

Appendices for When Groups Fall Apart: Identifying Transnational Polarization during the Arab Uprisings

Robert Kubinec^{1,*} and John Owen²

¹New York University Abu Dhabi

²University of Virginia

*Corresponding author rmk7@nyu.edu

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A Expanded Informal Model of Group Polarization

Transnational group polarization spans two or more countries at once. Citizenship in a state amounts to yet another group affiliation, albeit normally an especially salient one. States are established to foster group identity and loyalty vis-à-vis foreigners. They may use physical segregation, closed borders, economic integration, propaganda, history, threats of war, or coercion to induce a strong national identity among citizens. Yet, interaction – communication, trade, investment, travel – across state borders is normal, particularly among most countries in the twenty-first century. States vary in their capacity to build and maintain a national identity that perpetually trumps all other group affiliations, including transnational ones. Thus transnational group affiliations – ethnic, religious, ideological, class, sexual – are part of life for most people in most countries. Insofar as communication across state boundaries is uncensored by states, transnational group affiliations can yield transnational group polarization, as a direct effect (from observing the stimulus) produces an indirect effect (from observing others polarize). The informal model above may then incorporate democrats and authoritarians in a second state (and a third, a fourth, and so on).

Justifying Assumptions

Social identity theory links the formation of groups and their degree of competition by means of the concept of polarization. Microfoundations for such a model are found in philosophy and social theory. Assume that persons are not atomized individuals whose fundamental goal is to maximize their own exogenously derived utility and who value the gains and losses of others only insofar as those are instrumental to such maximization. Assume instead the persons depicted by traditions in sociology (Simmel 1955; Coser 1956): each individual is fundamentally a member of multiple social groups, and he identifies his interests to some extent with those of the groups to which he belongs, and against opposing groups.

Experimental evidence suggests that at least some people tend to think, feel, and act according to this in-group versus out-group logic. Their notion of “self” may expand to include persons in their social group whose existence requires contrast with some opposing or “out-group” (Mercer 1995). Indeed, these two identifications are mutually constitutive (Simmel 1898, 45-46).

Varying Group Saliencies

That individuals belong to multiple social groups, each with a corresponding anti-group, introduces a complication (Simmel 1955, 139-41). At any moment, an individual may identify more strongly with some of his groups than with others. Sometimes large numbers of individuals simultaneously may find more salient one particular group affiliation, such that populations polarize along one particular axis of identity. Social-psychological experiments demonstrate at least two attributes that lend groups high salience. One is prestige or high status: members of high-status groups are significantly more biased toward fellow members and against nonmembers than are members of low-status groups. A second attribute is threat (physical, economic, status, etc.) – particularly among persons already highly committed to the group (Ouwerkerk and Ellemers 2001). A new threat – such as an attack on a group member by members of the opposing group – tends to arouse in such persons fears that they may be next, and so they tend to increase their biases toward that particular group affiliation (Simmel 1898, 45-46).

Hence, a rise in a group’s status or jeopardy renders it more salient for its members. A rise in status may be triggered by a victory in an election or a civil war, or an unexpectedly large public rally. A rise in threat may be brought on by physical violence, verbal abuse, or evidence (true or false) of discrimination or persecution against the group.

The social-psychological literature notes that people vary by level of commitment to various groups. Smith (2012) models allocation decisions in a game comprising two social groups, each

comprising two types of actors: “behavioral” actors biased to favor their own group members, and unbiased “rational” actors. The model shows that “rational” actors – comparable to Ellemers, Kortekaas, and Ouwerkerk (1999) “low commitment” actors – will come to act like “behavioral” ones and favor allocation of goods to their own group. In equilibrium some city-dwelling Islamists identify more as urban and less as Islamist; others identify more as Islamist as less as urban. Such heterogeneity could in principle stifle polarization, because low-commitment group members could try to exit or hide from the group rather than take the risks that come with strongly identifying with it. Against that possibility, Tilly writes that, following a triggering event, highly committed group members mediate and broker polarization by spreading information about the threat or increased status and about ongoing polarization. Such brokers may propagandize by exaggerating and inventing symbolic events. Public discourse turns to what is to be done; those who hold extreme views tend to have more influence in such times and moderates either are quiet or move toward the extreme (Tilly 2005, 143-44).

In sum, an exogenous event that either raises the prestige of social group A or threatens group A may cause people who belong to multiple overlapping groups A through Z to identify more strongly with A and against $\neg A$ and less with B and against $\neg B$, etc. Increases in status and in threats may be simultaneous: an increase in A 's status may simultaneously threaten members of $\neg A$ and thus cause them to identify more as $\neg A$ s and against group A . Large public anti-government demonstrations, as take place during a typical political spring, can both raise the status of being anti-government and simultaneously threaten those who identify with the government. As members of A observe members of $\neg A$ identifying more as $\neg A$ s, members of A will identify still more strongly with A ; and so on, in what we call an indirect effect.

