Challenging information scarcity

The effect of internet use on protest under authoritarian regimes

Ruijgrok, K.

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Challenging Information Scarcity

The Effect of Internet Use on Protest under Authoritarian Regimes
Kris Ruijgrok

This book investigates the relationship between internet use and anti-government protest under authoritarian regimes and shows that in spite of all the internet's shortcomings – including online repression by regimes themselves – internet use still has mobilising effects. While staying far away from any technologically deterministic claims about the internet, the study finds internet use plays especially in the early stages of the mobilisation process an important role: By challenging the information scarcity in authoritarian societies and exposing citizens to alternative political information online, internet users become more disillusioned with their own governments.

Kris Ruijgrok

Challenging Information Scarcity
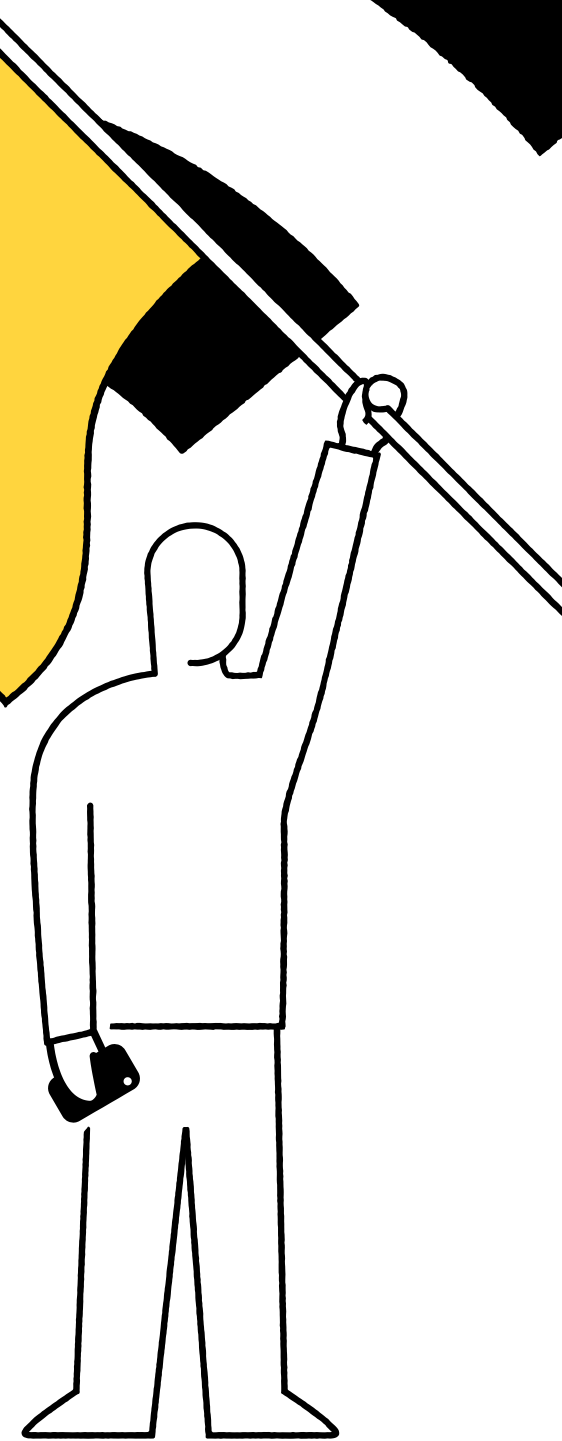
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ACADEMISCH PROEFSCHRIFT
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Promotiecommissie:

Promotor:	prof. dr. M.E. Glasius	Universiteit van Amsterdam
Copromotor:	dr. U. Daxecker	Universiteit van Amsterdam
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	prof. dr. R. Vliegenthart	Universiteit van Amsterdam
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	dr. J. Pan	Stanford University

Faculteit der Maatschappij- en Gedragswetenschappen

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Acknowledgements

It might sound pathetic – and perhaps it is – but when my supervisor-to-be Marlies Glasius called me in November 2013 to tell me I could join her research project as a PhD, I burst out in tears. Now that my PhD comes to an end, I still consider that moment as one of the happiest in my life. Every PhD project has its ups and downs, and so did mine, but I am glad to say that the last four years of working at the UvA were very exciting and enjoyable for me. The fact that I can call myself Dr. Ruijgrok from now on (and please feel free to do so) makes me proud, but would never have been possible without the support of many others.

