (1998). Deliberation and Constitution-Making. *Deliberative Democracy*. J. Elster. New York, Cambridge University Press: 69-96. provides the example of the defeat of bicameralism in the French 1789 Constituent Assembly by reactionaries and radicals who disagreed between each other both on the ends and the means-end relationship. “This general phenomenon—agreement based on preference differences and belief differences that cancel each other—is quite common. It implies that when deliberation reduces disagreement either about ends or about factual matters, it may increase disagreement about the decision to be taken.” Put differently, when deliberation creates common knowledge, it can lead to divergent policy preference if deep preferences differ. (The opposite case of deep preferences converging while beliefs about the means-end relationships remain different would produce the same result. This seems less likely to happen than the converse.)

without a leg to stand on. Instead, deliberative democrats' hopes for the salutary effects of deliberation rely on deeper mechanisms than the strategic signalling effects of cheap talk. Their claims presuppose that earnest, free deliberation can change not only beliefs, but also deep preferences. In a comment on social choice theorists' criticisms of deliberative democracy theories, Dryzek (2000) says:

'Indeed, one can imagine a deliberation-induced increase in awareness enabling individuals to behave in still more cunning ways as they attempt to manipulate the process to their own advantage. Yet to accept this dismal conclusion implies excessive reliance on the behavioural assumptions of *rational* choice theory, which cannot see in deliberation any potential to curb the proclivity to engage in unremittingly strategic behaviour. *The real beauty of deliberation is that it can curb strategic action...*' [Dryzek, 2000; second italics added].

Whether deliberation affects deep preferences or at most factual beliefs is an empirical question. Yet in much of this disagreement, much the argument tends to eschew an investigation of the facts of the matter in favour of postulates from theory that 'talk is cheap' or that deliberation can transform preferences so as to 'curb strategic action'. Admittedly, the deliberative democracy literature is not entirely lacking in scientific investigations of its empirical claims, but they have not addressed this question satisfactorily. Work on 'deliberative polling'³ suggests that deliberation does indeed induce preference change, but it is difficult to tell from these poll results whether it is deep preferences that change, or people just obtain better information and adjust their policy preferences accordingly. The findings of 'group polarisation' (see Sunstein 2002) shows that discussion and debate can change preferences and opinions, but the phenomenon of group polarisation contributes more to

³ See <http://cdd.stanford.edu/polls/index.html>.

our understanding of how a *group's* opinion changes than the preferences of each individual in the group. Finally, there has recently been done quite sophisticated quantitative research on whether deliberation causes 'preference structuration'; that is, whether it transforms preferences so that they become more single-peaked and potentially avoid the inconsistency problems of democratic preference aggregation. The evidence is mixed, but some structuration seems to occur (McLean, List et al. 1999). Notwithstanding, increased single-peakedness does not suffice to show that deliberation makes preferences more considered, impartial, or civilised.

This paper presents an analysis of a new set of data from an exercise in deliberative democracy that was recently organised on a nation-wide scale in the (admittedly small) country of São Tomé and Príncipe in West Africa. The data represent a unique opportunity to investigate the effects of full-fledged deliberation on a national scale: Unlike deliberative polls, a considerable part of the population (6% of all adults) participated in São Tomé and Príncipe's National Forum. The event is described in the following section. Using survey data collected before and after the Forum, we can use regressions methods to estimate the effect of deliberation on people's opinions about the questions that were discussed, all while taking into account other possible determinants of those opinions. In particular, we examine the following two hypotheses, which operationalise the more general presuppositions discussed above:

HYPOTHESIS 1: people's responses to the questions that were discussed in the São Tomé and Príncipe's National Forum change as a results of participating in the deliberations.

HYPOTHESIS 2: the responses of people who *did* deliberate, are *less* well explained by individual characteristics than are the responses of those who *did not* deliberate and the responses of the same people *before* they participated in the deliberations.

III. São Tomé and Príncipe's National Forum

The island state of São Tomé and Príncipe is situated in Gulf of Guinea, about 200 kilometers west of Gabon and South of Nigeria. The former Portuguese colony is one of the smallest and poorest countries in the world: Its 160.000 inhabitants survive on a GDP/capita of around \$300 at purchasing power parity, suffer endemic malaria and generally severe disease environment. The dominant export industry has long been cocoa, but a fall in production and prices in the last decades has left the country saddled with one of the largest debt burdens in the world in relation to GDP (about 600% of GDP), and a government which relies on foreign donors for more than half of its budget. Yet since dismantling the socialist system of government it adopted upon independence in 1975, it has been one of Africa's most robust democracies: Two presidents and many governments have left office after free elections. (a book-length treatment is Seibert 1999; For a short overview of São Tomé and Príncipe's history and politics, see Frynas, Wood et al. 2003)

In recent years, São Tomé and Príncipe's idyll has been disturbed by recurrent political crises, precipitated in particular by the expected imminent discovery of oil. Former exiles (ex-soldiers of South Africa's 'Buffalo' battalion) and disgruntled officers staged a military coup in July 2003, during President Fradique de Menezes' state visit to Nigeria. With international mediation, the situation was quickly brought under control, and the constitutionally legitimate authorities restored to power. As one of several conditions for terminating the coup, however, the coupmakers demanded of the President that a 'National Forum' be organised to debate the grave situation of the country. (For an analysis of the coup, see Seibert 2003) When preparing the Forum, the Presidency of São Tomé and

Príncipe consulted a Columbia University-based group of advisors of which this author is a member.⁴ The group assisted São Tomé and Príncipe in developing and organising the following format for the Forum:

For a period of several weeks, grassroots meetings were held in 56 plantations, villages, and towns around the entire country, in order to give every adult citizen an opportunity to participate. Each meeting consisted of a presentation part and a discussion part. At the beginning of each meeting, the moderator would explain the factual situation with respect to oil—in particular make clear that no oil had been found as yet, and that it would take years after a discovery before commercial production could begin. With the presentation the audience would receive a small ‘popular information bulletin’ which contained the same information in easy-to-understand language.

