Between Collaboration and Disobedience: The Behavior of the Guantánamo Detainees and its Consequences

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Abstract: This article examines the behavior of the Guantánamo detainees in terms of collaboration and disobedience and how it influences their chances of getting a release recommendation. JTF-GTMO-authored memoranda on 765 detainees are used to create a network of accusations between detainees and an attribute dataset, which are analyzed using multivariate regression and Kolmogorov-Smirnov tests. It is found that while the distribution of incriminating statements obeys a power law, 62.6% of all detainees do not incriminate anyone. Yemenis and Saudi Arabians heavily over-contribute regarding incriminating statements and disobedient actions, whereas Afghans and Pakistanis under-contribute. Disobedient behaviour does not affect the likelihood of getting a release recommendation, except for hunger striking, which has a negative effect. By releasing information, detainees don't improve their own chances of getting release recommendations but impair those of the detainees they implicate. Three different groups of detainees are identified whose behavioral patterns seem to follow distinct logics.

More than a decade after its installment in 2002 and six years after Obama's promise to close

it down, the Guantánamo Bay Detention Camp is still operating and continues to attract wide-

spread public attention around the globe. In contrast to this high level of interest, there is little

knowledge about what is occurring in what has become one of the world's most notorious

prison camps. The non-scientific work on Guantánamo consists mostly of ideographic eye-

witness accounts of ex-detainees (Begg 2006; Willemsen 2006; Hicks 2010), military person-

nel (Saar & Novak 2005; Cucullu 2009) and attorneys (Margulies 2006; Smith 2007a, b; Khan 2008; Denbeaux & Hafetz 2009), as well as journalistic reports (Rose 2004; Worthington 2007; Shephard 2008). While the importance of these narrations must not be downplayed, they fail to give a systematic, nomothetic analysis of what is occurring at Guantánamo. The academic work on the other hand focuses almost exclusively on the legal status of Guantánamo (Steyn 2004; Amann 2004; Chesney 2006), sometimes combined with medical (Bloche & Marks 2005; Miles 2007) or geographic-philosophical (Gregory 2006) aspects, but with little quantitative social scientific work being produced to date. So far, the only statistics-based analyses were presented by Denbeaux et al. (2006a, b, c, 2012). Their 2006 work contributed to the understanding of the composition of the population of detainees, but failed to go further by describing any mechanisms at work. The first and hitherto only published piece of work going in that direction is their 2012 working paper, which investigates factors that influence the release of detainees, but, as we will see, suffers from serious technical flaws. The persisting lack of social scientific work on Guantánamo is even more noticeable given the long history of sociological research on prisons and the social interaction of detainees (Clemmer 1940; Cressey & Krassowski 1957; Goffman 1961; Garabedian 1963; Kaminski 2004) and a deep interest in prisoner treatment in political science (Wallace 2012). Hence, there is an urgent need to conduct social scientific work capable of describing and explaining the social microcosm of Guantánamo. This paper aims to contribute to filling this gap.

One topic that has not been studied systematically enough as yet is the behavior of the Guantánamo detainees and how US authorities react to it. From qualitative accounts such as those cited above we are aware of individual detainees collaborating with interrogators by releasing information or resisting doing so, participating in hunger strikes or throwing liquids at guards. We know about small rewards single detainees have received for being cooperative and cases of violent suppression of disobedient acts. But we have little knowledge about the *overall* picture of the detainees' behavior and its consequences. This paper attempts to en-

hance our understanding of the underlying patterns by examining the following two research questions:

1. How do the Guantánamo detainees behave in terms of (a) collaborating with interrogators by incriminating other detainees and (b) conducting disobedient acts during detention?

2. How does this behavior influence their chances of getting a release recommendation?

To answer these questions, information contained in memoranda on 765 Guantánamo detainees, the Detainee Assessment Briefs (DABs) compiled by the Joint Task Force Guantanamo (JTF-GTMO) and published by WikiLeaks in April 2011, were manually coded. The resulting new dataset consists of 25 attribute variables and a network in which directed ties represent incriminating statements between detainees. The data was analyzed using multivariate linear and logistic regression, Kolmogorov-Smirnov tests, and social network analysis (SNA).

The article proceeds as follows. First, the conceptual approach is set out. Second, the data and methodology are described in detail. Third, the results are presented by analyzing successively the detainees, their behavior, and the consequences of their behavior. Fourth, potential political and socio-psychological explanations for the behavior and implications for the utility of the detainees' statements are discussed. Finally, the results are summarized.

Conceptual Approach

The behavior of the Guantánamo detainees can have serious consequences, particularly in the case of collaboration with interrogators, because detainees' statements are used in court cases against fellow detainees (Worthington 2009). Even small pieces of information which in themselves do not seem to contain grave accusations may be combined with other bits of data to form an incriminating mosaic of evidence. This is the position of the *mosaic theory of intelligence-gathering* (Pozen 2005), which has been employed extensively by Guantánamo inter-

rogators and prosecutors. Mosaic theory explains how detainees' behavior can be utilized, but what can explain the behavior *itself*? Is it possible to predict the actions of detainees at Guantánamo, a "legal black hole" (Steyn 2004) where torture was reportedly applied, with the help of existing research?

As stated before, social-scientific literature on Guantánamo is still scarce. Even the above-mentioned 2012 working paper by Denbeaux et al. does not contain any theoretical considerations and the validity of its findings is questionable (cf. appendix for a detailed critique). The classic sociological literature on prison behavior typically presupposes fixed sentences (e.g., Garabedian 1963) which are not given at Guantánamo where almost no detainee knows if or when they will be released (Ratner & Ray 2004, 38). The scholarship on behavior in torture-related contexts does not allow for generalized predictions either, as findings vary starkly across different historic contexts.[1] Due to this lack of direct guidance, we turn to a different approach, taking inspiration from Molm (1997) and Kaminski (2004). Molm developed her theory on coercive power in social exchange only *after* she had conducted a series of experiments and Kaminski generated models of detainees' behavior *following* his participant observations in a Polish prison. Here, we adopt their "inductive" approach. Instead of imposing formal models and hypotheses on the empirical data *ex ante*, which would be rather arbitrary given the exploratory status of this work, we take an unprejudiced approach towards the data, search for answers to the two above-mentioned research questions, and then move to discuss the results in the light of possible theoretical explanations.

Kaminski (2004) argues that prisoners play different "games", i.e. they take on varying roles which follow distinct rationales. In the discussion at the end of this article, we transfer this concept to Guantánamo, taking the three groups of detainees that emerge from our analysis (non-, low-level, and high-level collaborators) as a base to show how distinct political and socio-psychological mechanisms may account for the behavior of a specific group of detainees, while no single mechanism can explain it all. For this purpose, we will draw on three

behavioral theories, namely the theory of the evolution of cooperation (Axelrod 1984), power-dependence theory (Molm 1997), and learned helplessness theory (Maier & Seligman 1976). In addition, the implications of each behavioral pattern for mosaic theory will be discussed.

Data and methods

This article is based on an entirely novel *dataset*. The sources of this dataset are JTF-GTMO-authored DABs on 765 detainees at Guantánamo, which were published by WikiLeaks in April 2011 and are available online (WikiLeaks 2011). There is one DAB available for each of the 765 detainees. The date of the DABs ranges from 2002 to 2009, with a considerable number of reports (45 to 176) available for every year except 2009 (two reports). Each DAB gives a summary of the current state of knowledge that the JTF-GTMO has about the detainee and an assessment of whether he should remain under Department of Defense (DoD) control (henceforth "stay at Guantánamo") or be released.

We manually extracted information from the DABs to create (a) a dataset on the characteristics of the detainees (*attribute variables*) and (b) a one-mode network[2] of the incriminating statements between detainees (*structural variable*). There are 25 attribute variables including the number of incriminating statements sent (*outdegree*) and received (*indegree*), release recommendation (1=release, 0=stay at Guantánamo), age, nationality, health status, year of transfer to Guantánamo, assessed threat risk, intelligence value, risk from the detention perspective, and affiliation with terrorist organizations (cf. online appendix for a complete list with detailed descriptions). The attribute variables are available for up to 770 detainees, while 797 detainees are part of the network. Hence, the dataset contains information on almost the whole population[3] of Guantánamo detainees.