We are interested in establishing that, in general, (1) relatively exogenous events like the coup against Mohamed Morsi in July 2013 will affect the direction of group polarization, and (2) these exogenous events also induce endogenous (de-)polarization as groups' polarization increases (de-

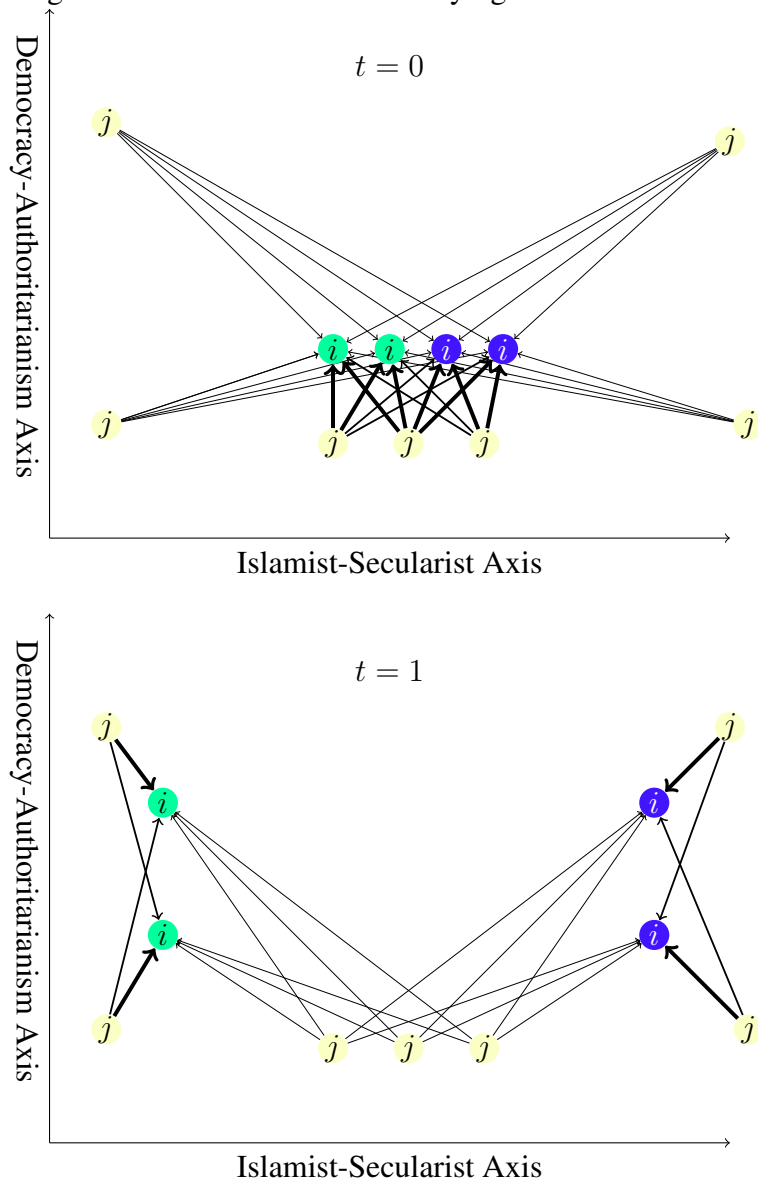
creases) in response to their ideological allies' polarization. Our two countries are Egypt and Tunisia. We choose Egypt and Tunisia because they are part of an ex ante identifiable cultural, ethnic, and geographical region and the two were open to some of the same media, including satellite television and Internet platforms (Lynch 2007). Furthermore, these two countries are of theoretical interest due to the prominent role attributed to inter-sectarian polarization in either the success or failure of democracy following the Arab Uprising (Stepan 2012; Brooke 2017).

We are not trying to ascertain conditions under which polarization does not diffuse – only whether it sometimes does so. Thus we select on the explanatory variable of an exogenous stimulus of polarization.

Given the prominence of Islamist parties in either country, links between the two have been the subject of considerable debate. Marks reports that the mainstream Islamist party in Tunisia, Ennahda, traditionally identified little with Egypt's Muslim Brotherhood, looking instead to Turkey's Justice and Development Party (AK Parti) as a model; but that the July 3, 2013, coup against Mohamed Morsi in Egypt – the Muslim Brotherhood leader who had been elected president – generated new sympathy in Ennahda for their Islamist counterparts in Egypt and made them more suspicious of secularist Tunisians (Marks 2015, 4). In the years following, however, Ennahda sought to distance itself further from the Muslim Brotherhood, arguably out of a strategic rationale to increase its electoral chances (Cherif 2019).