After the presentation, the participants were divided into several groups for deliberative discussion sessions. Led by trained facilitators (also Saotomeans), each group was asked to discuss a series of questions about development priorities and economic and political situation in the country. The discussion was organised around a questionnaire which listed the questions and allowed the group to record its consensus decision, or if consensus was not reached, indicate the degree of disagreement. A typical question would be:

‘If the government had more money to spend on health, what should it spend it on first?

1. Health clinics close to you, with limited services?
2. Full-service hospitals, that could be located two or three hours away?’

Except for questions that were purely factual (such as ‘how many people in the group have electricity in their home?’) the facilitators were trained to encourage deliberation within the

⁴ For more information about this advisory project, led by professor Jeffrey Sachs of Columbia University, please see <http://www.earthinstitute.columbia.edu/cgsd/STP>.

group before any answer was recorded. Deliberation was also used for questions that had an evaluative component even if they were not policy choices, for example:

‘How is your quality of life this year, compared last year?’
(1 = much better; 5 = much worse)

The facilitators were told to ensure that everyone felt able to participate, women in particular. Depending on the turnout and the availability of facilitators, there were from one to four questionnaires completed from each local meeting, in groups that typically ranged from 20 to 30 participants.

After the four-week period in which the local meetings took place, a plenary conference was organised for all political, commercial and civil society élites, as well as representatives from the localities where deliberative meetings had been held. The conference concluded with a statement of national consensus and a commitment to a ‘plan of action’ for economic development.

The focus in this paper is the effect of the local deliberative sessions. Measured by turnout, they were a great success: More than 3500 people participated—6% of the adult population of the country. For scholars thinking about the role of deliberation in politics, the question is what difference the Forum actually made for the participants’ attitudes to the questions that were discussed. Put simply: Did deliberation matter for the deliberators?

To investigate this question, the São Tomé and Príncipe advisory group at Columbia University organised an individual-level survey in collaboration with the National Statistics Institute of São Tomé and Príncipe. The survey instrument was designed to be as close as possible to the questionnaire used in the Forum deliberative sessions. It asked exactly the questions that were asked in the local Forum meetings, modified only from a collective to an

individual phrasing. It also collected demographic information and answers to a set of factual questions about matters discussed in the Forum.

As mentioned above, not all the questions discussed at the Forum were in fact submitted to deliberation. Some were mere survey questions, where people simply indicated their answer by raising hands, and the number of people giving each answer was recorded. Since the present paper aims to analyse the effect of deliberation, we confine our attention only to those questions that were submitted to deliberation in the local Forum meetings. Our interest here is in the answers people gave to the same questions in the private setting of the survey, before and/or after taking part in a Forum meeting. The full list of questions is given in the appendix. They cover general priorities for public services; specific priorities in the health, education, and transport sectors; people's discount rates and desired tax rates; their view of corruption and legitimacy in government; and their assessment of their living standards today and in the future.⁵

One group of individuals was interviewed both before and after the local Forum meeting had taken place in their community. Of the 266 individuals interviewed before the forum, 76 were not available or could not be found at the time scheduled for the second interview, leaving a panel of 190 respondents. Another group was interviewed only after the forum; this group numbered 356 individuals. This brings the total number of respondents to 622. Of the 546 people interviewed after the Forum (for 190 of whom it was the second

⁵ We have included one question from the survey that was not asked in the deliberative sessions of the Forum meetings. This is question 11, asking the respondents whether they agree with the statement that the state 'represents' them or 'acts on their behalf' when making decisions. This question is intended to measure the subjective sense of government legitimacy. We have included this question in the analysis, because much of the deliberative democracy literature implies that free deliberation about what the government should do increases both the subjective perception of government legitimacy and even the real normative legitimacy of the state. While the latter obviously cannot be measured empirically, it is hard to think of a theory of legitimacy in which the state could gain in actual normative legitimacy without the citizens noticing, that is, without subjective and expressed perceptions of democracy (which can be measured) also strengthening. Answers to question 11 could therefore reflect both effects.

interview), 247 or 45% reported that they had attended the local Forum meeting. Given missing data, this made for a sample size close to 300 for most the regressions. The next section lays out the detail of how the responses were analysed.

IV. Method of investigation

To assess the effects of deliberation on the attitudes people express, it is necessary to control for other possible determinants of those attitudes. Most important among those are of course a person's individual situation and how it shapes his or her interests and derived preferences. To the extent that the priorities expressed in the surveys reflect more than a concern for the common good, as they undoubtedly do, we should expect the answers to be in part determined by factors such as age, gender, and income. The survey instrument collected a set of individual characteristics precisely in order to control for such effects. Specifically, the present analysis uses the respondents' age, sex, educational attainment, monthly salary, and household size as co-determinants of their responses to the fifteen questions.