The structural variable consists of incriminating statements (*ties*) of one detainee (*sender*) against another detainee (*receiver*) during interrogations. The information about these ties was

mainly obtained from a section in the DABs called "Reasons for Continued Detention", but at times incriminating statements were found in other sections as well and were coded equivalently. In order to count as a tie, a statement had to fulfill five conditions: it had to be *certain*, *direct*, *deliberate*, *explicit*, and *incriminating*.

Certain means that it has to be sure that X released information on Y. For instance, the statement, "[X] *possibly* recognized detainee [Y] from the al-Zubayr Guesthouse," (ISN 324[4], emphasis added) does not fulfill this condition. *Direct* signifies that the statement has to be made personally by the sender; for example the statement, "[X] stated that [Y], a high-level explosive trainer for Al-Qaida, informed him that detainee [Z] was a spy who used to work for Al-Qaida before they discovered him," (ISN 653) contains the incriminating ties X→Y and X→Z, but not the tie Y→Z. The statement has to be made *deliberately* during interrogations, indicating that for instance information on Y gathered from a hard disk obtained from X would not count as an incriminating tie X→Y. *Explicit* means that the statement has to be directed against a specific individual. For example, this is not true for the statement, "If you were in Tora Bora, you were not innocent. You were there to fight." (ISN 252). Finally, *incriminating* means that the statement has to contain information that could be used against the receiver in the "war on terror" (broadly defined). For example, the sentence "[X] reported that [Y] intended to commit suicide at JTF-GTMO" (ISN 114) is not treated as an incriminating statement. The phrase "[X] stated detainee [Y] was a bodyguard who was very close to UBL [Usama Bin Laden] and had been with UBL for a long time" (ISN 37) is an example for a statement that fulfils all five conditions and would accordingly be coded as an incriminating tie (X→Y).

Various *statistical methods* are used in this study. Multivariate linear regression is applied during the analysis of collaborative behavior, using the outdegree as dependent variable. In addition, Kolmogorov-Smirnov-tests are conducted to test for the existence of power-law distributions[5]. Multivariate logistic regression is employed when analyzing the consequences of

the detainees' behavior, as well as in the appendix, using "release recommendation" as regressand. Over and above, SNA is applied throughout using Ucinet 6 (Borgatti et al. 2002), mainly for illustrative purposes. For the sake of parsimony, various ordinally scaled independent variables (threat risk, risk from the detention perspective, intelligence value) are treated as interval variables in the regression models.

There are various issues resulting from the nature of the data that had to be considered when constructing the models: First, the composition of the DABs changes over time. Files from later years are more detailed and contain sections that cannot be found in earlier ones. This problem leads to missing values for some variables (e.g., Reports of Disciplinary Infraction, assaults, potential areas of exploitation). In order to avoid biases, these variables are not included in the regression models.

Second, the qualitative meaning of some categories apparently changed over the years, most importantly in the case of the central variable "release recommendation". The original variable in the dataset has eight categories (cf. online appendix), some of which are not unambiguously orderable. For instance, it is not clear whether "transfer to the control of another government" is a "lower" category than "transfer to the control of another government for continued detention", or if the JTF-GTMO's scaling system has just become more detailed over time. In order to tackle this problem, various classes were merged to create a binary variable consisting of the two categories "release" and "stay at Guantánamo". This is not only more reliable than imposing disputable assumptions about the order of various categories, but also has the advantage of increasing comparability with Denbeaux et al. (2012), who use a similar binary variable.

Third, it could be that later DABs contain more release recommendations because as the years passed by, voices lamenting the situation of the detainees became stronger and the political pressure to release prisoners grew. In order to sort out this external effect from those intrinsic to the detainees' behavior and attributes, the DAB-date is included as a control variable

in the regression models. Similarly, the differing time that a detainee has been at Guantánamo could matter. For instance, someone who was brought to Cuba in 2006 is less likely to have the same number of disobedient actions or outdegree as someone who was brought there in 2002, simply because he was there for a shorter time period. To solve this problem, we also add the transfer year as a control variable in the regression models.

Fourth, the outdegree does not necessarily match the DAB date (i.e. the point in time the release recommendation was issued) perfectly. This results from the fact that the DAB of a given detainee contains mainly information on his indegree, while his outdegree is usually composed by information contained in other detainees' DABs. Hypothetically, this could lead to a mismatch, e.g. if incriminating statements made in 2005 would lead to a release recommendation in 2006, but the 2004 DAB which is available to us still recommends continued detention. In this case, the time difference would lead to wrong conclusions. This problem is not easily solvable as it is not generally possible to link the incriminating ties to specific dates. However, its impact on the validity of the results should be manageable, as there is no reason to believe that higher- and lower-than-expected outdegrees do not balance out.

Finally, there is no information available on the accuracy of the incriminations made or the conditions under which they were elicited from the detainees. For example, we don't know whether some detainees talked more because they were tortured while others talk less because they were treated less harshly. This shortcoming does not gravely interfere with the analysis of the two research questions of this study, but reduces the possibility of determining precise causes of the detainees' behavior. We will come back to this problem in the "Discussion" section below.

It should be mentioned that despite these issues, this new dataset is probably the most comprehensive one available for research to date. The US government has long been reluctant to release information on whom they hold captive on Cuba and when finally forced to reveal some data in the wake of the 2004 Rasul v. Bush Supreme Court decision, the resulting list

contained nothing but the name, nationality, date and place of birth, as well as the ISN of 759 detainees (OARDEC 2006). Denbeaux et al. (2006a, b, c) managed to collect more details on the detainees, but their reports are far from complete. Our dataset is based on new sources, includes the late arrivals (2006-2008) that were missing in earlier reports, and uses variables that the former analyses did not contain.

Results

The Guantánamo detainees

Guantánamo brings together people from all over the world. While the large majority of detainees are from the Greater Middle East, some come from countries as diverse as Canada, Australia, Sweden, Denmark, Great Britain, Spain, Turkey, Russia, China, Bangladesh, Sudan, Uganda, Zambia, Indonesia, Malaysia and the Maldives. All in all, 50 nationalities are present at Guantánamo. The largest national groups are Afghans (28.6%), Saudi Arabians (17.1%), Yemenis (15.1%), Pakistanis (9.4%), and Algerians (3.4%). Despite coming from so many backgrounds, almost all of the detainees (95.9%) have been caught in either Afghanistan (51.5%) or Pakistan (44.4%). The vast majority (80.6%) of the detainees were transferred to Guantánamo in 2002. Fewer people were brought to Cuba in 2003 (12.7%), 2004 (3.0%), 2006 (2.4%), and 2007 (1.2%). There were no transfers in 2005, 2008, and 2009.

For no less than 83.7% of the detainees, the single explicit reason for transfer to Guantánamo is "to provide information". The remaining percentage is split as follows: 6.8% of the detainees were brought to Guantánamo because of an alleged affiliation with Al-Qaeda or similar incriminating circumstances. In 1.6% of the cases, the reason is an alleged affiliation with Al-Qaeda *and* the provision of information. Only 12 detainees (1.75%) were transported to

Guantánamo "to face prosecution for terrorist activities against the US". The reports of 42 detainees (6.1%) state "no reasons for transfer to GTMO".

All detainees are male. Their age at the time they were transferred to Guantánamo ranges from 14 to 89 with a mean age of 29.3 years. Men in their twenties make up more than half of the inmates (54.6%), while those in their twenties and thirties taken together constitute more than four fifths (82.2%) of all detainees. Twenty detainees were probably minors (≤18 years of age) when transferred to Guantánamo[6], and there are six elderly persons (60-89 years of age). Minors and elderly persons taken together constitute 3.8% of all detainees.

The DABs contain a section on the detainees' "health status". However, their actual health is hard to assess since the JTF-GTMO tends to rate detainees as being of "good" health even when the detailed description clearly shows that they are not (cf. ISN 497 for a graphic example). In order to have a more realistic estimate, the categories presented here are based on the whole health section rather the final rating alone. According to this unofficial evaluation, 44.7% of all detainees are in "good" health, 15.6% are in "overall good" health, 26.6% are "overall good with stable medical problems", 8.3% are in "medium" health, and 4.6% are in "poor" health. Concerning mental wellbeing, it is known that a substantial number of detainees attempted to kill themselves at Guantánamo, but unfortunately the "lack of clear reporting data of suicide attempts" (Fletcher & Stover 2009, 82) in sources on Guantánamo also applies to the DABs. While suicide attempts are reported in several cases (e.g., ISN 971, 1007), they were not coded as a variable in the dataset as the coverage was estimated to be incomplete.