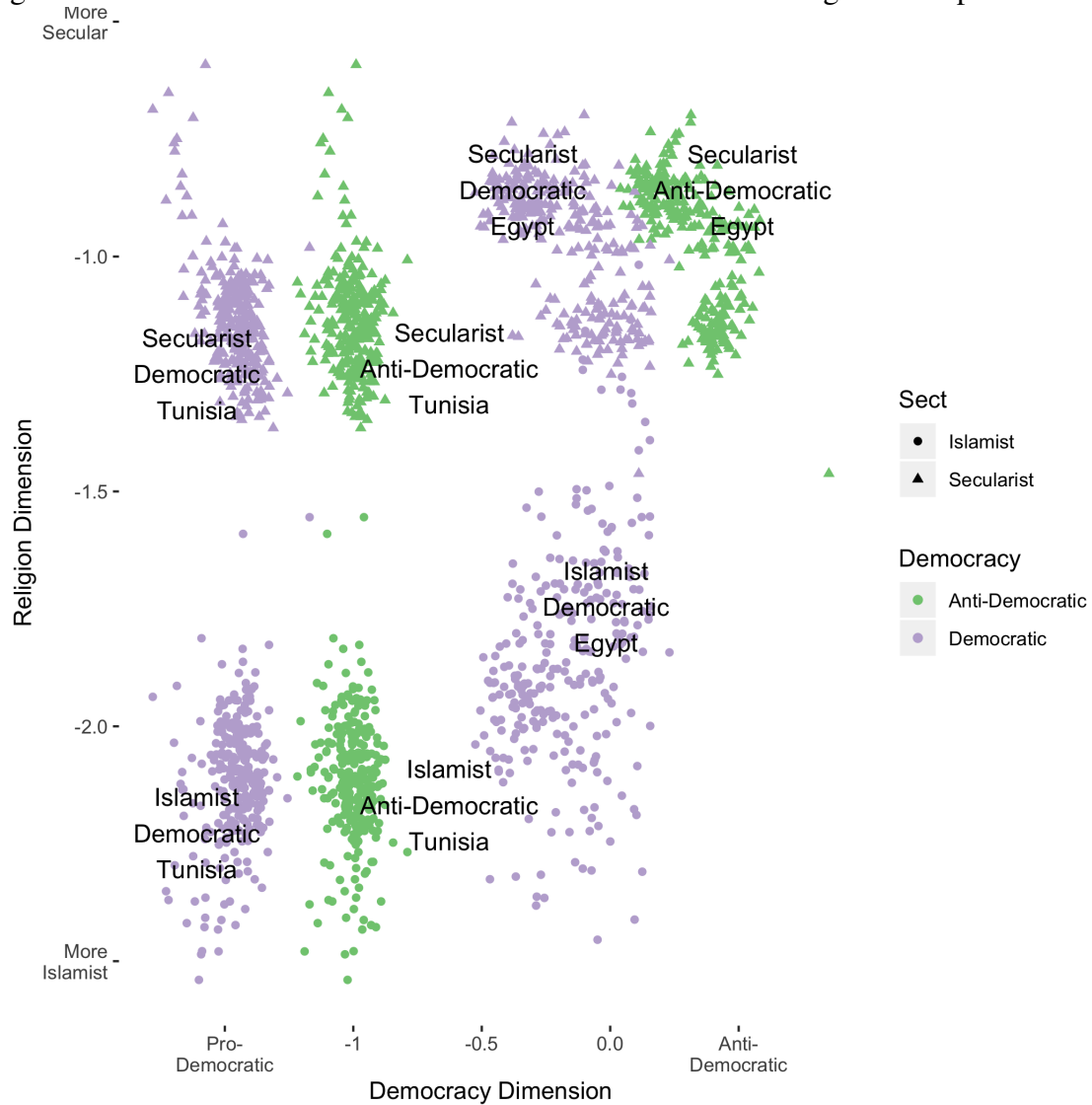
B Illustration of Time-Varying Ideal Point Model

Figure 1: Illustration of Time-Varying Ideal Point Model



C Flattened Scatter Plot of Ideal Points for Ideological Groups

Figure 2: Estimated Ideal Point Locations for Transnational Ideological Groups Over Time