There are other, subtler determinants that are also easy to mistake for an effect of deliberation. There is a difference between saying that *deliberation* has an effect and that the *Forum* had an effect. Even if deliberation *per se* does not change anyone's mind, the Forum involved an effort at popular education, which would likely have spilled over to household members and other people connected with those who actually attended their local Forum sessions.⁶ Moreover, the government by organising this exercise in popular consultation, may have sent a signal to the population whose view of the government could have changed as a

⁶ That is, the change in beliefs due discussions at the Forum could have affected policy preferences, among participants as well as non-participants. If those who went to the Forum told their family and neighbours about when returning home, we should expect a difference between the pre- and post-Forum responses, regardless of participation.

consequence, and that in turn might have affected policy preferences, evaluations and expectations regardless of any deliberation.⁷ Therefore, we control for the Forum having been held—and thus for the effect the Forum had on everyone, not just the Forum-goers. Additionally, the survey itself might have had a distorting effect on reported attitudes. Since the ‘pre and post’-format involved a set of people being interviewed twice within just over a week on almost the same set of questions, their responses in the second round are likely to be coloured by the fact that they have already been asked to consider and reflect upon the questions. There is the added issue that respondents may feel a need to be consistent with what they said in their previous interview. It was to address this potential survey effect that the sample included a control group that was *only* interviewed after the Forum, as explained above. This allows us to control for whether the subject has been interviewed before.

Finally, *attendance* at the Forum may not tell us much about *deliberation*. If we find that attending the local Forum session does not seem to have an effect, that might, on the one hand, belie the faith the literature has put in the powers of deliberation, but it may equally likely incriminate São Tomé and Príncipe’s National Forum process itself. Were the discussion sessions truly deliberative? Were people free to voice unpopular opinions, and to take time to ask, answer, and reflect over questions? Certainly in some of the sessions that was not the case, as anecdotal examples show. In one ‘deliberative’ group, the discussion became so aggressive and ill-behaved that the facilitator (an officer) threatened to bring the police if the participants did not stop shouting. Another Forum session was interrupted and had to be postponed when it was attacked by members of a political party who were holding

⁷ For example, if the government were seen as more caring about the people because of organising the Forum, we might expect that more people responded positively to the legitimacy question. But the effect could equally well be in the opposite direction, if people viewed the government’s effort as hypocritical, their cynicism about government could be *increased*. The point here is just that we should expect some differences in attitudes between the first and the second round of surveys just by the fact that the Forum has been held.

a rally at the same time, and mistook the Forum meeting for a rival party rally. At the same time, these anecdotes were the exception rather than the rule, and most of the sessions were reported to have gone relatively smoothly. Still, this shows that knowing whether someone went to the Forum meeting is therefore not necessarily a good indicator as to whether they did in fact participate in free deliberation. The survey instrument offers two better measures of deliberation. One question asked of those who did go to the Forum was: ‘Did you feel that you could freely express your opinion?’ Another question was: ‘Did you participate in any of the discussion?’ It is not quite obvious whether what is should matter is only actually discussing with others; it seems that some of the salutary effects of deliberation should also affect those who listen and are engaged in the conversation, even if they choose not to make a statement. Not everyone will always have something to say; that does not mean they are not a full member of the deliberative group and do in that sense participate in the deliberation. In the analysis that follows, we therefore as the deliberation variable the answer to whether respondents felt they could freely express their opinion.⁸ We also include the indicator for mere participation.

We organise all of these potential determinants of preferences in a multiple regression model of the following form:

$ANSWER_{Q,it} =$

$$F_Q(AFTERFORUM_t, SECOND_{it}, PART_{it}, FREE_{it},$$

$$AGE_i, SEX_i, EDUCATION_i, SALARY_i, HHSIZE_i,$$

$$FREE_{it} * AGE_i, FREE_{it} * SEX_i, FREE_{it} * EDUCATION_i, FREE_{it} * SALARY_i,$$

$$FREE_{it} * HHSIZE_i)$$

⁸ In fact feeling free to express oneself and participating in the discussion turn out to be closely correlated, and using one variable instead of the other in the regressions reported below produces similar results.

The first four variables are dummy variables that indicate whether the forum has taken place (AFTERFORUM = 1), whether this answer to question Q comes from the respondent's second interview (SECOND = 1), whether the respondent participated in the local Forum meeting (PART = 1), and if so, whether he or she felt free to talk (FREE = 1).⁹ The variable FREE is the key variable under investigation. Then follow the set of determinants capturing individual characteristics. They include the respondents' age, sex, and education level, as well as their salary and the size of their household. All of these are plausible determinants of preferences, since they are directly related to a person's social and economic position, which determines their needs and which policies are in their interest. Finally, we include a set of interaction variables between freedom to deliberate and the individual characteristics. This will allow us to investigate both the overall effect of deliberation and how it is mediated through individual characteristics.