Several variables estimate the detainees' dangerousness to the world outside Guantánamo. First, the detainees' "threat risk", an indicator of the future threat a detainee may pose to the US and its allies, is assessed. It shows that 42.0% of the detainees are seen as a "high", 37.7% as a "medium", 8.2% as a "low", and 12.1% as "no" threat risk. Second, the detainees are assessed to be associated[7] with 30 different terrorist organizations (cf. online appendix for a complete list). Al-Qaeda constitutes the most central organization, with 49.5% of the detain-

ees allegedly being associated with it, followed by the Taliban with 13.0%. The two groups partially overlap, as 4.2% are assessed to be affiliated with Al-Qaeda *and* the Taliban. 18.5% are assessed to be affiliated with a terrorist organization other than Al-Qaeda and the Taliban. For almost a quarter (23.3%) of all detainees no affiliation with any terrorist organization is mentioned.

There are three indicators of a detainee's alleged relevant knowledge. First, the JTF-GTMO assesses the detainees' "intelligence value". Here, 21.6% of the detainees are assessed to be of "high", 37.4% of "medium", 22.8% of "low or moderate", and 18.3% of "no" intelligence value. Second, the DABs list the areas in which the JTF-GTMO expected the detainee to have valuable information at the time they were transferred to Guantánamo ("pre-APE"). The number of items on these lists ranges from 0 to 20 with a mean of 2.6 items. Third, the DABs also contain an inventory of "areas of potential exploitation" ("APE"), i.e. a list of fields in which the JTF-GTMO estimated the detainee to have precious knowledge at the time the DAB was written. The number of items on these lists ranges from 0 to 34 with a mean of 5.7 items. There is no significant correlation between pre-APE and APE. In fact, the former is not correlated with any other variable in the dataset, whereas the latter is correlated with the majority of them (cf. online appendix, Table OA2), including the likelihood of getting a release recommendation (r=-.47, p<.001). This difference between the two variables suggests that (a) the US transported people to Cuba without being able to assess how much they actually knew, and (b) a learning process took place over time at Guantánamo which resulted in the separation of those who actually had knowledge from those who didn't.

The Guantánamo detainees' behavior

Collaborative behavior

The collaborative behavior of a detainee is measured in terms of the number of incriminating statements he makes about other detainees (outdegree). In total, there are 1,500 incriminating

ties between the 797 detainees in the network[8]. This would be equivalent to 1.9 accusations per detainee if they were equally distributed. However, not everybody released an equal amount of information. Most notably, 62.6% of the detainees did not incriminate any other detainee. This high proportion of *non-collaborators* is astonishing given our prior finding that 83.7% of the detainees were brought to Guantánamo explicitly and solely "to provide information" and knowing that to extract information, interrogators at Guantánamo used "coercive techniques" (CIA 2004), which are discussed in the public discourse as torture.

For those detainees who did talk and/or were talked about, Fig. 1 shows the distribution of out- and indegrees ranked by their size. The distribution of outdegrees (depicted by the solid line) shows that a small portion of all detainees is responsible for a large share of all incriminations, while a large number of individuals are each accountable for a small share of all incriminations. The shape of the curve suggests that the distribution obeys a *power law*. In order to test whether this is actually the case, we conduct a Kolmogorov-Smirnov test as proposed by Clauset et al. (2009). When using $x_{min}=2$ as the lower bound in this distribution, the resulting *p*-value for the distribution of outdegrees is $p=.58$ after 1,000 repetitions. This indicates that the data indeed fits a power-law distribution very well and that the hypothesis that the fit occurs by chance can be rejected[9].

The existence of this power-law relation is notable because it uncovers that apart from the small number of *high-level collaborators* whose central role in incriminating others has been described in the past (e.g., Worthington 2011), a large number of *low-level collaborators*, whose statements accumulate to an equally substantial amount of information, exists as well. To give an example, the four people who are most active in terms of incriminating others (outdegrees of 123, 77, 52 and 40) account for about one fifth (19.5%) of all incriminating ties, while the 213 people with the smallest number of incriminations released (outdegrees of 1-3) equally contribute one fifth (22.2%).

The distribution of indegrees (depicted by the dotted line in Fig. 1) is different from that of the outdegrees and clearly doesn't resemble a power-law distribution. Instead, the indegrees are more evenly spread across the detainees. The highest indegree (21) is far lower than the highest outdegree (123) and while only 37.4% of all detainees talked about others, more than half of all detainees (53.0%) were talked about.

(Fig. 1 about here)

The divergence of the two distributions indicates that those detainees who talk are not necessarily identical with those they talk about. A closer look reinforces this picture. Almost half (48.6%) of the detainees who were incriminated did not release any information on others and 27.2% of those who released information on others were not incriminated themselves. There is only a weak positive correlation (r=.31, p<.001) between the indegree and the outdegree of a detainee and only 6.3% of all dyads are reciprocal. These figures are not trivial if we accept the (highly plausible) assumption that if detainee A has information on detainee B, detainee B is also very likely to have information on detainee A. They indicate that (a) there is no self-reinforcing spiral of mutual incrimination at Guantánamo (i.e. detainees do not usually "take revenge" for accusations by recriminating), and (b) the detainees are not just stratified in terms of centrality and the amount of knowledge they have but they actually make a choice to talk or not to talk. Detainees do not respond in a uniform manner to the situation they are in: some opt for releasing information, while others don't.

Against this background, the question arises whether we can determine more closely who collaborates and who doesn't. Fig. 2 shows a representative sample of detainees from the four largest national groups at Guantánamo (N=244) and the incriminating ties between them, depicting Afghans as circles, Pakistanis as squares, Saudi-Arabians as triangles, and Yemenis as diamonds. The size of the nodes indicates the outdegree of the detainee in the whole network.

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The graph illustrates that the detainees from these four nations behave very differently in terms of releasing information on other detainees. Most of the incriminating ties can be found among Yemenis, among Saudi-Arabians, and between Yemenis and Saudi-Arabians. Only very few Afghans and Pakistanis are connected to the network of accusations. Ties between them and Yemenis or Saudi Arabians are scarce and there are no ties at all between Afghans and Pakistanis. Accordingly, the average outdegree per detainee in the whole network is 3.4 for Yemenis and 2.4 for Saudi Arabians, but only 0.5 for Afghans and 0.9 for Pakistanis. Merely 12.1% of all Yemenis do not get incriminated by others, compared to 75.0% for Afghans. Yemenis, who constitute 15.1% of all detainees, are responsible for making 26.5% of all incriminating statements, while Afghans, who constitute 28.6% of all detainees, are responsible for making only 7.7% of all accusations.

(Fig. 2 about here)

The many incriminations between Yemenis and Saudi Arabians could be due to contextual effects such as the long history of conflicts in Saudi-Yemeni relations (cf. Gause 1990) or rivalries between Al-Qaeda groups from both countries. But then why don't we see any ties between Afghans and Pakistanis, whose nations have a similarly long history of contentious relations? One possible explanation is that the national groups at Guantánamo differ in composition in terms of individual characteristics which have not yet been taken into account. In order to test this hypothesis, two linear regression models are constructed (Table 1). Model 1 contains only nationality as a regressor and shows that Yemenis (Saudi Arabians, detainees with other nationalities) make 2.9 (1.9, 1.9) more incriminating statements than Afghans, while Afghans and Pakistanis do not significantly differ in terms of their outdegrees. This is completely in line with our observations in Fig. 2.

Model 2 adds several variables concerning individual attributes and behavior. While the DAB year has no significant effect, the transfer year has a counterintuitive one: a detainee who was transferred to Guantánamo one year later makes almost two additional incriminating statements. There are several possible reasons for this finding: (a) later arrivals could have been selected more carefully and thus have more relevant information, (b) interrogation techniques may have improved over time, or (c) later arrivals talk more because they were already primed for interrogations at other prisons such as Bagram and Kandahar before arriving at Guantánamo (cf. Fletcher & Stover 2009, 22), and are possibly merely giving names they picked up at earlier interrogations due to source-monitoring errors.