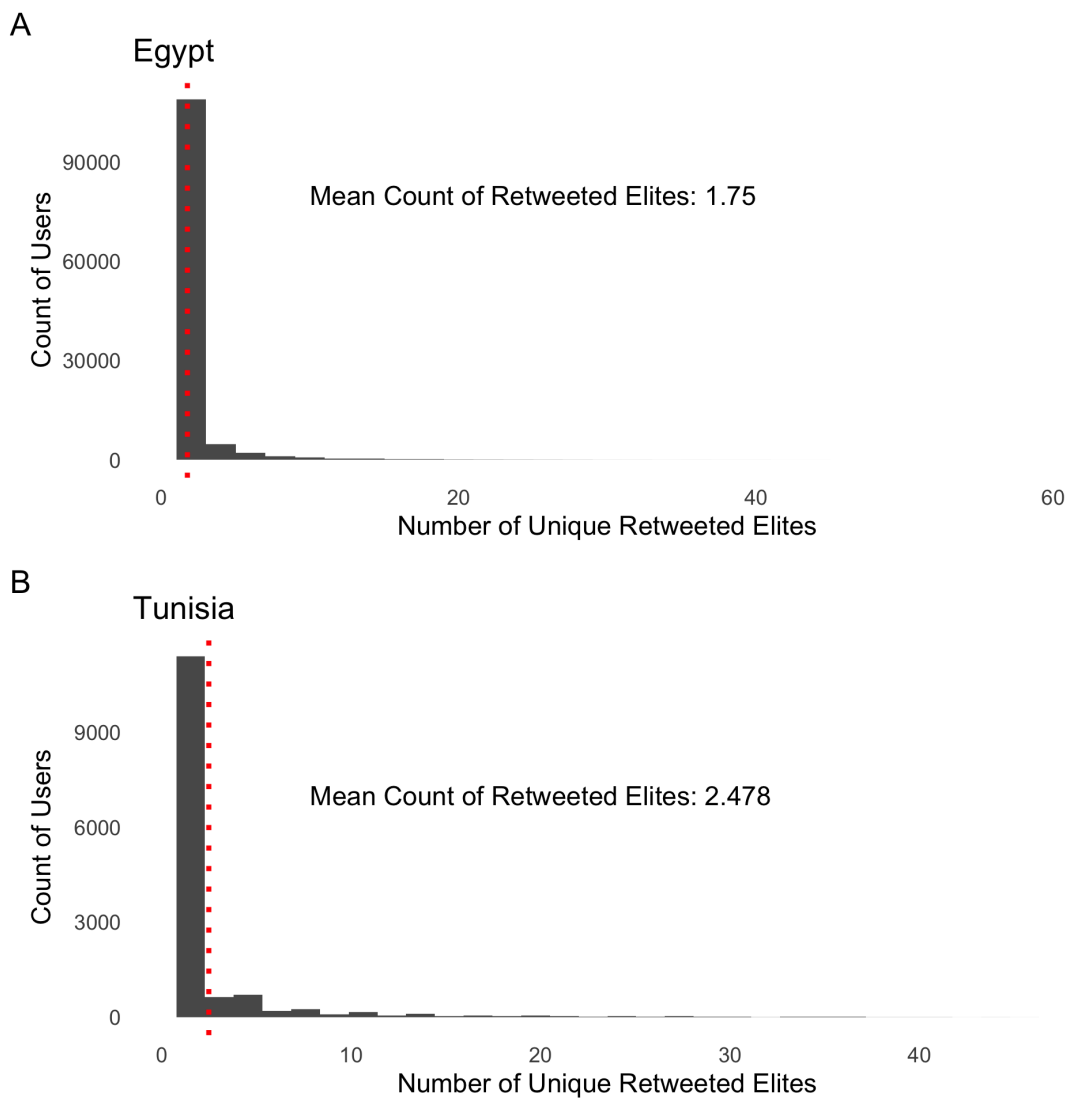
D Characteristics of Twitter Users

As mentioned in the main text, the data collection led to a dataset of the timelines of the 148 elite users from December 31st, 2012, to March 31st, 2013. This dataset of 1.2 million tweets was then

separately examined to determine which users retweeted these elites. In this section we expand on the retweeting users, who we term citizens in our paper to reflect the fact that they are not as well-known Twitter users.

The information we present here are aggregated statistics. We did not collect further identifying information about the retweeting users due to privacy concerns. Though the accounts are all public, there is a reasonable expectation of privacy for users without large followings. Figure 3 shows the

Figure 3: Histograms of Retweet Counts by Country



distribution of counts of retweeted elites for the citizens in the sample—that is, how many elites each citizen retweeted at least once during the course of the data collection period. Tunisia had a higher average mean retweet elite count (2.5) versus Egypt (1.75), although Tunisia also had fewer total citizen users (13,946 versus 118,951). It is clear that there is also a long tail to the distribution, implying that some citizens tend to very active, retweeting up to 40 separate elites over the three-month data collection window. As such, some users will contribute more information to the estimates given their propensity to retweet.

This distribution also makes it clear why the number of users which we use in estimation is relatively small (6,134) compared to the total number. In general, relatively few users retweeted more than two individuals, and if users did not retweet across ideological groups at least once, then their data is not particularly informative. Due to the requirement that the users retweet at elites from at least two different groups, it removed a lot of relatively inactive users.

The advantage of this data trimming policy is that it increased the validity of the remaining users. Anyone can retweet on Twitter, and it stands to reason that at least some of these citizens are not Egyptian or Tunisian. However, by requiring that they retweet at least two elites from distinct ideological groups, we can filter out users who only happen to know a single Egyptian elite (such as the popular cleric Yusuf Al-Qaradawi). These users are also more likely to be politically informed and able to track the changes in discursive polarization happening in Twitter.

It is also important to note that the Egyptian and Tunisian elite networks have citizens from each other's countries in them. We calculated the degree of overlap, which we show in Table 1. There is substantial overlap across the networks, though as a proportion, there are more citizens in the Tunisia data that appear in the Egypt data than vice versa. This may not be a sign of greater connectivity on the part of Tunisians, but rather simply the smaller overall size of Twitter in the country. We can interpret these numbers to imply that there is reason to believe that diffusion

	Egypt	Tunisia
Egypt Users in Elite Retweet Network	$\frac{116603}{118951} = 98\%$	$\frac{2348}{13946} = 16.8\%$
Tunisian Users in Elite Retweet Network	$\frac{2348}{118951} = 1.9\%$	$\frac{11598}{13946} = 83\%$

Table 1: Comparison of Overlap of Citizen Users Across Countries

Username	International Citizen Retweeters	Proportion
TheBigPharaoh	1331	0.17
nawaranegm	1285	0.07
alaa	1177	0.13
gamaleid	1031	0.10
Ikhwanweb	996	0.28
Monasosh	982	0.16
kalimakhus	896	0.17
eahram	838	0.04
zelaky	833	0.16
gelhaddad	802	0.24

Table 2: International Citizens in Egyptian Elite Networks

across Twitter directly, as opposed to other media such as satellite TV, likely occurred. However, we do not have the ability to quantify the level of diffusion occurring via Twitter as opposed to another medium.

