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PROBABILISTIC PRESIDENCY IN MOZAMBIQUE: ANATOMY OF A SCRAMBLED ELECTION

ABSTRACT

The Mozambican presidential election of 1999 was officially won by Frelimo candidate Chissano against Renamo candidate Dhlakama. Renamo has always questioned that result. Recently published data on election results at local level make it possible to assess the claim that the exclusion of hundreds of thousands of votes might have changed the election result. The statistical analysis provided here shows that this is indeed a possibility that cannot be ignored. Even if it cannot be proved that Dhlakama really won the election, it is also clear from the data that Chissano could not claim to have been the preferential choice of the majority of the voters in 1999 either. Although international election observers acknowledged the official result, the annulment of the election would therefore have been a more reasonable response. The continued relevance of the 1999 presidential election is indicated.

Introduction

The Mozambican presidential election of 3-5 December 1999 knew only two candidates, Joaquim Chissano (of the incumbent Frelimo party) and Afonso Dhlakama (of the opposition Renamo party). The official result of the election, a Chissano win, has never been accepted by Renamo with reference to a variety of irregularities. Most foreign observers and analysts, however, have maintained that these irregularities would not, or not likely, have changed the result from a real Dhlakama win into a Chissano win. I argue that it is not certain that Chissano won in

1999 as far as the majority of voters' intentions is concerned. This idea has been stated by Luís de Brito (no date), but without providing statistical analyses. That is done in this article. Recently published data at fairly local levels across Mozambique enable making detailed analyses of trends of certain irregularities as correlated with geography and Dhlakama's share in the official voting results (Hanlon, 2015). These analyses show that it is very well possible, as far as information goes, that the studied irregularities might have impacted on the overall election result (*MPPB*, 2000a; 2000b; Manning 2002, 195). Declaring the election annulled would, therefore, have been a reasonable response. The article also will deal with the continuing importance of the 1999 election result for Mozambican politics. The methods used in this article may be a contribution to the more general field of election studies.

Background

The former Portuguese colony of Mozambique became independent on 25 June 1975 under the government of Frelimo (Frente de Libertação de Moçambique – Mozambique Liberation Front) only. It is widely acknowledged that Frelimo physically eliminated many of its political opponents at the time, though in still unclear circumstances. Anti-Frelimo Mozambicans and the minority regime of Rhodesia established Renamo (Resistência Nacional Moçambicana – Mozambican National Resistance or MNR), which started a war against the Frelimo one-party government from 1976/1977 onwards (exact beginning unclear). After Zimbabwe's independence in 1980, Renamo was supported by apartheid South-Africa. The population suffered badly from the war, with an estimated 600,000-1,000,000 deaths (Cabrita, 2000; Dinerman, 2006). In 1990 the Frelimo government introduced a multiparty constitution. Peace between Frelimo and Renamo was signed in 1992 and

in 1994 Mozambique's first multiparty presidential and parliamentary elections were held, both won by Frelimo. Since then every five years there have been multiparty presidential and parliamentary elections. Frelimo candidate Chissano's victory in the presidential elections of 1999 is relevant to this day because it blocked Renamo's rise into executive power, thus preventing alternation of power in the executive. Since then Frelimo has been able consolidate its disproportionally strong grip on Mozambique.

Mozambique's national president is chosen through a two-round system in which either the candidate wins who immediately has an absolute majority of the valid votes, or when this is not the case, there is a second round of voting with the two candidates ending highest competing again. So far presidential elections in Mozambique have known only one round, with the Frelimo candidate winning immediately.

The 1999 presidential elections and its problems

While the 1999 presidential election knew only two candidates, the parliamentary election knew 12 contesting parties and coalitions. Renamo had made a deal with other opposition parties to combine forces in the parliamentary elections, leading to the Renamo-UE (*União Eleitoral* – Electoral Union) combination. In return for the third parties' hitch-hiking with Renamo in the parliamentary elections, Dhlakama would be the preferred presidential candidate for these parties. Several presidential candidates from yet other parties did not make it through the required registration procedures, leaving only Chissano and Dhlakama as candidates. The official results are given in Table 1 (*MPPB* 2000a; 2000d):

Table 1: Official election results in 1999

	Presidential		Parliamentary		
	Chissano	Dhlakama	Frelimo	Renamo-UE	Others
Valid count[a]	2,338,333	2,133,655	2,005,713	1,603,811	522,799
% of valid	52.3%	47.7%	48.5%	38.8%	12.7%
Blank votes (%)	6.5%		9.6%		
Invalid votes (%)	2.9%		4.9%		

Note (a): the total of presidential votes taken into consideration was 4,934,352; the total of parliamentary votes taken into consideration was 4,833,761.