We estimate the model for the fifteen questions listed in the appendix. The first two questions (Q1 and Q2), which ask the respondent to choose their first and second priorities from an unordered list of development policy areas, are estimated with multinomial logit. The seven either-or questions (Q3–Q8 and Q10) are estimated with probit models, and the four questions that ask the respondents to rank their answers (Q9 and Q13–Q15) are estimated with ordered probit models. Finally, the two questions where the answer is a number (Q11 about the discount rate and Q12 about the tax rate) are modelled with Generalised Least Squares (GLS). All fifteen estimations use robust standard error estimation.

⁹ Note that in the pre-forum surveys, all of these variables have a value of zero. In the post-forum surveys, AFTERFORUM always has a value of one. FREE = 1 implies that PART = 1 also.

The results from these fifteen regressions are presented and discussed in the next section, but a final methodological point is in order. Different variables will have a significant effect in different regressions, and they will have significant coefficients for some but not all questions. When should we conclude that deliberation ‘has an effect’ overall? If there is no sign of deliberation mattering in any of the fifteen questions, it casts doubt on the empirical assumptions of the deliberative democracy advocates. But clearly there is no reason to expect significant deliberation effects in *every* question. It would be a mistake simply to focus on the questions where the coefficient on deliberation turned out significant. The reason is that when running fifteen regressions simultaneously, one would expect occasionally to find significant effects even if there were no causal relationships in reality. To overcome this problem, we use a bootstrapping method to derive empirical confidence intervals for the number of significant effects expected for each variable. The method is described in appendix B. Briefly explained, we assess the importance of the estimated number of significant coefficient for some variable by seeing if it exceeds the 90% (95%, 99%) critical value. This critical value is in turn the equivalent percentile (corrected for bias) in a bootstrap distribution of the same statistic from a data set where the independent variables had no causal effect on the outcome/response (which was essentially randomly generated). If the number of significant effects for a variable is above the 90% (95%, 99%) critical value, it means roughly that we would expect to estimate that number less than 10% (5%, 1%) of the time in a world where there was no true effect of the variable in question.

V. Results

Table 1 gives qualitative results from the fifteen regressions. While it is of great interest to know by how much attitudes change because of deliberation, my focus in this study is the

narrower one of simply establishing whether deliberation changes opinions *at all*, regardless of the direction or magnitude of those changes. For purposes of clarity and parsimony, the table therefore does not report actual regression coefficients: Instead, it reports when each variable had a significant effect (denoted by the sign of the effect; positive or negative) and when the effect was statistically insignificant (denoted by 0). A simple sign denotes statistical significance at the 90% level, a double sign at the 95% level, and a triple sign at the 99% level. Note that two of the questions called for an answer chosen from unordered categories and were modelled by multinomial logit. This model estimates one coefficient for each category (less one base category), and so there is no single sign of the effect. Instead the table reports one or more signs S if a variable had a significant effect on any category, 0 otherwise.

The column labelled ‘# significant’ gives the proportion of the fifteen regressions where the variable’s coefficient estimate was statistically significant at least at the 90% level. Whether this number in turn is sufficiently far from zero, is indicated by the asterisks. One asterisk denotes that the number is in the upper 10% tail of the bootstrap distribution (after bias correction), two asterisks the 5% tail, and three the 1% tail.

The table shows that the freedom to deliberate does indeed have an impact on people’s expressed preferences. The coefficient on the simple deliberation variable is significant in six out of the fifteen questions ($p < .01$). More informative, however, is the row labelled ‘total effect of FREE’: This is the total estimated effect of deliberation on expressed preferences, including the interactions of deliberation with individual characteristics (which are all evaluated at the sample mean). What that row shows is that in four out of fifteen ($p < .05$)

questions, an average¹⁰ person taking part in deliberation will exhibit a (statistically) significant difference in his/her response, as compared with an otherwise identical person who did not deliberate.

Note that this effect is estimated after controlling for the more widespread effects of the Forum having taken place, and after controlling for a previous interview. Interestingly, both of these factors are also important, and significantly affect the responses in one-third and one-fifth of the cases, respectively. This shows that in addition to the effect on the deliberators themselves, the Forum affected attitudes and preferences in the population at large. This spillover effect might reflect that those who attended the Forum told their families and neighbours about it, so that the Forum promoted a national conversation even among those who did not participate. We have also controlled for mere participation in the Forum, which turns out to have no effect at all by itself. In other words, there is no difference between those who did not attend the Forum, and those who did but did not feel they could express themselves freely. It seems crucial that deliberation be genuinely free and open if it is to have an effect.

We can therefore conclude that deliberation matters, at least so long as deliberative freedom is effective, supporting the first hypothesis advanced in section II. This immediately raises the question of *why* and of *how*, and in particular whether hypothesis 2 about the direction of preference transformation also holds up. As to *why*: Can these preference changes be explained as functions of belief change, or do they reflect a transformation of 'deep' preferences about ends? We discuss this question below. As to *how*: Does deliberation induce attitudes to converge on more public-spirited responses? It is to this question we now turn.

¹⁰ Average in our whole sample.