A one-unit increase in the indegree corresponds only to a .49-unit increase in the outdegree, which reinforces our prior finding that there is no one-to-one relationship between providing incriminating information *about* others and being incriminated in information provided *by* others. Inmates who are assessed to be a higher threat risk talk less about their fellow detainees, while those estimated to have more intelligence value implicate *more* inmates. Detainees who are considered to be a greater "risk from the detention perspective" seem to be less cooperative in terms of releasing information on others, but this effect is only marginally significant. Affiliation with a terrorist organization has no significant effect. The differences between Afghans and Yemenis and Afghans and "other nationalities", which were significant in Model 1, become non-significant in Model 2, indicating that they are probably not caused by the national groups *per se*, but by their varying composition concerning individual characteristics.

However, while the adjusted R^2 of Model 2 (.12) is much higher than that of Model 1 (.02), 88% of the variance in outdegrees remains unexplained, indicating that there are probably other, unobserved factors that also play a role. These could range from differences in actual

knowledge, treatment, moral/religious beliefs, and psychological disposition to peculiarities of individuals and macro-level explanations such as the above-mentioned rivalries between countries (which should not be ruled out, especially since the nationality coefficients, though now partially non-significant, remain large in size). While we miss the data to analyze the role of these factors statistically, we will come back to some of them in the discussion below.

Disobedient behavior

Concerning disobedient behavior during detention, there are four different indicators. First, the "risk from the detention perspective" rates the overall disobedience at Guantánamo and is available for almost all detainees. In sum, 26.9% of the detainees are assessed to be a "high", 20.4% a "medium", 36.1% a "low", and 16.6% "no" risk from the detention perspective. Second, hunger strike is reported in 54 cases (8.9%). This figure, however, is probably not exhaustive, as other sources state that "hundreds" of prisoners have participated in hunger strikes at Guantánamo (Denbeaux & Hafetz 2009, 265; cf. Worthington 2007, 272; Culullu 2009, 188). Since hunger strikes usually appear in the "health status" section of the DABs, the variable seems to capture mainly long-lasting hunger strikes with severe consequences. Third, the number of Reports of Disciplinary Infraction (RDIs), which record insubordinations of all kinds, are available in later DABs. The total number of RDIs is 15,854 for the 318 detainees for whom relevant information is available. However, they are very unevenly distributed, ranging from 0 to 456 with a mean of 49.9 RDIs per detainee. Fourth, assaults are reported, with a total number of 2,594 assaults for the 290 detainees for whom appropriate data can be found, ranging from 0 to 153 with a mean of 9.0. Similar to the dispersion of incriminating statements, the two distributions have long tails, but Kolmogorov-Smirnov tests lead to *p*-values of *p*=.00, indicating that power laws can be ruled out in these cases.

Fig. 3 shows the number of RDIs (A) and assaults (B) for detainees from the four largest national groups, ranked by their size. In both cases, a remarkably clear order is visible. Yemenis

behave most disobediently, followed by Saudi Arabians, Afghans and finally Pakistanis. In all four groups a small number of detainees exist that are disproportionally disobedient compared to detainees from the same national group. The small number of observations for Afghans and Pakistanis is a result of fewer post-2004 DABs for these groups, probably indicating that many Afghans and Pakistanis had already been released by 2005. As RDIs and assaults are recorded for less than half of all detainees, using them as dependent variables in linear regression models to determine more closely who behaves disobediently could lead to biased results. Instead, we turn directly to the consequences of the detainees' behavior, using the risk from the detention perspective, which is broadly available, as a measure for disobedient behavior.

(Fig. 3 about here)

The consequences of the Guantánamo detainees' behavior for their situation

In order to carve out the effect of collaborative and disobedient actions on the chances of getting a release recommendation, four binary logistic regression models are constructed (Table 2). Model 1 predicts only the effects of the out- and indegree on the log odds of getting a release recommendation. It shows that every additional incriminating statement about a detainee decreases his likelihood to get a release recommendation. Conversely, by incriminating others, the collaborator does not influence his own chances to get a release recommendation. Hence, by releasing information, detainees seem to harm those they talk about while not benefiting themselves in terms of improved release chances.

(Table 2 about here)

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In order to test whether this picture holds once other variables are controlled for, various attributes are added in Model 2. While the transfer year has no significant effect on the log odds of getting a release recommendation, the date of the reports matters. When a DAB dates from one year later, the likelihood of getting a release recommendation is significantly lower. This effect contradicts the above-mentioned hypothesis that public awareness and political pressure has grown over the years, resulting in more release recommendations in later years. Instead, the remaining detainees have a lower chance of getting release recommendations. The model also shows that the likelihood of getting a release recommendation is higher for detainees who are in bad health and for those who are minors or elderly persons. These findings directly contradict Denbeaux et al. (2012) who argue that the only attribute affecting detainees' release chances is their nationality (cf. appendix).

Both scoring higher on the threat-risk scale and having more intelligence value have strong negative effects on the likelihood of getting a release recommendation. By contrast, being considered a higher "risk from the detention perspective" has no significant impact on release chances. Participation in hunger strikes, however, decreases the likelihood of getting a release recommendation, controlling for other variables (including bad health, which is more common for hunger strikers but influences the likelihood of getting a release recommendation positively). This effect might be explained by the JTF-JTMO's perception of hunger strikes as a form of "asymmetric warfare" (Denbeaux & Hafetz 2009). Controlling for these additional aspects in Model 2, the negative effect of being incriminated by others on the chances of getting a release recommendation decreases in size but remains significant. Incriminating others still does not affect the collaborator's chances to get a release recommendation.

In Model 3, a simplified version of the detainee's alleged affiliation with terrorist organizations is added. The coefficients show no significant effect of being allegedly affiliated with Al-Qaeda, the Taliban or another terrorist organization on the likelihood of getting a release

recommendation. While possibly startling, this result is in line with Denbeaux et al., who find "surprisingly little correlation between association with a terrorist group and a detainee's release date from Guantánamo" and "little or no distinction between [terrorist] groups" (2012, 15). Our finding indicates that alleged affiliations with terrorist organizations tend to present rather arbitrary charges with no consequential impact, comparable to the irrelevance of the initial areas of potential exploitation (cf. above), whereas the incriminations by fellow detainees, the assessed threat risk and intelligence value are more substantial and have serious consequences.

Finally, Model 4 tests whether releasing information on others has a positive effect on the likelihood of getting a release recommendation for a given detainee *as long as others don't release information on him*. This is done by adding the interaction between outdegree and indegree as an additional variable. However, the model shows no support for this idea. Testing for a curvilinear relationship between the out-/indegree and release recommendations instead of a linear one by adding squared terms for both variables (not depicted) does not lead to significant coefficients either. Hence, there is no statistical evidence that detainees could improve their own chances of getting a release recommendation by releasing information on fellow detainees. As indicated by the rise in the Pseudo-R^2 from .25 to .75, adding the extra variables in Model 2 highly improves the quality of the model, whereas the additional variables in Model 3 and 4 add no visible explanatory power.

In order to improve the interpretability of some of the results of Model 2, Fig. 4 illustrates the predicted probabilities of getting a release recommendation depending on the indegree and the intelligence value of an example detainee with a mean outdegree, who is a medium threat risk, a low risk from the detention perspective, not in bad health, not a minor or an elderly person, who has not been on hunger strike, who was transferred to Guantánamo in 2001 and whose DAB dates from 2008. The graph shows that both the intelligence value and the indegree of such a detainee have a substantial impact on the probability of getting a release

recommendation. At an indegree of two, for instance, the probability of getting a release recommendation is 96.1% if the detainee is assessed to have low, 74.7% if he has medium, and 28.1% if he has high intelligence value. Conversely, for a detainee with medium intelligence value, the probability of getting a release recommendation drops dramatically from 82.4% to 32.1% and further to 10.3% as the indegree increases from 0 to 10 to 20. These numbers illustrate that while having no impact on their own chances to get release recommendations, the Guantánamo detainees profoundly influence the fate of others.