As can be seen in Tables 2 and 3, the proportion of elites' followers from other countries is approximately equal to 20 percent, again giving indication that there is a significant degree of overlap, though the majority of citizens tend to be clustered within countries, as we would expect. It is also important to note that two Islamist accounts, Ikhwanweb (the official account of

Username	International Citizen Retweeters	Proportion
nawaat	1176	0.22
Sarah_bh	1003	0.20
yusraghkh	933	0.57
Khamousss	865	0.23
ifikra	785	0.42
benmhennilina	749	0.23
Al_Pacino_	743	0.24
AlBawsalaTN	719	0.27
R_Ghannouchi	698	0.47
sameh_b	600	0.27

Table 3: International Citizens in Tunisian Elite Networks

the Egyptian Muslim Brotherhood) and R_Ghannouchi, the official account of the head of the Tunisian En-Nahda party, both rank in the top 10 in terms of overall international followers and in terms of the proportion of their followers from outside the country. This empirical evidence accords with the estimates presented in the paper showing a much higher degree of influence across countries for Islamists relative to secularists.

E Coding Strategy and List of Elites

While we make no assumptions about the ideological of the Twitter users in our data who are retweeting, using pre-coded ideological groups for the elite users ensures that we estimate the latent dimensions of interest as opposed to the dimension with the highest predictive power in the data. For the first dimension we were able to rely on public statements and tweets by these users

concerning their opinion on Islamism, a very salient topic at this time. For the second dimension of democracy, we instead employed a separate IRT model to scale the elite users while exploiting our knowledge of the anti-democratic preferences of certain pro-regime figures. The IRT model was used as there was a relative lack of openly anti-democratic statements during this period. Together we combined this qualitative and quantitative analysis to produce reasonably objective categorizations of these users along the dimensions of interest to our study.

We first had two graduate assistants code all users along our two central latent scales of interest: Islamism/secularism and democracy/authoritarianism. A significant asset in coding users was their own Twitter timelines, which are easily searchable for known polarizing hashtags such as those used for protest activity (Steinert-Threlkeld 2017) or Islamist movements. The assistants also looked at published writings or newspaper articles about these users as an additional source of information about their views. Users lacking content expressing their own political opinions were removed from the sample (primarily media/aggregation accounts).

Ultimately we found elite users at almost all possible combinations of religion and democracy perspectives. While Islamists and secularists were relatively easy to identify given the heightened salience of Islamist groups in politics during this time period, identifying an elite's views on democracy proved to be a significantly greater challenge. A strong normative bias against expressing pro-authoritarian discourse operated during this time period, although some users were willing to tweet their skepticism of democracy and the Arab Uprising. For others, we were able to determine their anti-democratic views based on their membership in pro-authoritarian parties in Egypt and Tunisia. However, reliability for coding democracy was too low to rely solely on available information.

Table 4 illustrates this tendency for the coders to agree much more on the Islamist-secularist coding than on the pro/anti-democracy coding. While the coders disagreed on 77 of the users, or

	Democracy Coding	Religion Coding
Percent Agreement	38.9% (83)	61% (130)
Percent Disagreement	72% (77)	28% (30)

Note: Rows sum to one.

Table 4: Coding Agreement for Anti/Pro Democratic and Islamist-Secularist Twitter Users

roughly half, for the pro/anti-democracy codings, they only disagreed on 30 of the Islamist/secularist codings. Furthermore, almost all remaining disagreements for Islamism and secularism were easy to resolve because they resulted in one coder’s failing to see a tweet or piece of evidence that another coder found. For the handful of users who were the most difficult to characterize and had relatively little identifiable sectarian content, we defaulted to secularism, since the majority of these users tended to be secular in terms of appearance, education and language. In addition to these binary classifications, we also had the graduate coders record their confidence in their assessment on a scale of 0 to 100. We further reviewed cases that had an uncertainty of less than 50 percent even if both coders agreed in their original assessment. In general, we found that these users did not tweet as much on political topics and their ideology was relatively unknown. We excluded such users for the analyses we report here, as their lack of any political content makes them uninteresting to this analysis.

Because of the difficulty in obtaining quality information about users’ opinions for the pro/anti-democratic axis, we instead implemented a static 2-dimensional item response theory model (Clinton, Jackman, and Rivers 2004). The reason we chose to use a model is because the IRT ideal point framework does not require us to code *all* of the users, only to be relatively certain about the position of some users. These required assumptions suited this particular instance perfectly. We know with high confidence the views on democracy for some actors even if they were not expressed publically. For example, Naguib Sawiris, an Egyptian businessman, was an active supporter of the

military-led movement that overthrew the democratically elected president of Egypt. Regardless of his public discourse, Sawiris simply did not value democracy as much as other secular Egyptians who, even though they did not support the Muslim Brotherhood, also did not want a coup. Because of the normative prohibition against openly expressing doubts about democracy, the best way to infer pro-authoritarian inclinations is to find users who choose not to re-tweet fellow secularists defending the MB but do choose to re-tweet individuals like Sawiris who openly defend the military's actions. In other words, we need to take advantage of the subtle behavioral nature of retweet patterns to accurately code elite users along this dimension.