It is not clear how we could classify one response as more public-spirited or reason-based than another, although a few of the questions do lend themselves to such a categorisation. Question 12 asks how much the respondent would be willing to contribute to public goods as a share of incremental income. An increase in the answer could be interpreted as a more public-spirited preference. Interestingly, deliberation does have a strongly significant and positive effect on how much a respondent claims to be willing to contribute to public goods. However, there is a strongly significant *negative* effect of attending the Forum, so some of this effect reflects not that deliberators are more generous, but that frustrated Forum-goers are less generous than all other groups, including those who did not attend the Forum in the first place. In a similar vein, answers to question 9 on political legitimacy could be thought of as reflecting the public as opposed to private orientation of attitudes. We find no effect of deliberation on perceived legitimacy, but we do see a strongly significant effect of the Forum. This suggests that the Saotomeans saw the Forum as a valuable exercise, which increased their acceptance of government action. While the fact that deliberation was used may or may not have been a factor in this increased legitimacy of the state, the effect applies to the population at large, and not to Forum-goers specifically.

Question 11 can be taken as a measure of time-consistency and thus of the degree to which time preferences are rationally structured. It asks what the interest rate would have to be to make it worth leaving one's savings in the bank—the response is a measure of the respondent's discount rate. The total effect of deliberation on the discount rate is not statistically significant from zero. There are, however, some interesting partial effects. Older people and women are more likely to be patient than younger people and men—a finding that fits with our stereotypes. What is more unexpected is that deliberation *increases* this

effect: Older and female deliberators are even more patient than their non-deliberating counterparts.

It is limited how much such exegeses of individual regression coefficients can contribute to our understanding, since there are many alternative interpretations of what the responses reflect. A more useful approach to examine is how deliberation affects the influence of individual characteristics on attitudes *in general*. Optimistic deliberative democrats claim that by forcing people to cast their arguments in a perspective that will appeal to their interlocutors, and thereby privileging impartial and common-good preferences, deliberation divorces people's preferences from their parochial interests. If this is true, we should see that deliberation reduces the explanatory effect of all of people's individual characteristics on their opinions. Since the regressors include individual characteristics by themselves and interacted with deliberation, we can easily compare how individual characteristics matter among participants and non-participants.

Examining first the simple coefficients on individual characteristics, we find that people's opinions are strongly correlated with aspects of their demographic and socio-economic situation. Most visibly, both gender and monthly salary have very strong effects on attitudes—they are statistically significant in more than one-third of the questions. The effect of household size is not quite as strong, but still clearly significant. Somewhat surprisingly, neither age nor education seems to matter. These variables are found to be statistically significant in only three out of the fifteen questions, and the bootstrap confidence intervals show that we would be likely to find three significant effects even if there was no relationship whatsoever. Overall, we find evidence that preferences of non-participants in the Forum are at least somewhat self-interested, since individual situation is such a strong determinant of the responses. There is of course nothing surprising in this.

We next examine the coefficients on the interacted variables. It is clear that much of the effect of deliberation is mediated through individual characteristics: Four out of five interaction variables have significant effects. They are interactions between deliberation and the three variables that explained non-participants' responses, but also the interaction between deliberation and education.

There are two ways to interpret the coefficients on the interacted variables. On the one hand, they could be seen as measuring the influence of individual characteristics on the effect of deliberation. By choosing different values for age, education, *et cetera* we could obtain different estimates of the *total* effect of participation (the calculations behind the table use the sample means). But they could also be interpreted differently; as the influence of deliberation on the degree to which individual characteristics affect opinions. By setting FREE to zero or one, we will estimate a different effect of a person's socio-economic situation on his or her preferences and attitudes.

While formally equivalent in isolated cases, these interpretations rely on quite different views of the mechanisms by which the deliberative process works. In the latter interpretation, deliberation modifies the role of individual characteristics in determining preferences. It could temper that role as deliberative democrats claim. But it could also strengthen them, for example if deliberation makes visible an incompatibility among private interests and strengthens the participants' desire to protect theirs. In the former interpretation, deliberation has a basic potential to change opinions in one direction or other, but some groups of people are more susceptible to the effects of deliberation—say women more than men, or educated people more than uneducated ones.

If we look at only one question or regression at a time, there is no way to discriminate between these two interpretations. They are observationally equivalent and are both picked up by statistically significant interaction effects. If we look at all fifteen questions together, however, it becomes possible to tease the two interpretations apart. The reason is that they have different implications for the relationship between the coefficients on the simple and the interacted variables *across* regressions. On the one hand, if the interaction effects are significant because deliberation modifies the influence of individual characteristics, then the simple and the interacted variables should mostly have opposite signs (if deliberation weakens the effect of individual characteristics) or mostly the same signs (if deliberation *strengthens* parochial influences). If, on the other hand, the significant interaction effects reflect which attributes of individuals (age, education, and so on) make deliberation ‘stick’, then we should not expect such a systematic opposition or similarity between the coefficient signs on the simple and the interacted terms. Instead, we should expect a systematic relationship between the signs of the interaction coefficients and the sign of the total effect of deliberation. They should typically be the same sign for factors that increases the effect of deliberation; and the opposite sign for factors that reduces the effect of participation.

To illustrate with an example, consider question Q14:

‘How is your quality of life this year, compared to last year?
(1 = Much worse; 5 = Much better)’

There is a significant negative effect of the interacted gender variable (0 = male, 1 = female). As explained above, this can be interpreted in two ways. It could be that the effect of deliberation on women’s opinions (in this question) is different from that on men’s opinions. Alternatively, it could be that the influence of one’s gender on what one thinks about the question is modified (weakened or strengthened) by participation.