(Fig. 4 about here)

Discussion

So far, we have analyzed how the Guantánamo detainees behave and what consequences their behavior has. We also examined rudimentarily which individual characteristics foster collaboration and disobedience. To round this study off, we discuss possible explanations for *why* the detainees behave the way they do and what this means for the usability of their statements. The distinction between the three behavioral groups identified above (non-, low-level, and high-level collaborators) serves as a base for this discussion. Following Kaminski (2004), we argue that different logics may be underlying these distinct behavioral patterns.

Non-collaborators

Non-collaborators are those detainees who do not incriminate anyone (outdegree = 0). As determined above, this group comprises the majority of all detainees (62.6%). Two possible explanations for the behavior of this group are outlined here. The first one puts emphasis on their selection, the second one on them as actors.

The first interpretation states that non-collaborators do not implicate anyone because they only ended up in Guantánamo due to a misguided selection and screening process and consequentially do not possess any actual inculpatory information. After invading Afghanistan, the US paid US-$ 5,000-25,000 in bounty money for each "terrorist" handed in, which provided enormous incentives to ordinary Afghans and Pakistanis to betray business competitors, enemy clan members, and strangers to the Americans (Khan 2008, 55). Moreover, US troops often had to rely on highly unreliable markers such as the "use of a guest house" or the "possession of Casio watches" as signs of suspiciousness to base their arrests on (Denbeaux et al. 2006a). As a result, a large number of people were brought to Guantánamo based on doubtful allegations. According to our data, 84.9% of the non-collaborators were brought to Cuba explicitly and solely "to provide information", a clear indication that intelligence-gathering did not work as expected and that any remaining mosaic of information is fragmentary. This does not mean that non-collaborators are necessarily "innocent", but it indicates that selection and screening problems, though a common issue in any asymmetrical warfare, were particularly detrimental for intelligence-gathering at Guantánamo.

Against this first interpretation, one could argue that not having *genuine* incriminating information does not necessarily preclude the accusation of others. It seems, for instance, that substantial parts of the incriminations made by high-level collaborators were made up (Lasseter & Rosenberg 2011). As discussed above, the low correlation between the in- and outdegrees indicates that detainees actually make a choice to talk or not to talk, regardless of their actual knowledge. Thus, remaining silent about others may be interpreted as an act of cooperation between detainees, which fits into the picture that "[t]here was a community of spirit among some prisoners. If one person was mistreated, others would refuse to eat or strike in support of him. Several detainees used the word 'solidarity' to describe their relationship with other prisoners" (Honigsberg 2009). Seen in this light, the behavior of the non-collaborators is reminiscent of a "live-and-let-live" system that may evolve in prisoner's-dilemma-like situa-

tions in which pursuing individualistic goals leads to collectively suboptimal outcomes (Axelrod 1984). Just as the feuding trench battle soldiers of WWI in Axelrod's famous example silently agree to shoot off target in order to mutually increase their survival chances (Ibid, 73-87), or as fear of retaliation can serve as an incentive to treat prisoners of war better (Wallace 2012, 958), the non-collaborators at Guantánamo may be remaining silent in the hope that others do the same, reducing the overall spread of incriminating information. The non-collaborators could then be described, in terms of Axelrod's *theory of the evolution of cooperation*, as "nice" behavioral strategies that can exist despite the presence of "meanies": "By doing so well with each other, a population of nice rules can protect themselves against clusters of individuals using any other strategy just as well as they can protect themselves against single individuals" (Axelrod 1984, 68). At Guantánamo this protection against other strategies (i.e. high- and low-level collaboration) seems to work relatively well, as 58.9% of the non-collaborators don't get incriminated by others and only 21.6% of those who don't get incriminated by others *do* incriminate others.

   While it is difficult to assess which of the two interpretations has more weight, and with due caution not to mistakenly impose thought processes on detainees' minds, both the screening problems and the "live-and-let-live" system constitute potentially useful explanations for the behavior of the non-collaborators.

High-level collaborators

High-level collaborators are those detainees who incriminate a large number of fellow prisoners (outdegree ≥ 5)[10]. They are the smallest group (7.8% of all detainees), but highly influential since their accusations have served as evidence in cases against other detainees (Lasseter & Rosenberg 2011). It is interesting to look at the behavior of this group in light of *power-dependence theory*, which was derived from social exchange theory by Emerson (1962) and developed further by Molm (1997) via experimental studies. This theory is concerned with

exchange relations in structures of mutual dependence. Such a situation is present at Guantánamo since interrogators depend on detainees for information and detainees depend on interrogators for well-being[11]. There is however a *power imbalance*, i.e. a "difference between two actors' dependencies on each other" (Ibid, 31), as the interrogators have a surplus in *reward power*, i.e. the "threat of withholding benefits" and *punishing power*, i.e. "the level of actual losses that an actor can impose on another" (Ibid, 282). In such a situation of dependence, Molm argues, the disadvantaged actor will do everything to keep the powerful actor's attention for rewards, small and inconsistent as they may be, due to "fear of loss" (Ibid, 160). This seems to match the behavior of the high-level collaborators. For instance, the DAB of one detainee who incriminated 21 fellow detainees states that "there are so many variations and deviations in his reporting, *as a result of detainee trying to please his interrogators*, that it is difficult to determine what is factual" (ISN 489, emphasis added). Another high-level collaborator "told CIA de-briefers in 2004 that he had earlier exaggerated his status in al Qaida *because he thought that's what American interrogators wanted to hear*" (Lasseter & Rosenberg 2011, emphasis added), while yet another detainee reported that some collaborators were "straying away from the truth, *trying to save themselves*" (Ibid, emphasis added). For this phenomenon to occur, it is not even necessary that interrogators indeed reward the detainees *strategically*; their *structurally* advantaged position may suffice. Moreover, the theory argues that disadvantaged actors will resort to coercion only as a "tool of last resort", i.e. sporadically and at a point where it can paradoxically only be ineffective (Molm 1997, 172). Accordingly, only 8 out of 62 high-level collaborators reportedly engaged in hunger strike. Our finding that disobedient behavior does not affect release chances also supports the idea that the Guantánamo detainees use disobedience as an "instrument of the weak", inconsistently and unsuccessfully.

Thus, power-dependence theory may proof useful for explaining the behavior of the high-level collaborators. From the perspective of mosaic theory, though, the validity of the infor-

mation obtained from this group of detainees must be questioned. If structural incentives force detainees to keep releasing information at any cost, at least some pieces of the resulting data puzzle are likely to be contrived.

Low-level collaborators

Low-level collaborators, who constitute the second largest group (29.6%), are those detainees who incriminate a small number of other detainees (outdegree = 1 to 4). A theory that could potentially help explain the behavior of these detainees is that of *learned helplessness* (Maier & Seligman 1976), which, as human rights activists lament, has been used purposefully as a "psychological tool" at Guantánamo "to condition detainees" (Amnesty International 2009). The theory states that "when events are uncontrollable the organism learns that its behavior and outcomes are independent, and that this learning produces the motivational, cognitive, and emotional effects of uncontrollability" (Maier & Seligman 1976, 3). Our finding that detainees cannot increase their own chances of getting release recommendations whatever they do indicates that such a situation of uncontrollability was indeed established at Guantánamo.

In contrast to the other two groups, the low-level collaborators show no intention to either actively protect their fellow detainees by remaining silent (live-and-let-live), or to impress interrogators by giving away extraordinary amounts of information (power-dependence). Instead, just as learned helplessness theory would predict, they are passive, collaborating whenever necessary but generally trying to behave unobtrusively. Consistent with this idea, low-level collaborators are also the group with the smallest average number of insubordinations (mean of 42.7 RDIs compared to 52.3 RDIs for high-level- and 55.1 RDIs for non-collaborators).

The main component of the network that originates from the accusations of the 236 low-level collaborators involves no less than 247 detainees (31.0% of all detainees). This is sur-

prising given that each single low-level collaborator can name only up to four other detainees. It indicates that mosaic theory works comparatively well for this subgroup of the detainees.