Dhlakama's share in the vote increased sharply from 1994 to 1999; probably many adherents of third candidates would have had Dhlakama as a second choice in 1994 and voted for him in 1999 (assuming most voters' preferences did not change). In 1999, Chissano won with a relatively small margin in the official results. In fact, the difference between Chissano and Dhlakama was smaller than uncertainties in the vote count, to be studied below. A large amount of ballots were declared invalid (in Portuguese: *nulos*), or blank (*brancos*). Also, hundreds of tally sheets (*editais*; summaries of election results at polling station level), each with hundreds of votes, were *entirely* disregarded in the end result. Whether it is possible, given existing data, that this changed the result from a real Dhlakama win into an official Chissano win is to be investigated. According to Luís de Brito (no date, 1), the official figures of the 1999 presidential elections

> do not correspond to the real results of the election. Among other indications of fraud it should be noted that the Supreme Court refused the opposition call to recount c. 370 000 votes […] not considered due to technical problems with the tally sheets. In fact Chissano had most probably lost the election.

Most analysts (examples below) continue to maintain that the uncounted *editais* would not, or not likely, have changed the result. By this, two sorts of misconceptions

about Mozambican politics are perpetuated: first, that the specific result of the 1999 presidential election was legitimate beyond doubt, even if procedurally problematic; second, that overall Frelimo's power has had a continuous electoral legitimacy beyond doubt. The 1999 election knew tampering. This needs no specific argumentation since the existence of such tampering has been confirmed by the Mozambican Technical Secretariat of Electoral Management – abbreviated STAE (*MPPB* 2000a); there is little reason to assume that only the parliamentary election was affected.

Approach

In cases of uncertain election outcomes, it is rare for researchers to have the concerned ballots at hand for investigation (an exception is the case of the presidential election in the United States in 2000 – Mebane, 2004). An exception is the case of the presidential election in the United States in 2000. Referring to studies of discarded individual ballots of the state of Florida, Mebane (2004) argues that failing voting machines, confusing design of ballots and absence of warnings when voters might submit incorrect ballots, may have cost Al Gore the state – and thus the entire election – against George W. Bush. Such deficiencies were not uniformly distributed across the state and consequently almost certainty had a differential effect, which Mebane shows cost Gore the electoral victory because voters' intentions in the case of Gore were more negatively affected than in the case of Bush, even if not considering the problems fraudulent.

In the present article on the Mozambican presidential election of 1999 there is, unfortunately, no possibility to use information concerning individual ballots as Mebane (2004) could, as the problematic ballots and tally sheets have not been made public. I will, however, use the insight that problems in the voting process affect areas

(here: districts) differentially. Observed differentiation of problems across voting districts can be used to argue that the official results may not adequately represent voters' intentions, the more so (but not only) when the ratio of numbers of adherents of two candidates is not uniform across districts. I will use a method for determining the differential character of problems reminiscent of the method used by Powell (1989) to reconstruct voter intentions concerning the ratification of a new constitution for the state of Mississippi during the time of the Reconstruction. Powell shows that fraud and intimidation almost certainly caused the result to change from an expectable acceptance to an official rejection. Voters were registered according to the racial characterizations of "Black" and "White", where the first could be expected to vote for the proposed constitution and the latter more against. Since the respective numbers of the racially defined voters were differential across counties, one might expect differential poll outcomes concerning the proposed constitution as well. Powell uses regression analysis across Mississippi counties to identify a general trend across counties, as well as "outlier" counties which deviated from the general trend. Anecdotic evidence of fraud and intimidation is then used to explain the aberration of the "outlier" counties from the general trend. This enables Powell to reconstruct outcomes for the "outlier" counties according to expected values in the absence of fraud and intimidation, on the basis of census data containing the demographic occurrences of "Blacks" and "Whites". This leads to the conclusion that the voting process without the disturbances would probably have produced an outcome in favour of the proposed constitution rather than a rejection of it.

Below I will also use regression. In the absence of data on individual ballots that have been discarded, analysis of regression and variation of data can yield numerical outcomes that by their magnitude can justify or unsettle certain conclusions about elections even when individual ballots cannot be studied. Unfortunately Powell's

method of reconstructing voting intentions is not available to us. There is no other variable, like Mississippi's racialist one, from which individual voters' intention could have been reconstructed in the Mozambican presidential elections of 1999. However, it can be shown that it is not certain that the official outcome of the 1999 Mozambican presidential election represented the intention of the majority of the voters.

Some of the individual ballots initially discarded by polling stations were revalidated in a reassessment by the National Elections Commission – CNE (*MPPB*, 2000a), indicating a bias against Dhlakama in ballots initially considered invalid (*nulos*), but later declared valid. There were also large amounts of blank votes, *brancos*. Neither *nulos* nor *brancos* show a uniform distribution across Mozambique (Van Dokkum, 2015). The large number of discarded tally sheets (*editais*), already alluded to, formed the bulk of lost information about voters' intentions. High incidences of individual *brancos* may correlate to some degree with problems with *editais* (a motivation of this will be given below). It may then be established that the discarded *editais* could indeed have been such that the difference in *intended* votes between Chissano and Dhlakama was smaller than the officially reported difference, if not in fact inverted (i.e. constituted a Dhlakama win). Other problems, such as with computers, have been reported (*MPPB*, 2000c; Cahen 2009, 40n117, n121). These problems do not form part of the present analysis, but if they would have followed the tendency that they were disadvantageous for Dhlakama, this would only lessen the numerical burden put on the methods described below.