The column labelled ‘% sign difference’ gives the proportion of times when the coefficients have *opposite* signs. The proportions listed to the right of the simple coefficients compare their signs with those of the corresponding interacted coefficients. The proportions listed to the right of the interacted coefficients compare their signs with that of the total effect of deliberation. Note that there are 25 comparisons to be made, since the two multinomial logit regressions involve six equations each.

The numbers show that the simple and interacted variable coefficients have opposite signs in the vast majority of cases, and that is true for all five variable pairs. In contrast, there is not as much of a systematic relationship between the signs of the interaction coefficients and the total effect of deliberation. The proportion of sign differences is closer to $\frac{1}{2}$, although the coefficients on FREE*AGE and FREE*SEX are generally of the same sign as the total effect of deliberation. This might suggest that older people and women are more susceptible to deliberation inducing preference change than younger people and men. The overall finding, however, is that deliberation modifies (indeed tempers) the effect of individual characteristics on opinions and attitudes, rather than the other way round. This lends support to the second hypothesis advanced in section II: That the power of individual characteristics to explain people’s answers to the questions is lesser among people who participated in deliberation than among those who did not (or were frustrated in their attempt). This suggests that one of the main claims made by the deliberative democrats has been borne out in a real exercise of deliberative democracy.

That claim is in fact confirmed by a statistically more convincing analysis than simply comparing signs. The bottom panel of the table reports the *total* effect of each pair of the simple and the interacted variables—that is, the statistical significance of their sum, which is of course the effect of individual characteristics on the opinions of people who have

participated in deliberation. The results are striking. Not a single variable has a number of significant effects above the critical value. In other words, *the individual characteristics of deliberators cannot explain their responses to the questions about which they have deliberated*. This stands in stark contrast to the non-deliberators, who we saw above were clearly affected by their individual situation.

These results are very promising for those with an optimistic view of deliberative democracy. It does not seem possible to explain away these strong effects as simple changes in policy preferences due to new information and altered beliefs, with unchanged deep preferences. Since we have controlled for the effect of the Forum ‘at large’, we know that the estimated effect required attending the Forum. Since we used perceived freedom of expression as our deliberation proxy but controlled for mere presence, we know further that the effect came from participating in the deliberations. Since any informational content of the Forum meeting is common knowledge to all present, and is thus equally available to those who did and those who did not feel free to express their opinion, the separate effect of deliberation cannot be reduced to mere informational effects.

VI. Conclusions and further research

This paper is the first in a series of analyses of deliberative democracy the São Tomé e Príncipe National Forum. The results reported here are promising for deliberative democrats, but clearly show the need for further research. We have demonstrated that deliberation does indeed transform preferences, but only when care is taken to make sure the deliberative process is genuinely free and inclusive. The survey responses also confirm the second hypothesis I identified in the deliberative democracy literature: Genuine deliberation reduces the influence of individual characteristics on the deliberator’s opinions and

preferences, lending support to the hope that deliberation can ‘launder’ preferences so that they are less based on parochial self-interest, and more on an enlightened view of the common good.

It is opportune here to present a few caveats that will have to be addressed in future research. First, most of the analysis in this paper has ignored the substantive content of the questions and the direction in which the answers changed upon deliberation. This was done because of the nature of the question, which focused on whether there was any change of all, and whether the change could be seen as reducing the influence of self-interest. For the first part of that enquiry, knowing the substantive direction of the change is unnecessary; for the second, it is uninformative unless we can find a way to establish without controversy which response to a question is the least self-interested. Nevertheless, while this approach was appropriate in the present study, future work should certainly examine more closely which kinds of responses were more favoured by deliberation. Once it has been established that deliberation does matter, there remains much work to do to map out in more detail the *way* it matters.

The second caveat relates to the source of the information: The National Forum itself. One set of concerns relate to its representativeness. This was a very special situation in a very special country. Most obviously the nation is extremely small, which made it easier to involve a large portion of the population, but which raises doubts as to what we can generalise from this experience to other countries. Another set of concerns relate to the quality of deliberation in the Forum meetings. As was to be expected, both time pressure and the education gap between facilitators and participants turned out to be a threat to genuine deliberation. Further work should therefore examine better the ways in which opinions change, to uncover what influence the facilitators had on the participants.

In spite of these warnings, however, the main lesson to draw from this study is a positive one. Deliberation matters; deliberation works not just by changing deliberator's beliefs but also their deep preferences; and deliberation reduces the explanatory power of individual characteristics on people's preferences. Caveats provided, these are encouraging results for those who believe deliberation could improve the democratic process also in other parts of the world.

Appendix A: List of questions

The full list of questions analysed is as follows:

Q1. As you may already know, there is a probability that we will find oil in the waters of São Tomé and Príncipe. If we really discover oil in our country and the revenues increase, the government will be able to invest the resources in the improvement of the living conditions of the population. But even with money from oil, it will not be possible to do everything at the same time. In your opinion, what should be done first? Below you find six types of expenses that could improve the population's living condition. Please indicate which are the two expenses you consider most urgent (1 for the first priority and 2 for the second priority). You may also add your own option. (1) Health; (2) Education and schools; (3) Roads and transportation; (4) Electricity services; (5) Water and sanitation; (6) Justice and internal order; (7) Other (specify).