Summary and a note of caution

The discussion has shown that different logics may underlie the different behavioral patterns at Guantánamo. This fits not only Kaminski's idea of distinct "games" prisoners play, but also Axelrod's theory of the evolution of cooperation very well. Axelrod argued that if the "shadow of the future" is large, i.e. if actors expect interaction to continue for an undeterminable amount of time and the future has substantial weight, there is no single most rational behavioral strategy (Axelrod 1984, 15; Molm 1997, 163). At Guantánamo, an intentionally unspecified juridical space where almost no detainee knows if or when they will be released (Ratner & Ray 2004, 38), detainees must expect to be engaged in continued interaction for such an indeterminate period of time and consequently no single best way to behave emerges.

But a note of caution is necessary: as spatial and data limitations impede developing or testing the explanations put forward in more detail, the discussion must unavoidably remain inchoate. As stated before, we lack information on differences in actual knowledge, treatment, beliefs, psychological dispositions, intergroup conflicts, and intra-group agreements, which could all affect the behavior of detainees. It is for instance possible that some detainees were more likely to be tortured than others and that these detainees released more incriminating statements in the hope of escaping distress. Expressed in the language of power-dependence theory: we neither know how selectively interrogators used their "punishment power", nor if detainees have different degrees of susceptibility to it. Thus, we are not in a position to establish whether each and every detainee was guided by one of the behavioral mechanisms discussed or what precisely it is that makes a detainee act according to a certain logic in the presence of alternatives. The goal of this section was simply to show that different behavioral rationales are likely to be at work simultaneously at Guantánamo. We hope that despite its limi-

tations, this discussion provides valuable first suggestions on how to understand the behavior of the Guantánamo detainees from a social scientific perspective.

Conclusion

Based on a quantitative analysis of 765 JTF-GTMO-authored memoranda, this study examined the behavior of the Guantánamo detainees in terms of collaboration and disobedience and how it influences their chances of getting a release recommendation. Five findings should be highlighted:

(1) While the distribution of incriminating statements obeys a power law, almost two thirds (62.6%) of all detainees do not incriminate anyone.

(2) Yemenis and Saudi Arabians heavily over-contribute in terms of incriminating statements and disobedient actions, whereas Afghans and Pakistanis under-contribute. These disparities seem to result from compositional differences in terms of individual traits.

(3) By releasing information on others, detainees don't influence their own chances to get a release recommendation but decrease the chances of those they implicate.

(4) Disobedient behaviour does not affect the likelihood of getting a release recommendation, except for hunger striking, which has a negative effect.

(5) The assessed intelligence value, threat risk, and health status all influence the chances of getting a release recommendation, which directly contradicts prior research by Denbeaux et al. (2012).

 Based on this empirical analysis, three different groups of detainees were identified whose behavior can be interpreted as following distinct logics: non-collaborators remaining silent in attempts to establish a live-and-let-live system, high-level-collaborators pleasing their interrogators in hopes to improve their situation because of power-dependence, and low-level-

collaborators behaving passively due to learned helplessness. Mosaic theory was accordingly found to work comparatively well with low-level-collaborators, deficiently with high-level-collaborators, and not at all with non-collaborators. We hope that the data, findings, and theoretical considerations presented in this article will serve as a starting point for further research on the social microcosm of Guantánamo.

Appendix: Assessing the Denbeaux et al. nationality argument

The hitherto only piece of work that analyses factors that influence the release of detainees is Denbeaux et al. (2012), who argue that "the Department of Defense releases detainees without regard to anything except their nationality" (Ibid, 2) and that the reason for this is differences in the political relations between the US and the respective foreign governments (Ibid, 26-27). The authors base their argument on the fact that nationality is correlated with release chances, while all other variables they use are not. Here, we argue that their supposed correlation is likely to be a spurious one, resulting from the failure to control for other variables.

Table A1 shows two logistic regression models with release recommendation as response variable. Model 1 only contains nationality as an explanatory variable, separating the groups Denbeaux et al. examine. It shows that nationality indeed *seems to* influence the likelihood of getting release recommendations. Afghans, Pakistanis, Saudi-Arabians, Chinese and "other nationalities" all have a higher likelihood of getting release recommendations than Yemenis. Only the difference between Algerians and Yemenis is not significant. However, when adding individual characteristics as control variables, all national differences become non-significant (Model 2). When adding the additional variables in Model 2, the Pseudo-R² rises from .10 to .76, indicating a drastic improvement in the model fit. This indicates that, contrary to what

Denbeaux et al. claim, it is not political relations at an aggregate level, but individual characteristics and detainees' behavior that influence release chances.

While the fact that Denbeaux et al. use actual release dates and not release recommendations as dependent variable could partially account for the discrepant findings, it is more likely that their non-correlation between release and any variable except nationality results from defective measures and inaccurate methods. For example, the authors use the number of paragraphs which describe the charges against a detainee as an indicator of the severity of these allegations, without assessing their substantial content. Their claim that "the alleged level of danger" makes no difference concerning the chance of release (Ibid, 28) seems to result from such deficient coding, as our "threat risk"-variable is strongly negatively correlated with release recommendation (r=-.70, p<.001) and has a significant effect on the likelihood to get a release recommendation controlling for other variables (Table A1, Model 2). Furthermore, Denbeaux et al. only analyze correlations between two variables at a time, which means that spurious correlations are not sorted out.

(Table A1 about here)

Notes

1. Concerning collaborative behavior for instance, Mitschele (personal communication, 9 June 2012) finds that 1,878 out of 3,232 (58.1%) alleged "witches" in early modern Scotland (1563-1736) accused others of witchcraft during interrogations by persecutors, whereas Silverman (2001, 89-90) relates confession rates under torture of only 3-14.2% for early modern France (1600-1788). Cobain (2005) in turn reports that in the London Cage, during WWII a torture center for extracting information from German officers, 1,000 out of 3,573 men (28%) gave statements about war crimes. In "normal" cases of interrogation in the US today, studies find that 42-47% of all suspects confess or make admissions during interrogation (Gudjonsson 2003, 137).

2. For details on the SNA terminology used in this paper, cf. Wasserman & Faust (1994).

3. There are no precise official figures on the total number of Guantánamo detainees. A list released by the DoD in 2006 states that 759 prisoners were held at Guantánamo "from January 2002 through May 15, 2006" (OARDEC 2006). Worthington (2011) states that the total number is 779 (759 "old" detainees plus 20 new arrivals from 2006 to 2008). The fact that a total of 797 detainees (identifiable by their ISNs) are involved in our network of incriminating statements could mean that the total number of Guantánamo detainees is even higher than previously assumed, but it is also possible that the additional ISNs refer to detainees at other American prisons outside the US, where detainees were also given ISNs. Worthington (personal communication, 4 July 2012) states that the total number of Guantánamo detainees is 779 plus an unspecified number of high value detainees who were held in a secret CIA prison in Guantánamo for six months in 2003 to 2004 and that the DABs do contain ISNs of detainees from other prisons, e.g. in Iraq. We keep the additional detainees in the analysis because their omission would bias the knowledge of and claims against definite Guantánamo detainees.

4. Each detainee at Guantanamo is given an individual Internment Serial Number (ISN). This and similar ISN [X] references allude to individual reports which can be found in WikiLeaks (2011).

5. A quantity x is defined to obey a power law if it is drawn from a probability distribution $p(x) \propto x^{-\alpha}$, where α is a constant parameter of the distribution which usually lies in the range $2 < \alpha < 3$. The value x_{min} defines the lower bound of the power-law distribution (Clauset et al. 2009, 662; cf. Mitzenmacher 2004). The test is carried out using the Python script provided on Clauset's website (http://tuvalu.santafe.edu/~aaronc/powerlaws/, accessed 18/7/2012) together with an additional script written by Adam Obeng explicitly for this paper.

6. Using the capture instead of the transfer date as a base, Worthington (2008) estimates the number of minors at Guantanamo to be at least 22.

7. We do not differentiate between "affiliated", "associated", "member of", "links to", or similar expressions as they appear to be the result of imprecise use of language rather than distinct categories. The (lack of) evidence Denbeaux et al. (2012, 14) find with respect to this issue seems to support this decision.

8. The network of incriminations consists of 306 components, i.e. network fractions "in which there is a path between all pairs of nodes" (Wasserman & Faust 1994, 109), with a main component that involves 474 detainees. The fragmentation amounts to 0.647 and the component size heterogeneity is 0.646.