Data

IESE (Instituto de Estudos Sociais e Económicos; Institute of Social and Economic Studies) has since long made available provincial and district-level data of the 1999

presidential election (referred to below as "IESE data" – IESE, 2004).[1] Here "district level" refers to 128 administrative districts proper, ten provincial capitals, three other cities not subsumed under proper district data,[2] and five "urban districts" of the national capital Maputo, in total 146 districts to be considered. On province level we deal with 11 provinces, consisting of ten provinces proper plus the city of Maputo. Recently Joseph Hanlon has published data, hitherto difficult to come by, on several geographical levels below districts, down to *local de votação* (voting place; *local* for short; plural *locais*). A *local* consists of one or a few polling stations (stations for short), the lowest aggregate level apart from individual voters. A station is represented by an *edital* (tally sheet; plural *editais*) but data of individual *editais* are not publicly available. The *local*-level data are available on a website of the London School of Economics (LSE, 2015), and are referred to below as "LSE data". The LSE *local* (and intermediate) level data are specifications of the IESE data. A third source of data (besides some others), already referred to, is the *MPPB* periodical, edited by Joseph Hanlon.

A column in the IESE data containing 52,716 votes accepted that had been rejected earlier ("revalidated votes"), is not split into votes for Dhlakama and Chissano. I will follow *MPPB* on the official total end result, where Chissano had 204,678 votes more than Dhlakama (MMPB, 2000a), but the analysis below concerning statistical trends is mostly based on the IESE and LSE data without the "revalidated votes".

There were 8,322 stations (Carter Center 2000, 21, 27), distributed over 3,428

[1] <www.iese.ac.mz>, accessed 16 May 2012. The IESE figure for Chókwè "Votos na Urna" of "120,540" should be read as "63,049".

[2] Maxixe, Ilha de Moçambique, Nacala-Porto; compare IESE data with list of municipalities in Machava (2013, 7n2).

locais (excluding 24 *locais* with zero registered *and* zero actual voters), about 2.4 stations per *local*. The LSE database gives 7,099,105 registered voters, a number also announced before the elections (*MPPB*, 1999). There were 78 *locais* with registered voters but without any submitted votes (an estimated 103 stations – estimated numbers of stations per *local* are here obtained by taking the next highest 1,000 in a *local* and then dividing that number by 1,000), representing 71,729 registered voters. These estimated 103 stations are presumed here to be part of the body of 550 excluded stations, as they do represent registered voters.[3] Below this collection of 78 *locais*/103 stations is called the "small" group. The remaining registered voters amount to 7,027,376 across 3,350 *locais* and an estimated 8,219 (from 8,322 – 103) stations. This latter collection is called the "big" group.

Trends in the data

Before making some calculations, we need descriptive information on the counting and related subsequent processes concerning the 1999 presidential ballots and the high number of *brancos*. *MPPB* (2000a, 4) gives revealing information:

> Ballots went into the wrong piles or people lost count. After midnight, the temptation to cut corners became overwhelming. […] Up to 20% of *editais* had errors, and this caused serious delays in the provincial and national counts. […] Where the totals [of *editais*] did not add up, the number of votes for president or parliamentary parties was normally taken as correct, and the number of blank votes adjusted to make the sums correct.

[3] Carter Center (2000, 19) reports 11 polling stations never opened. This information is ignored, as they cannot be located. Since there is, as we shall see, on average a bias against Dhlakama, excluding these 11 stations makes the analysis almost certainly more conservative, not more lenient.

Overall the percentage of the 1999 presidential *brancos* (6.5%) is high compared with 1994 (5.8%) and 2004 (2.9% of all ballots).[4] From the last sentence of the quote it appears that many of the *brancos* in the final official results may refer to ballots that were not *brancos* at all, but *nulos* to be studied or valid ballots that were not counted as such. This is likely, because mostly not the number of cast votes was adjusted but the number of *brancos*. Since the reported incidence of *brancos* was relatively high, their number can be expected to have been raised rather than lowered. Consequently, a higher incidence of *brancos* is an indicator for a higher chance of problems having occurred, as it was *brancos* that were invoked to get the math straight in case of discrepancies.

Brancos *in included* editais

I have shown elsewhere that the incidence of *brancos* per district had a tendency to be higher around a share for Dhlakama (in a district) of around 59% (Van Dokkum, 334-337). With the LSE data this result can be strengthened on *local* level, just one level above the stations, in the big group of 3350 *locais*. Using a spread-sheet or similar computer programme, the incidence of *brancos* in a *local* as a dependent variable, as against Dhlakama's share in valid votes in a *local* as an independent variable, can be approached by a second-degree polynomial (inverted parabola) as a regression curve with a peak at 65.35% for Dhlakama's share in the officially valid votes:

[4] 5.8%: *MPPB* (2000a, 2); 2.9%: IESE (2004).

predicted ratio *brancos* = -0.0837 × ([share Dhlakama] – 0.6535)² + 0.0755.