[The first priority is recorded as the answer to Q1.]

Q2. [Question as above; the second priority is recorded as the answer to Q2.]

Q3. If the government had more money to spend on health, what should it spend it on first: (1) Health clinics close to you, with limited services; (2) Full-service hospitals, that could be located two or three hours away?

Q4. If the government had more money to spend on education, what should it spend it on first: (1) Primary schools; (2) Secondary schools?

Q5. If the government had more money to spend on education, what should it spend it on first: (1) Vocational training; (2) University training?

- Q6. If the government had more money to spend on transport, what should it spend it on first: (1) Guarantee transportation for trucks and tractors; (2) Guarantee transportation for people and cars?
- Q7. If the government had more money to spend on transport, what should it spend it on first: (1) Improve the roads; (2) Improve public transportation services?
- Q8. If the government had more money to spend on roads, what should it spend it on first: (1) Build and improve roads in the communities; (2) Build and improve roads between towns?
- Q9. In an overall perspective, what is your position on the following statement? “The state represents me and acts on my behalf when making its decisions.”
(1 = completely agree; 5 = completely disagree)
- Q10. Suppose you are paying into the savings bank. Yours savings have reached one million Dobras [~100USD]. You may choose between keeping your money in the savings bank and receive interest, or receive the money today. What do you prefer?
(1) Receive the money today, regardless of how much money you could gain by waiting; (2) Place the money in the savings bank, wait one year and receive the interest.
- Q11. What would be the lowest amount in interest that the savings bank would have to pay you to make you wait one year?
- Q12. In many countries, people give a certain part of their income to pay for things like roads, schools, and health. Suppose that ten years from now, you receive one million

Dobras [~100USD] more in salary/income than today. How much of this money do you think you would contribute to improve these services?

Q13. Do you think there exist people in the government who abuse their authority for private gain instead of working for the good of the community?

(1 = No one; 5 = Everyone)

Q14. to How is your quality of life this year, compared last year?

(1 = Much worse; 5 = Much better)

Q15. How do you think your quality of life will be one year from now?

(1 = Much worse; 5 = Much better)

Appendix B: Explanation of bootstrap method

The bootstrap method is explained in detail in (Efron and Tibshirani 1993). Bootstrapping is useful when normal confidence intervals or other statistics cannot be derived analytically.

The statistic of interest in this case is the distribution of the number of significant coefficients a variable is estimated to have across the fifteen regressions. As stated in the main text, with fifteen regressions and fourteen variables, one would always expect to find some significant coefficients, even if in the true model the independent variable had no effect on the outcome whatsoever.

To create a confidence interval for this statistic, I constructed a 'pseudo' data set in which, by hypothesis, the variables had no effect on the answers. I did this by predicting the outcomes from the regressions, setting all the variables to their sample means for all the observations. For the probability models, this gave a set of probabilities for the different possible outcomes (responses), and a random draw determined which one it was. This method gave the same distribution of responses as the real data set, but with no correlations with the explanatory variables except fortuitous ones. For the linear regressions, the prediction gave a constant, to which I added a random number, randomly distributed with mean zero and the same standard deviation as the real outcome variable. This procedure produced a 'pseudo' data set with exactly the same explanatory variables that had been used in the regressions, and a set of new 'pseudo' outcome variables, one for each question.

For the bootstrap, I generated 10000 data sets by drawing N observations with replacement from the 'pseudo' data set, where N is the number of observations in the 'pseudo' data set. The normal regression analysis was then applied to each of these 10000 samples, creating a set of 10000 measures of how often each variable was significant in the fifteen regressions. I

used this database of 10000 results to obtain the critical value for the actual numbers of statistically significant coefficients for each variable. To obtain the 90% critical value, I used the top endpoint of the bias-corrected 80% bootstrap confidence interval (the bias-corrected confidence intervals are described in Efron 1987). To obtain the 95% critical value, I used the top endpoint of the bias-corrected 90% bootstrap confidence interval, and for the 99% value, the top endpoint of the bias-corrected 98% bootstrap confidence interval.