The data we used for this model are the same data we employed for our full analysis later in this paper, except that retweet counts were aggregated over time. To make sure that we were estimating a distinct second dimension, we included our secular/Islamist codings as the first dimension in the model. We allowed the democracy ideal points of all the users in the model to float along the democracy dimension, and then classified users as belonging to the pro- or anti-democracy group depending on whether their median posterior estimate was greater or less than their country-level median for the latent scale. This modeling strategy allows us to capture the unexpressed though highly salient nature of the pro/anti democratic cleavage without having to explicitly code all users in the data. In essence, we know that marginal of the secular-Islamist cleavage, very similar retweet patterns during this time to pro-regime figures like Naguib Sawiris is highly indicative of pro-authoritarian preferences.¹ The actual scores produced by the IRT model for this second dimension are shown in the table below along with Islamist/secular coding decisions.

Username	Secularist/Islamist	Democrat/Authoritarian	Democracy Score
slim404	Secularist	Democratic_Tunisia	2.00

1. One limitation arising from this model is that it did not identify any Egyptian Islamists who were coded as anti-democratic. This lacuna is a feature of the data rather than the model; the Islamists prior to the coup were democratically elected and thus were on balance very supportive of the system of government.

ooouups	Secularist	Democratic_Tunisia	1.57
nawaat	Secularist	Democratic_Tunisia	2.00
psycke	Secularist	Democratic_Tunisia	1.83
karim2k	Secularist	Democratic_Tunisia	1.76
riadheh	Secularist	Democratic_Tunisia	1.75
mira404	Secularist	Democratic_Tunisia	1.81
yassayari	Islamist	Anti-Democratic_Tunisia	1.35
sarah_bh	Secularist	Democratic_Tunisia	2.26
majdikhan	Secularist	Democratic_Tunisia	1.91
maramirou	Secularist	Anti-Democratic_Tunisia	0.52
marwen	Secularist	Democratic_Tunisia	1.50
benmhennilina	Secularist	Democratic_Tunisia	1.92
slimazzabi	Secularist	Anti-Democratic_Tunisia	1.27
jnayna	Secularist	Anti-Democratic_Tunisia	0.34
azyyoz	Secularist	Anti-Democratic_Tunisia	1.46
arabasta1	Secularist	Democratic_Tunisia	1.92
zinga_	Secularist	Anti-Democratic_Tunisia	0.40
c_moi	Secularist	Anti-Democratic_Tunisia	0.29
jasmintn	Secularist	Democratic_Tunisia	2.08
sans_url	Secularist	Democratic_Tunisia	1.74
indigo_light	Secularist	Anti-Democratic_Tunisia	1.45
takriz	Secularist	Anti-Democratic_Tunisia	0.49
sameh_b	Secularist	Democratic_Tunisia	1.93
nayzek	Secularist	Anti-Democratic_Tunisia	0.60
liliopatra	Secularist	Democratic_Tunisia	1.78

eyaturki	Secularist	Democratic_Tunisia	1.52
faiyla	Secularist	Democratic_Tunisia	1.49
zizoo	Secularist	Anti-Democratic_Tunisia	1.28
houeida	Secularist	Anti-Democratic_Tunisia	0.98
malekk	Secularist	Democratic_Tunisia	1.54
ahlemhc	Secularist	Democratic_Tunisia	1.99
tom_z	Secularist	Anti-Democratic_Tunisia	0.38
chiheb12	Secularist	Anti-Democratic_Tunisia	1.14
zeinebturki	Secularist	Democratic_Tunisia	1.75
khamousss	Islamist	Democratic_Tunisia	2.17
may_mouna	Secularist	Democratic_Tunisia	1.60
yamenbousrih	Secularist	Anti-Democratic_Tunisia	1.06
ifikra	Secularist	Anti-Democratic_Tunisia	1.25
blech_klem	Secularist	Anti-Democratic_Tunisia	0.59
emnachebaane	Secularist	Anti-Democratic_Tunisia	0.24
bidules	Secularist	Democratic_Tunisia	1.78
khalilbm	Secularist	Anti-Democratic_Tunisia	1.21
boukornineblog	Secularist	Democratic_Tunisia	2.08
out__rage	Secularist	Anti-Democratic_Tunisia	0.95
yhzami	Secularist	Anti-Democratic_Tunisia	0.77
viagramoniak	Secularist	Anti-Democratic_Tunisia	0.46
mounej	Secularist	Democratic_Tunisia	1.71
maroo_king	Secularist	Anti-Democratic_Tunisia	0.45
kiffegrave	Secularist	Anti-Democratic_Tunisia	1.04
albawsalatn	Secularist	Democratic_Tunisia	2.00