Establishing statistical significance for the regression curve has no import here because we are not dealing with a sample from a yet larger statistical population. However, we can apply Spearman's rank correlation coefficient r_S and determine the statistical significance of the permutations of rank orderings of the incidence of *brancos* around 65.35% for Dhlakama's share in the votes. We take the *local* with the lowest difference (ignoring sign) between Dhlakama's score and 65.35% first (rank 1) and the *local* with the highest such difference last (rank 3350). The district with the highest incidence of *brancos* is given rank 1. This yields $r_S = 0.263$, by normalization $z = 15.2$, $p < 0.000\,000\,1$ (one-tailed).[5] It may be recalled that the data here are *not* a sample but form the *total population of locais with actual voters* in the big group as officially reported; the skewed incidence of *brancos* is not a parameter with which we might estimate bias concerning the risk of *brancos* occurring across *locais*; it *is* the bias.

Excluded editais

So far it has been established that, if the incidences of *brancos* indicate counting problems, these problems were (*a*) not statistically random; and (*b*) making results

[5] I use $z = r_S \times \sqrt{(n - 1)}$, where $n = 3350$. Ties in ranks are eliminated as much as possible. For tied percentages of *brancos*, a lower absolute amount of *brancos* (if equal, the higher absolute number of valid votes) will get a higher rank-number (i.e. lower on the listing). For tied distances in percentages from the peak of the *brancos*, higher differences of actual votes between Dhlakama and Chissano get a higher rank-number. Remaining tied ranks are replaced by the mean between them; they are few and the original Spearman rank-correlation coefficient is used. Statistics literature consulted: Hays (1981[1963], 596-598); Noether (1991, 236-237).

more unclear in areas where Dhlakama was stronger than Chissano. This concerns only the officially *counted* votes. However, as indicated, there is *another* problem of *hundreds of entire editais* (polling station tally sheets) not being counted at all. Here we have anecdotic reports provided by election authorities themselves that foul play was involved:

> The Supreme Court […] cited "unexplained erasures and corrections" in some *editais.* In an interview in *Notícias* (10 January [2000]), [António] Carrasco [STAE Director General] said "some *editais* show evidence that something happened outside the polling station, and that someone tried to change the results."

For unexplained reasons, the Supreme Court (*Tribunal Supremo*) did not initiate a further analysis of the collection of 550 excluded *editais* (*MPPB*, 2000a: 5). Especially the quote from Carrasco indicates that foul play occurred concerning these *editais* (news reports do not distinguish here between excluded presidential and parliamentary *editais*, but presumably the problems concerned both categories).

MPPB reports that the Supreme Court maintained that

> the irregularities really were unresolvable. […] Taking the average turnout at other polling stations, the Tribunal [Supreme Court] estimates that at most 377,773 voters were excluded.

Then *MPPB* analyses:

> The Tribunal does not do the rest of the calculation, but to win the presidency, Dhlakama would have needed 77% of those [377,773] votes, and he only did that well in Sofala province.

MPPB, while agreeing that the *editais* would have been in Dhlakama's advantage, assumes that the estimated 377,773 rejected votes would reflect the statistical tendencies of the officially accepted results (*MPPB*, 2000b). Although admitting that it would not have been impossible, Manning considers it "statistically unlikely" that the result for the presidency could have been changed by the rejected *editais* (Manning, 2002, 195). This probabilistic interpretation of winning the presidency is remarkable because the purpose of counting votes in an electoral democracy is to produce a *certain* outcome instead of a "likely" one. I have shown above that problems in the counting of individual ballots were not statistically neutral. By extension it does not have to be so with *editais* either, since these are summaries based on individual ballots. Certain *editais* with many *brancos* were only relatively more acceptable than the rejected 550 ones, even if, as argued, they just as well represented problems with counting. What is more, *MPPB* gauges the necessary 77% against results on *province* level. However, statistically the *editais* concern a much localized level of reporting, where more extreme outcomes may be expected. In 1994 "there were great variations, with individual stations voting totally differently from nearby ones" (Hanlon in EMS, 1995, 27), and this may have applied to 1999 as well. More fine-grained data can show starker effects concerning the spread of vote shares for candidates across voting populations. For example, in Tapaca *Posto Administrativo* (lower-level "Administrative Post" within Malema District, Nampula), the two *locais* had 16% and 81% for Dhlakama respectively.

Reconstructing excluded editais

We can study the relationship between Dhlakama's share in officially valid votes on

the one hand and turnout on the other (as reported in the LSE data). The turnout data are interesting at least because these are the only data for which the concerned stations (rejected through their not admitted *editais*) are *actually included* in the official results, because they are still counted with respect to their registered voters. We can reason that when 550 stations/*editais* are excluded except for their registered voters, this should have downward effects on the officially reported turnouts per *local*.