Table 1:		Regression results															#	% sign difference
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	sign.		
AFTERFORUM	SSS	SSS	+++	0	0	0	-	0	+++	0	0	0	0	0	0	0	5**	
SECOND	SSS	SSS	0	0	0	0	++	0	0	0	0	0	0	++	0	0	4*	
PART	0	0	0	0	0	0	0	0	0	0	0	---	0	0	0	0	1	
AGE	0	SSS	0	0	0	0	0	0	0	--	0	---	0	0	0	0	3	0.76
EDUCATION	0	SSS	0	0	0	0	0	0	0	0	--	-	0	0	0	0	3	0.88
HHSIZE	SS	SSS	0	0	0	0	0	0	0	0	0	0	0	0	0	---	3**	0.76
SALARY	SSS	SSS	0	0	---	-	0	0	0	0	0	-	---	+++	+++	0	8***	0.88
SEX	SSS	0	0	0	0	0	0	++	0	0	--	--	---	+	0	0	6***	0.84
FREE*AGE	S	SSS	0	0	0	0	--	0	0	++	0	+++	0	0	0	0	5	0.16
FREE*EDUCATION	0	SSS	0	0	+	0	0	0	0	0	0	0	0	0	0	0	2*	0.32
FREE*HHSIZE	SSS	SS	0	0	0	0	0	0	+	0	0	0	0	0	+	0	4***	0.44
FREE*SALARY	S	0	-	+	+	0	0	0	0	0	0	++	+++	0	--	0	7***	0.36
FREE*SEX	SSS	0	+	0	0	0	0	-	0	0	0	0	+	--	0	0	5***	0.20
Total(AGE)	S	0	0	0	-	0	--	0	0	0	--	0	0	0	0	0	4	
Total(EDUCATION)	0	0	0	0	0	0	0	0	+	0	--	0	0	0	0	0	2	
Total(HHSIZE)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total(SALARY)	0	0	0	+++	0	0	0	0	0	0	0	0	0	+++	0	0	2	
Total(SEX)	SSS	0	0	0	--	0	---	0	0	0	--	0	0	0	0	0	4	
FREE	SSS	SSS	++	0	0	0	0	0	0	+	---	0	0	0	0	0	6***	
Total(FREE)	SSS	SSS	0	0	0	0	0	0	0	0	0	+++	0	-	0	0	4**	
N	297	296	293	296	292	299	293	293	299	291	241	257	246	276	177			
Type of regression	m.l.	m.l.	p.	p.	p.	p.	p.	p.	p.	p.	gls	gls	o.p.	o.p.	o.p.			

One, two and three signs in the table indicate statistical significance at the 90%, 95% and 99% level, respectively. The sign corresponds to the sign of the coefficient except in the multinomial logit regressions, where the symbol S indicates rejection of the hypothesis that the coefficient is zero in all the 6 equations. The column '# sign.' reports the number of regressions (out of 15) in which the variable is significant at least at the 90% level. One, two and three asterisks indicate that this number is above the 90th, 95th, and 99th bias-corrected percentile of the distribution of bootstrapped estimates from bootstrapped regression of randomly generate responses on the independent variables.

The column '% sign difference' reports the proportion of regression equations (out of 25, with 6 equations for each multinomial logit regression) in which the simple and interacted effect of individual characteristics have different signs (in the upper panel), or in which the interaction effects have a different sign from the total effect of deliberation. The bottom row reports the type of regression model used: probit (p), ordered probit (o.p.), multinomial logit (m.l.) or generalised least squares (gls).

References

- Ackerman, B. and J. S. Fishkin (2002). "Deliberation Day." The Journal of Political Philosophy **10**(2): 129-152.
- Austen-Smith, D. (1990). "Information Transmission in Debate." American Journal of Political Science **34**: 124-152.
- Austen-Smith, D. (1992). "Strategic Models of Talk in Political Decision-Making." International Political Science Review **13**: 45-58.
- Dryzek, J. S. (2000). Deliberative Democracy and Beyond: Liberals, Critics, Contestations. Oxford, Oxford University Press.
- Dryzek, J. S. and C. List (2003). "Social Choice Theory and Deliberative Democracy: A Reconciliation." British Journal of Political Science **33**(1): 1-28.
- Efron, B. (1987). "Better Bootstrap Confidence Intervals." Journal of the American Statistical Association.
- Efron, B. and R. Tibshirani (1993). An Introduction to the Bootstrap. New York, Chapman and Hall.
- Elster, J. (1998). Deliberation and Constitution-Making. Deliberative Democracy. J. Elster. New York, Cambridge University Press: 69-96.
- Elster, J. (1998). Deliberative Democracy. New York, Cambridge University Press.
- Elster, J. (1998). Introduction. Deliberative Democracy. J. Elster. New York, Cambridge University Press: 1-18.
- Fearon, J. D. (1998). Deliberation as Discussion. Deliberative Democracy. J. Elster. New York, Cambridge University Press: 44-68.
- Fishkin, J. S. (1991). Democracy and Deliberation: New Directions for Democratic Reforms. New Haven, Yale University Press.
- Frynas, J. G., G. Wood, et al. (2003). "Business and Politics in São Tomé e Príncipe: From Cocoa Monoculture to Petro-State." African Affairs **102**: 51-80.
- Gambetta, D. (1998). "Claro!": An Essay on Discursive Machismo. Deliberative Democracy. J. Elster. New York, Cambridge University Press: 19-43.
- McLean, I. S., C. List, et al. (1999). Does Deliberation Induce Preference Structuration? Evidence from Deliberative Opinion Polls.
- Miller, D. (1992). "Deliberative Democracy and Social Choice." Political Studies **40**: 54-67.
- Seibert, G. (1999). Comrades, Clients and Cousins: Colonialism, Socialism and Democratization in São Tomé e Príncipe. Leiden, School of Asian, African and Amerindian Studies, Leiden University.
- Seibert, G. (2003). Coup d'état in São Tomé e Príncipe: Domestic causes, the role of oil and former "Buffalo" Battalion soldiers. Institute for Security Studies Occasional Paper. Lisboa, Portugal.
- Stokes, S. C. (1998). Pathologies of Deliberation. Deliberative Democracy. J. Elster. New York, Cambridge University Press.
- Sunstein, C. (2002). "The Law of Group Polarization." The Journal of Political Philosophy **10**: 175.