nizarus	Secularist	Anti-Democratic_Tunisia	1.16
r_ghannouchi	Islamist	Anti-Democratic_Tunisia	1.20
nahdhatunisie	Islamist	Anti-Democratic_Tunisia	1.16
yusraghkh	Islamist	Democratic_Tunisia	1.54
ziedladhari	Islamist	Anti-Democratic_Tunisia	1.13
alaa	Secularist	Anti-Democratic_Egypt	-2.45
waelabbas	Secularist	Democratic_Egypt	2.00
ghonim	Secularist	Democratic_Egypt	-0.11
nawaranegm	Secularist	Anti-Democratic_Egypt	-3.03
sandmonkey	Secularist	Anti-Democratic_Egypt	-1.29
elbaradei	Secularist	Democratic_Egypt	-0.74
zeinobia	Secularist	Anti-Democratic_Egypt	-1.65
3arabawy	Secularist	Anti-Democratic_Egypt	-1.15
amrmsalama	Secularist	Democratic_Egypt	-1.02
monasosh	Secularist	Anti-Democratic_Egypt	-2.36
kalimakhus	Secularist	Anti-Democratic_Egypt	-2.26
drbasemyoussef	Secularist	Anti-Democratic_Egypt	-1.07
gamaleid	Secularist	Anti-Democratic_Egypt	-2.40
salmaeldaly	Secularist	Democratic_Egypt	-1.03
yosrifouda	Secularist	Democratic_Egypt	-0.12
wael	Secularist	Anti-Democratic_Egypt	-1.63
monaeltahawy	Secularist	Democratic_Egypt	-0.60
alyaagad	Secularist	Anti-Democratic_Egypt	-1.72
galalamer	Secularist	Anti-Democratic_Egypt	-1.30
amrwaked	Secularist	Anti-Democratic_Egypt	-1.18

mand0z	Secularist	Democratic_Egypt	-0.12
adel_salib	Secularist	Anti-Democratic_Egypt	-1.07
hazem_azim	Secularist	Anti-Democratic_Egypt	-2.75
ahmadesseily	Secularist	Anti-Democratic_Egypt	-1.91
zeinabsamir	Secularist	Democratic_Egypt	-0.90
lilianwagdy	Secularist	Anti-Democratic_Egypt	-1.45
5orm	Secularist	Anti-Democratic_Egypt	-1.14
sarahcarr	Secularist	Democratic_Egypt	-0.82
gsquare86	Secularist	Democratic_Egypt	-0.78
minazekri	Secularist	Democratic_Egypt	-1.01
ahmednaguib	Secularist	Democratic_Egypt	0.01
gemyhood	Secularist	Anti-Democratic_Egypt	-1.45
shokeir	Secularist	Anti-Democratic_Egypt	-1.49
heshoz	Secularist	Anti-Democratic_Egypt	-1.97
mennagamal	Islamist	Democratic_Egypt	1.15
theboghdady	Secularist	Democratic_Egypt	0.03
seksek	Secularist	Anti-Democratic_Egypt	-1.53
sarahngb	Secularist	Democratic_Egypt	-0.26
thebigpharaoh	Secularist	Anti-Democratic_Egypt	-2.09
lastoadri	Secularist	Democratic_Egypt	-0.59
rashapress	Secularist	Anti-Democratic_Egypt	-1.94
minanaguib90	Secularist	Democratic_Egypt	-0.44
ahmad_khalil	Secularist	Anti-Democratic_Egypt	-2.18
naguibsawiris	Secularist	Anti-Democratic_Egypt	-2.00
mazloum	Secularist	Democratic_Egypt	0.52

nabilehalfawy	Secularist	Anti-Democratic_Egypt	-1.77
alnagar80	Secularist	Anti-Democratic_Egypt	-1.60
theadly	Secularist	Democratic_Egypt	0.72
thesherio	Secularist	Democratic_Egypt	-0.24
kalnaga	Secularist	Democratic_Egypt	0.02
dr_heba_raouf	Islamist	Democratic_Egypt	-0.32
moftasa	Secularist	Democratic_Egypt	-0.93
ahmdalish	Secularist	Anti-Democratic_Egypt	-1.98
theonlywarman	Secularist	Democratic_Egypt	0.50
pakinamamer	Secularist	Democratic_Egypt	0.01
zelaky	Secularist	Anti-Democratic_Egypt	-2.32
embee	Secularist	Democratic_Egypt	0.05
ahmada2	Secularist	Anti-Democratic_Egypt	-1.10
ramiii	Secularist	Democratic_Egypt	-0.08
mar3e	Secularist	Anti-Democratic_Egypt	-1.61
alaaaswany	Secularist	Anti-Democratic_Egypt	-2.00
alienzero	Secularist	Anti-Democratic_Egypt	-1.20
salmasaid	Secularist	Anti-Democratic_Egypt	-1.35
i3atef	Secularist	Anti-Democratic_Egypt	-1.77
loainagati	Secularist	Anti-Democratic_Egypt	-1.14
memam8	Secularist	Anti-Democratic_Egypt	-1.74
ayaabdullah	Secularist	Democratic_Egypt	-1.00
bassem_sabry	Secularist	Anti-Democratic_Egypt	-1.37
bothainakamel1	Secularist	Anti-Democratic_Egypt	-1.77
tarekshalaby	Secularist	Democratic_Egypt	-0.22