About the estimated 550 – 103 = 447 excluded stations in the big group there are no specific data available concerning their distribution across provinces. However, we can make a reconstruction that will not be far off from the real situation. First, we make estimations for the number of stations per *local*. Unfortunately there are 42 *locais* with zero registered voters in the big group. These are estimated to have had one station, except two with an estimated two stations. Few of these 42 *locais*, if any, will have had stations excluded. To reach a total of 8,219 stations in the big group, we need to assume for the other *locais* in the big group that often new stations have been created when registered voters became more than multiples of around 1,034.5 rather than exactly 1,000 (for the small group there is no distinction here). The mentioned 42 *locais* without registered voters are now left out of consideration concerning turnout, as this cannot be determined for them. Otherwise, for each *local*, we divide the number of registered voters by the estimated number of stations. To estimate the number of excluded *editais* per *local*, we devise a factor, *f*, to be applied uniformly across all 3,308 *locais* for which official turnout can be determined. We suspect that a station in the big group has been excluded when the number of cast ballots (*votos na urna*) is smaller than $f \times$ (the total number of registered voters in a *local* minus the average number of registered voters per station in that *local*), where the number of stations in a *local* is as estimated by the method just described. For an additional excluded station in a *local*, we check whether the number of cast ballots is smaller

than *f* × (the total number of registered voters in a *local* minus *two* times the average number of registered voters per station in that *local*), and so on for more possibly excluded *editais*. If *f* is set 0.796, the sum of excluded *editais* in the big group is 447, which together with the earlier established 103 makes 550, referred to below as the "reconstructed" excluded *editais* (or stations). The distribution of these 550 reconstructed *editais* is as given in Table 2 (observed [in the reconstruction] and expected across 8,322 stations according to the distribution of all *locais* across provinces):

Table 2: observed (in the reconstruction) and expected frequencies of excluded *editais*

Province	Observed (in the reconstruction)		Expected
Maputo City	0	(0% of total of 550)	33
Maputo	21	(3.8%)	32
Gaza	7	(1.3%)	39
Inhambane	47	(8.5%)	38
Sofala	98	(17.8%)	46
Manica	7	(1.3%)	34
Tete[a]	33	(6.0%)	42
Zambézia	112	(20.4%)	104
Nampula	153	(27.8%)	104
Cabo Delgado	42	(7.6%)	47
Niassa	30	(5.5%)	31
TOTAL	550	(100%)	550

Note (a): expected frequency of Tete is rounded off downwards to obtain 550 expected excluded *editais*

We see that Nampula and Sofala are vastly out of proportion in their share of

reconstructed excluded *editais* ($\chi^2 = 172$, $p < 0.000\ 01$).[6] Zambézia represents many excluded *editais* in absolute terms. Hence the Supreme Court's assertion that "the discarded tally sheets came from stations in almost all provinces, suggesting that this indicated that there was no inherent bias against Renamo" (Carter Center, 2000, 27) is mere rhetoric; the southern region (Maputo City until Inhambane), where Chissano is strong, has in the reconstruction less excluded *editais* than expected (75 against 142), while the central and northern regions of the country have more. Recall that the reconstruction method was applied uniformly, there should be no large differences across provinces in a situation without bias.

Let us now study the possible effects of excluding *editais* with presumably high percentages for Dhlakama. Suppose we have a hypothetical *local* with three stations of equal size concerning actual voters with 37%, 58% and 79% for Dhlakama respectively; 58% on average. Excluding the 79% station, we get a result of 47.5% for the *local*. It would be misleading to refer to the 47.5% average of the remaining stations, or even to the 58% of the earlier value, as a proxy for the missing station. We could only do such a thing on average for large numbers of missing stations, *provided the exclusions could be assumed to be random*, and this is not the case.

There are indications that the arithmetical neighbourhood around 65% for Dhlakama functioned as a sort of pivot for many affected *locais*. Figure 1 gives the absolute frequencies of the 447 reconstructed excluded *editais* in the big group, divided for the *locais* into 20 sections of 5%-ranges (0-4.99%; 5-9.99% and so on until 95-100%) for Dhlakama's share in the officially valid votes measured on *local* level. The frequencies show a dip in section 14 (65-69.99% range) and a peak in section 9 (40-44.99%), plus other large values in sections 11 and 12 (50-59.99%).

[6] Hays (1981[1963], 537-541); for *p*-value: <http://www.socscistatistics.com/Default.aspx>, accessed 4 October 2015.

This is what we expect when excluded *editais* originated from arithmetical regions in or around the 65-69.99% range, had themselves higher scores for Dhlakama, and then showed up as missing stations within *locais* with relatively low official shares for Dhlakama (even possibly appearing as Chissano-majority *locais*, which they were not necessarily according to the totality of voters' intentions).