9. Clauset et al. (2009) rule out the power-law hypothesis when $p \leq 0.1$.

10. While a cut-off is analytically necessary, its location is arbitrary given the smooth transition between high- and low-level collaboration in the power-law distribution (cf. Fig. 1).

11. According to a CIA document, interrogators at Guantánamo used "conditioning techniques" to purposefully reduce detainees "to a baseline, *dependent* state" (CIA 2004, 4, emphasis added).

Supplementary material access

The online [appendices/data supplements/etc] are available at http://jcr.sagepub.com/supplemental.

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Table 1. Linear regression predicting the outdegree

	(1)	(2)
Nationality		
Yemen	2.895**	1.722
	(.806)	(1.305)
Pakistan	.334	-.058
	(.954)	(1.673)
Saudi Arabia	1.905*	2.092†
	(.774)	(1.219)
Other	1.925**	1.608
	(.663)	(1.073)
Transfer-year		1.884**
		(.488)
DAB-year		.114
		(.301)
Indegree		.490**
		(.134)
Threat risk		-2.355**
		(.791)
Intelligence value		2.864**
		(.685)
Detention risk		-.717†
		(.433)
Terrorist organization		
Al-Qaeda		.865
		(.957)
Taliban		-.543
		(1.318)
Other		.218
		(1.087)
Constant	.527	-4000.305**
	(.474)	(1162.986)
N	770	536
R²	.023	.144
Adjusted R²	.017	.123

Note: Omitted category for nationality is "Afghanistan"; omitted category for terrorist organization is "no affiliation". Main entries are OLS regression coefficients, standard errors are in parentheses. † p<.10 *p<.05 **p<.01

Table 2. Logistic regression predicting the log odds of getting a release recommendation

|	(1)	(2)	(3)	(4)
Outdegree	.000	.036	.035	.040
	(.014)	(.026)	(.026)	(.052)
Indegree	-.686**	-.276*	-.279*	-.273†
	(.062)	(.132)	(.137)	(.147)
Transfer-year		-.919	-.884	-.880
		(.591)	(.624)	(.625)
DAB-year		-.829**	-.822**	-.823**
		(.182)	(.193)	(.194)
Bad health (1=yes)		3.525**	3.687**	3.687**
		(.989)	(1.010)	(1.009)
Minor/elderly person (1=yes)		2.062†	2.227†	2.226†
		(1.224)	(1.301)	(1.302)
Threat risk		-3.719**	-3.644**	-3.641**
		(.458)	(.467)	(.467)
Intelligence value		-2.337**	-2.393**	-2.392**
		(.466)	(.480)	(.479)
Detention risk		-.089	-.102	-.103
		(.241)	(.241)	(.241)
Hunger strike (1=yes)		-2.184**	-2.290**	-2.292**
		(.627)	(.659)	(.659)
Terrorist organization				
Al-Qaeda			-.205	-.198
			(.575)	(.578)
Taliban			-.820	-.814
			(.972)	(.973)
Other			-.785	-.779
			(.690)	(.692)
Outdegree*Indegree				-.002
				(.020)
Constant	1.286**	3517.592**	3432.583*	3427.951*
	(.114)	(1315.82)	(1368.79)	(1369.41)
N	745	502	482	482
LR Chi²	250.20**	521.42**	500.62**	499.87**
Degrees of Freedom	2	10	13	14
Pseudo-R²	.25	.75	.75	.75

Note: Omitted category for terrorist organization is "No Affiliation". Main entries are log odds, standard errors are in parentheses. † p<.10 *p<.05 **p<.01

**Table A1. Logistic regression predicting the log odds of getting a release recommendation**

	(1)	(2)
Nationality		
Afghanistan	1.837**	-.131
	(.257)	(1.101)
Algeria	.182	.674
	(.466)	(.959)
Pakistan	1.700**	-1.097
	(.334)	(2.134)
Saudi Arabia	.553*	-.634
	(.266)	(.628)
China	3.738**	.871
	(1.043)	(3.659)
Other	.490*	.211
	(.249)	(.707)
Outdegree		.036
		(.026)
Indegree		-.250†
		(.132)
Transfer-year		-1.005
		(1.008)
DAB-year		-.881**
		(.200)
Bad health (1=yes)		3.371**
		(.987)
Minor/elderly person (1=yes)		2.188†
		(1.256)
Threat risk		-3.765**
		(.467)
Intelligence value		-2.530**
		(.491)
Detention risk		-.128
		(.246)
Hunger strike (1=yes)		-2.129**
		(.642)
Constant	-.693**	3794.48†
	(.199)	(2104.007)
N	745	502
LR Chi²	102.61**	525.07**
Degrees of Freedom	6	16
Pseudo R²	.10	.76

Note: Omitted category for nationality is "Yemen". Main entries are log odds, standard errors are in parentheses. † p<.10 *p<.05 **p<.01