m3adel	Secularist	Democratic_Egypt	-0.19
amrrodriguez	Secularist	Anti-Democratic_Egypt	-1.28
malek	Secularist	Anti-Democratic_Egypt	-1.68
etharkamal	Secularist	Democratic_Egypt	0.12
ssirgany	Secularist	Democratic_Egypt	-0.34
__safi__	Secularist	Democratic_Egypt	0.02
hfakhry	Secularist	Democratic_Egypt	-0.75
hamzanamira	Islamist	Democratic_Egypt	0.56
asmaamahfouz	Secularist	Anti-Democratic_Egypt	-1.20
egyptocracy	Secularist	Democratic_Egypt	-0.48
nasry	Secularist	Anti-Democratic_Egypt	-1.25
mohamedwaked	Secularist	Anti-Democratic_Egypt	-1.90
themiinz	Secularist	Anti-Democratic_Egypt	-1.21
muhammadmorsi	Islamist	Democratic_Egypt	0.90
ikhwanweb	Islamist	Democratic_Egypt	0.76
mushaweh	Islamist	Democratic_Egypt	1.21
azzaelgarf	Islamist	Democratic_Egypt	1.12
alnourpartyeg	Islamist	Democratic_Egypt	1.20
yonosmakhyoun	Islamist	Democratic_Egypt	1.21
naderbakkar	Islamist	Democratic_Egypt	0.18
gelhaddad	Islamist	Democratic_Egypt	0.59
alqaradawy	Islamist	Democratic_Egypt	1.11

F Over-fitting and Marginal Effects

The ideal point marginal effects we reported in the paper are not prone to over-fitting issues because they represent a transformation of the empirical joint posterior estimate (Gill and Heuberger 2020). There is no further estimation being done; rather, the aim of these marginal effects is to provide an interpretation of the coefficients that is of substantive interest. Due to the multiplicative nature of the IRT measurement model, presenting both negative and positive ends of the scale separately provides clearer results than the raw coefficients themselves.

To demonstrate this, we re-estimated the marginal effects given discrimination parameters that were estimated using only the pre-coup data (i.e., as a training sample). These results shown in Figure 4. As can be seen, while the uncertainty interval are wider for the effects calculated with training set discrimination scores, the results are very similar. We believe this provides further evidence that the transformation of the joint posterior does not induce additional issues with re-processing the data.

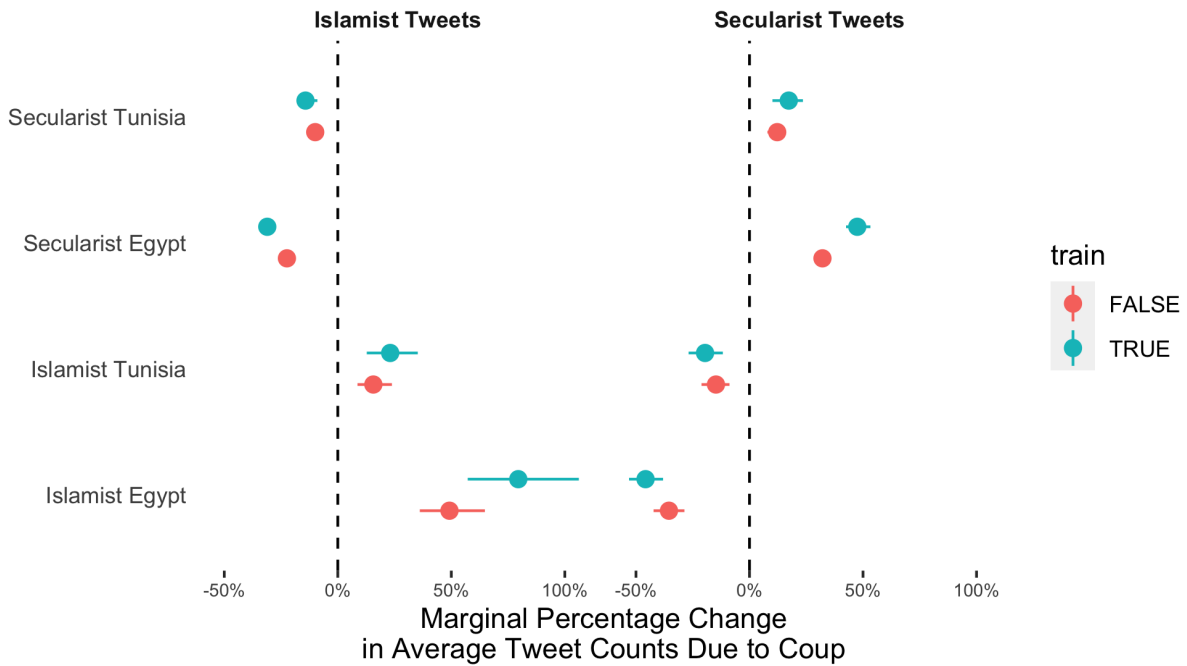


Figure 4: Comparison of Full vs. Training Set Ideal Point Marginal Effects

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