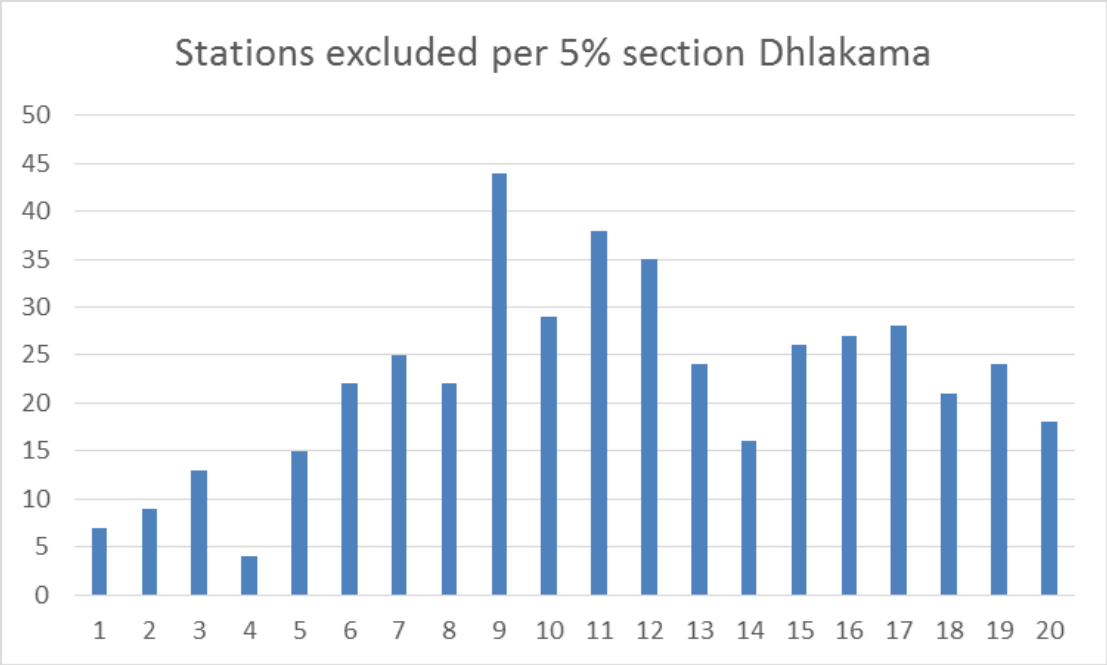

Figure 1: Stations excluded per 5% section of Dhlakama's share in "valid" votes

In Figure 2 the absolute frequencies for the mentioned sections themselves are depicted. In the two left-most sections (0-9.99% range), where Chissano is strongest, frequencies are higher than anywhere else. We see a dip in section 14 (65-69.99% range), a moderately high, not very much fluctuating zone in sections 9-13 (40-64.99% range), and a more fluctuating zone in sections 15-20 (70-100% range) which never gets as high as Chissano's top two sections. The overall pattern here is consistent with the pattern just described for Figure 1; it can be explained by the theory that some *locais* with a higher percentage for Dhlakama according to the intentions of the voters have ended up in the "bulge" of the 9-13 sections, diminishing

the height of bars more to the right-hand side and diluting what would have been a smoother U-shape of the graph.