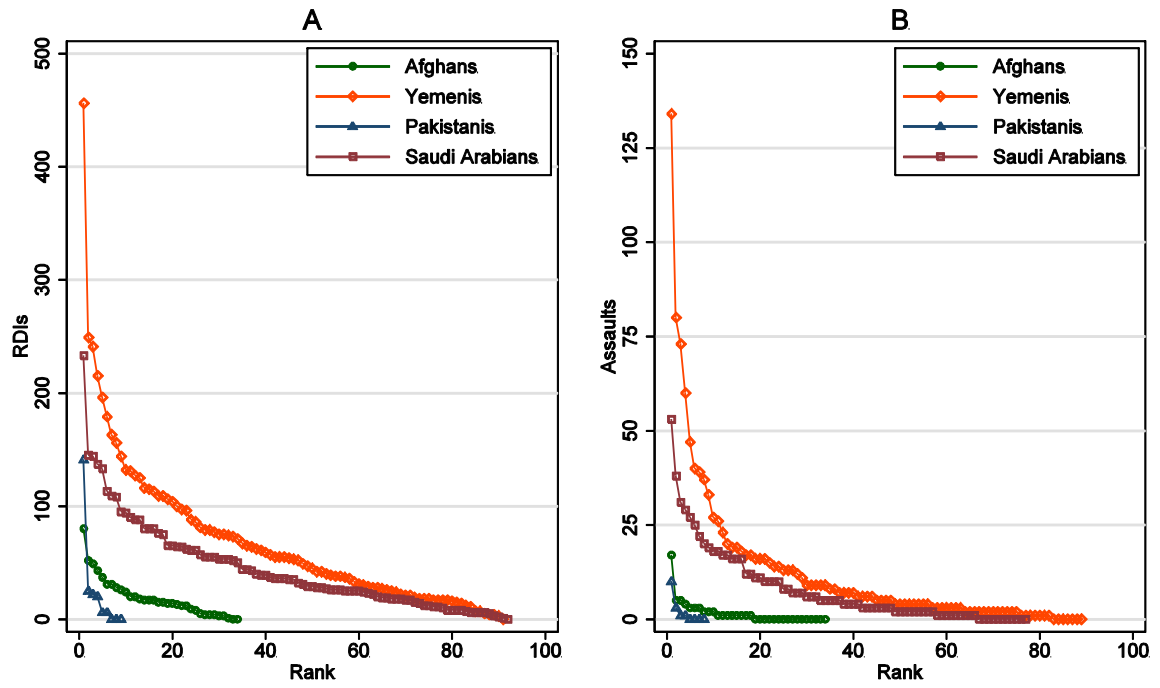**Fig. 1. The distribution of out- and indegrees**
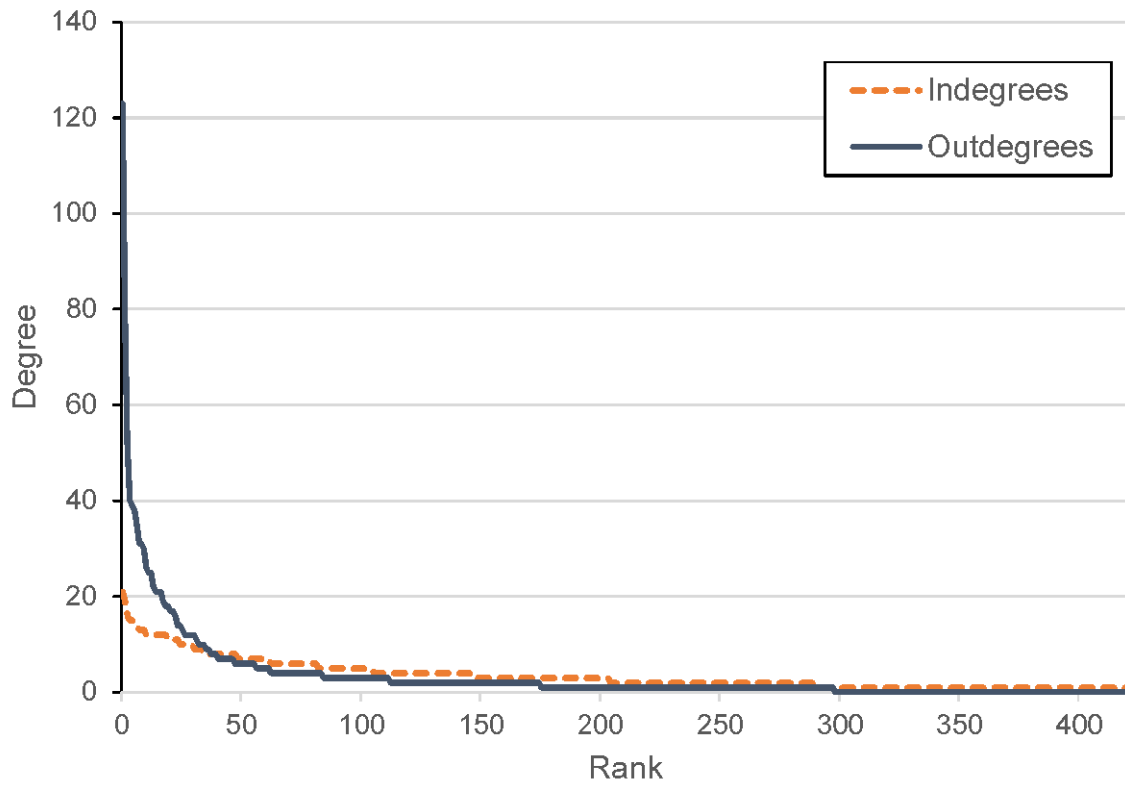
Fig. 2. Incriminations between detainees from the four largest national groups
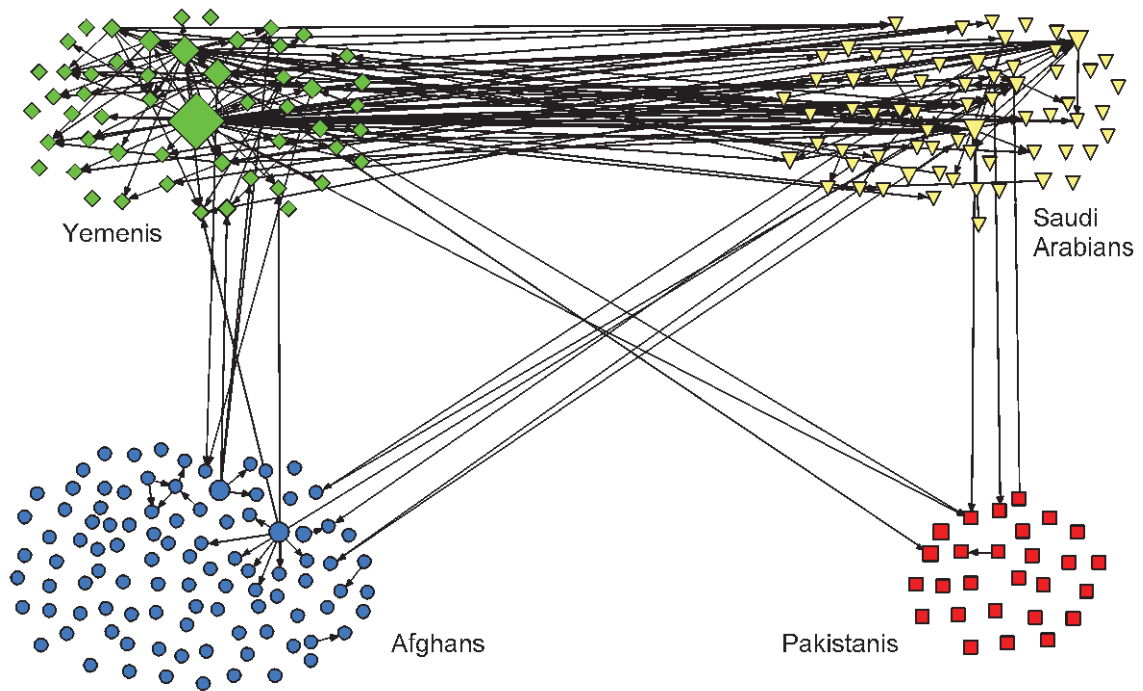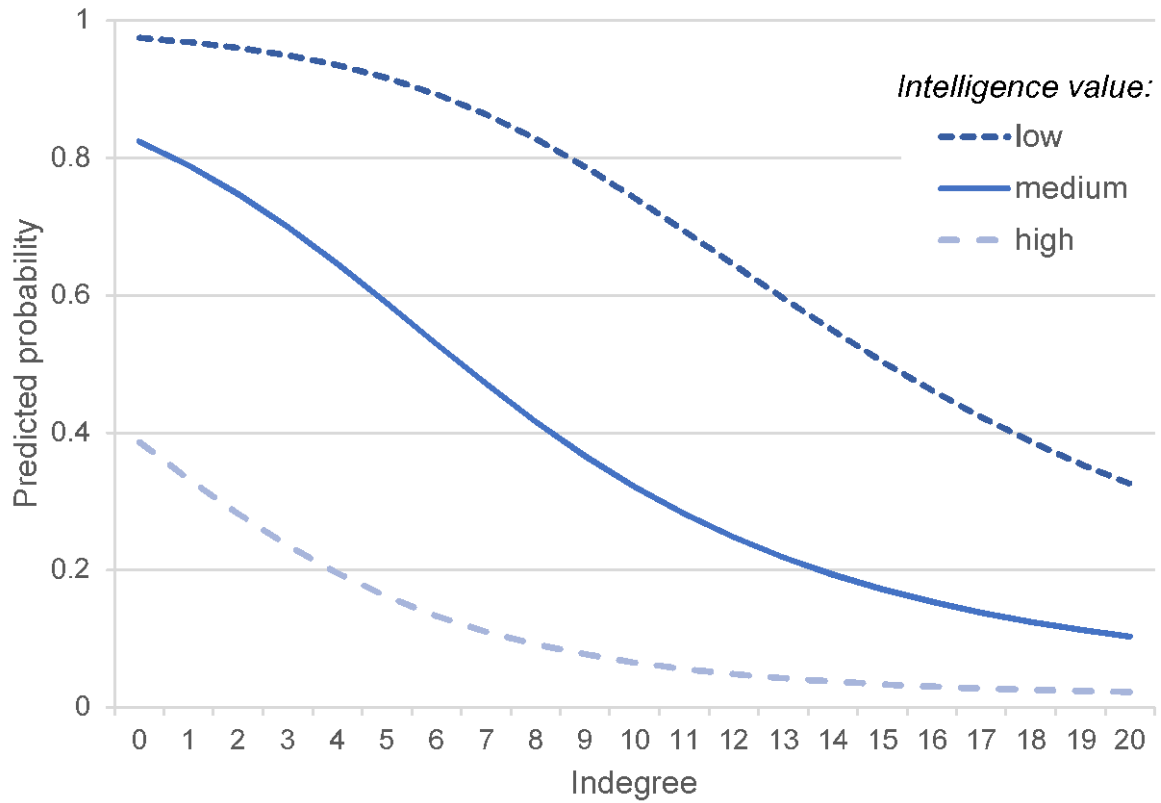

Note: The graph shows a sample of all nodes (N=244), taken by excluding every second year of birth.

Fig. 3. The distributions of RDIs and assaults for the four largest national groups

Fig. 4. Predicted probability of getting a release recommendation

Note: Predicted probabilities for a detainee with a mean outdegree (1.9), who is a medium threat risk, a low risk from the detention perspective, not at bad health, not a minor/elderly person, who has not been on hunger strike, who was transferred to Guantánamo in 2001 and whose DAB dates from 2008.