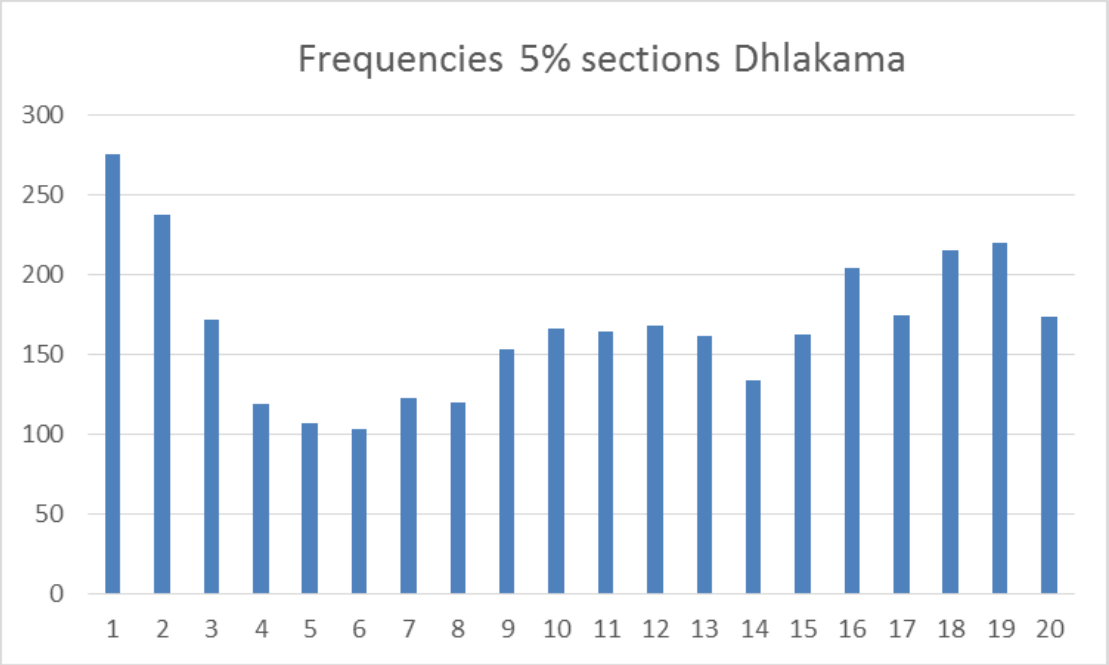

Figure 2: Frequencies of 5% sections of Dhlakama's share in "valid" votes

With a theory about how relatively many excluded *editais* could end up in or near the 40-44.99% range, we can ask whether the data of the 3,428 *locais* at least make it *possible* for Dhlakama to have 77.1% of the votes in the excluded *editais* reconstructed here. The answer is yes, at least on district level. The number of 377,773 mentioned by the Supreme Court can be attained if a turnout for the reconstructed *editais* of slightly more than 79% is taken. (This would have included invalid and blank votes, but I have argued elsewhere that the effect of these would more or less cancel out against anti-Dhlakama bias amongst the officially counted *brancos*, not taken into consideration here – Van Dokkum, 2015, 340n271.) Within a district, a score for Dhlakama can be considered *possible* when it occurs on *local* level within the district, or is lower than that. A *possible* value for the score for Dhlakama for reconstructed excluded stations in a certain *local* can be taken as the highest score

for Dhlakama occurring in the district of the *local*, with the following limitations: only consider (for conservatism in the analysis) *locais* where Dhlakama has less than 70%; and use the highest district score only when it is higher than 50% for Dhlakama. Otherwise, the average percentage for Dhlakama in the *local* as implied by the official results (or, in the small group, a higher level if no *local* data are available) can be used. Multiplying the estimated number of registered voters per station in a *local* with the reconstructed number of excluded *editais* in the respective *local*, with the mentioned about 79% turnout, and with the proposed score for Dhlakama, we can summate the votes for Dhlakama and Chissano across the reconstructed 550 excluded *editais*. This gives 295,764 votes for Dhlakama (78.29%) and 82,009 for Chissano (21.71%), a difference of 213,755 votes, higher than the difference of 204,678 between Chissano and Dhlakama in the official results. (Ignoring the conservative 70% threshold would only make the difference larger, allowing for relaxation of other assumptions.) So district-level data do make it a possibility that a Dhlakama victory represented the intention of the majority of the voters. It is certainly not unreasonable to take highest values for Dhlakama in a district, rather than averages. By Carrasco's own indication, foul play occurred. One expects foul play to be targeted at *editais* with extreme percentages of votes rather than at moderate ones. Since the irregularities studied so far are biased against Dhlakama, one must reckon with the possibility that the excluded *editais* represent high values for Dhlakama.

In sum, declaring Chissano winner is not possible with the argument that "given the official data, the excluded *editais* could not have changed the overall result". On the contrary, the official data provide ample reason to reckon with a Dhlakama victory as a serious possibility. Given the uncertainties in the results, a conclusion is that the voting exercise in 1999 failed Mozambican voters concerning the representation beyond doubt of their intentions. The comment by the Carter Center (2000: 30) that

> the fact that [Renamo] contested the final results through established legal channels, and that due procedure was followed in addressing Renamo's complaint, are positive signs of a nascent democracy

must be viewed as naïve. Mozambique's electoral democracy was destroyed in 1999 when a mockery was made of hundreds of thousands of voters' efforts to participate in the electoral process. The effects of this failure are still relevant today.

Aftermath

Renamo did not accept the results but its protests with the Supreme Court were dismissed (*MPPB*, 2000b; 2001a). Observer missions were reluctant, if not unwilling, to straightforwardly declare the 1999 presidential election invalid. The Carter Center (2000, 26-29) was critical about the vote count, pointing out that the amount of uncounted votes of the excluded *editais* was larger than Chissano's margin of victory and that the provincial distribution of those *editais* was unclear, but maintained that the end result of the election was not affected. The Electoral Commissions Forum of SADC countries was still less critical about counting issues (Kadima, 1999).

Frelimo made an attempt in early 2000 to appease Renamo by proposing that in three provinces (Manica, Sofala and Zambézia) Renamo could short-list three candidates in each province for provincial governor out of whom Chissano would choose one. In Nampula, Niassa and Tete Frelimo would also short-list three candidates in each and Chissano would appoint the one chosen by Renamo. Dhlakama rejected the offer, insisting Renamo should appoint governors in all these six provinces (*MPPB*, 2001a, 2). In any case this proposal made little systemic sense. It is rather arbitrary that the Renamo voters in say Manica would get a governor of their

party but the Renamo voters in say Nampula would not. As for Renamo, tension remained, culminating in armed fighting in Montepuez (Cabo Delgado). Eventually in Montepuez 83 prisoners died of suffocation in a police cell on 22 November 2000 (*MPPB*, 2001b, 6).

Impact and continued relevance

Mozambique's constitution of 1990 allowed for the president to appoint members of the national government. With the official victories in the presidential elections in 1999 Frelimo was able to control the national government for 100% with only a rather slight margin over 50% of the popular vote as officially reported. The uncertainty of the count diminishes the legitimacy of the result. Lehoucq (2003, 249) suggests that loss of legitimacy caused in that way may reduce turnout in subsequent elections and increase cynicism. Official turnout in the 2004 presidential elections was 36.42% (STAE, 2004). The real turnout might have been somewhat higher due to problems with the voter registration, but still probably did not reach more than 43%, a drastic downward difference with 1999. *MPPB* admits that voter abstention was more predominant amongst Renamo adherents, but does not link this with Lehoucq's implication that such abstention might have been induced by the events at the 1999 elections (*MPPB* 2004a; 2004b). Responses by interviewees in a study conducted by Mazula and others do include references to "fraud", "[v]oting [being] a farce to mislead the people" and "tiredness of seeing Frelimo win all the time", amongst other reasons.[7] Turnout in 2009 was 44.63%, in 2014 it was 48.64% (*MPPB*, 2009; 2014d). The latter election occurred after Renamo had started being military active again

[7] Mazula et al. (2006, 13-14, 33-35, 94, 164; cf. 56, 65-70, 95-97, Anexo 2); translations of this source mine.

(Allison, 2014). Dhlakama's official poll performance improved, but Frelimo remained in power. The 2014 election was again jam-packed with problems (*MPPB*, 2014a; 2014b; 2014c), despite having two decades of experience with organizing elections. Arguably, the basis for this quagmire was laid by the uncertainties in 1999, with the help of soothing assurances that these uncertainties "could not have changed the result". After the 2014 elections, the European Union Election Observer Mission (EUEOM), professed that post-1992 elections in Mozambique were "deemed credible by the international community" and EUEOM (2014, 11) showed no inclination to take the opposition's difficulty with "irregularities and fraudulent acts during the tabulation process" seriously as undermining actual results. The Freedom House (2012) shows more firmness when it flatly states that "Mozambique is not an electoral democracy", even if still confirming that "international observers have deemed that the overall outcomes of Mozambique's national elections reflected the will of the people".

Conclusions

I have argued that concerning the Mozambican presidential election of 1999 the variation in the officially reported incidence of blank votes can be interpreted as an indicator for the variation in the existence of problems in the determination of the outcome of voting processes. Together with information about the exclusion of hundreds of station tally sheets, and the indications that problems were detrimental to Dhlakama rather than Chissano, the supposition that Dhlakama was the favoured candidate of more than half of the voters in December 1999 constitutes a realistic possibility. This conclusion contrasts with comments made by the Carter Center, EU representatives and others who maintain or imply that including the concerned tally

sheets would not or not likely have changed the outcome. This article argues that such assurances cannot be maintained on the basis of the available information. It would, therefore, have been fitting to have the election declared annulled and the official outcome not to have been accepted by "the international community", because no candidate could definitively have been determined as being the preference of the majority of all the voters.

The supposition that distributions of votes in the excluded tally sheets would have been similar to that of officially reported distributions in provinces is unwarranted because (*a*) the distribution of problems (blank votes and excluded tally sheets) was not due to statistically random processes, hence it is imprudent to project average official results onto unknown tally sheets; and (*b*) the more fine-grained information is, the larger variation it may show in voting results across analytical units, making results contained in the excluded tally sheets contingent on which particular sheets were excluded in the count.

As alternation of Mozambique's chief executive is wholly dependent on numerical victories in elections, such alternation failed to materialize in 1999, and Frelimo's continuing 100% control of the national government is based on an unclear numerical overweight in the polls as officially reported. The 1999 polls therefore failed to correct party-political imbalance in Mozambique. The continued problems occurring in elections and the low turnout, which I have argued is connected to the problems studied above, make that the opposition in Mozambique stands no chance in winning a presidential election against the incumbent. Comments of foreign observers implying that problems "would have made no difference" only constitute unwarranted support for a dismally failing electoral system.

It is paradoxical that institutions or their representatives, who are supposed to monitor election processes and presumably help consolidate electoral democracy,

should broadcast that a result can be “statistically likely” or even “credible” when hundreds of thousands of votes are not counted and even not located (so that a statistical argument supporting such claims cannot be put forward). In disseminating such statements concerning Mozambique, they have contributed to an unwarranted certainty that the incumbent’s power position is “legitimate”, no matter how messy the elections, and have implied for large numbers of Mozambican citizens that their votes do not matter. In acting as they did, observation missions as the ones critiqued above have not “observed” but positively done a disservice to electoral democracy in Mozambique.

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