A big, big thank you should go to all the people in Malaysia that made time for me and assisted me during my research in the country. Although the list of people that I owe gratitude to is long, I would like to mention the names of Gopi, Jo, King Chai and Masjalizah in particular for helping me find the right contacts and making me feel safe and at home in Kuala Lumpur. My successful cooperation with the Merdeka Research Center would moreover never have been possible without the amazing help, energy and assistance of Melu Mello.

Unexpectedly, a couple of weeks after handing in the final version of my dissertation, the Barisan Nasional coalition was brought down through national elections for the first time since 1957. I believe this dramatic turn of events makes most of my book's arguments even more relevant. But rather than for myself or the value of my research, I am extremely happy with the recent election results for those who suffered under the Barisan Nasional's repression in their struggle for protecting Malaysians' civil and political rights.

Back home, I would first of all like to thank Marlies Glasius for being an incredible supervisor in every possible way. Your confidence, flexibility, and commitment are unparalleled, and your bright, spot-on interventions and feedback have helped me tremendously throughout the process. As it is unfortunately no option to stay a PhD student under your guidance until my retirement, I also appreciate the time and effort you put into finding a new position for me and the others of our team. Ursula Daxecker, thank you for being the ideal daily supervisor and taking me by the hand in the academic universe. Your illuminating, analytical mind brought my work to higher standards, and pushed me to sharpen my thinking and arguments.

There is a long list of other people that I would like to thank at the UvA, beginning with the teachers I had during my time as a student. Brian Burgoon, your lectures and seminars had a huge (positive) impact on my younger self. Paul Aarts, thanks for being an amazing lecturer and inspiring me and many others around me. Andrea Ruggeri, thanks for showing me how to do sound (quantitative) research and believing in my abilities. Thanks also to Annette Freyberg-Inan, Armen Hakhverdian, Rens

Chapter 1
Introduction

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> "In Malaysia you saw that as the internet penetration increased, especially in urban areas, people started to vote quite heavily for the opposition. And for the last two years, online social media have only accelerated the awareness among the public. Malaysians don't really visit independent news website unless they're really politically inclined or interested in what's happening. But Facebook and WhatsApp make it really easy to share stuff and short messages like a paragraph, link or an infographic. So there's a lot of that going around now, even exposing Malaysians that are not politically interested to political materials."

> Interview with Malaysian activist Anil Netto, 15 February 2016, Penang.

Internet Use and Protest Under Authoritarian Regimes

The importance of profoundly understanding the drivers behind protest under authoritarian regimes is hard to overestimate. Mass mobilisation can be the prelude to dramatic political ruptures that affect the lives of many. This can be for the better, as Tunisia's Jasmine Revolution or Slobodan Milosevic' overthrow demonstrate, but protests can also be the overture of a nightmare, as revealed by the horrendous civil wars in Ukraine and Syria. Irrespective of whether protest movements succeed in achieving their goals, our concern here is the determinants of street protest, also because taking to the streets is one of the few ways through which repressed peoples living under authoritarian rule can voice their dissent.

Mobilisation not Democratization
The internet was heralded by cyber-optimists in the late 1990s as a 'liberation technology' that would undermine authoritarian regimes' traditional control over information and communication. Cyber-pessimists, however, have in later years downplayed the liberating potential of the internet, arguing that contemporary

authoritarian regimes can make the internet work to their own advantage by using it as a tool of repression. Moving on from early, oversimplified debates between cyber-optimists and pessimists, empirical studies over the past years have looked at whether internet use facilitates processes of democratization in authoritarian regimes, sometimes finding a positive effect for particular time periods (Best and Wade 2009), sometimes only for countries that are already partially democratic (Groshek 2009), but most often finding no effect at all (Groshek 2010; Groshek and Mays 2017; Rød and Weidman 2015). This is perhaps not overly surprising. If we examine various countries during the Arab uprisings, the turmoil in Moldova in 2009, the Green Revolution in Iran, or the Ukrainian Orange Revolution, one could say that internet use to some degree facilitated the process of bringing people onto the streets, but whether these protests also led to democratization had very little to do with the technology. The Egyptian case is illustrative in this regard. Many have argued that the internet and especially social media played an important role in the mobilisation of people to actively strive for various social-economic and political issues (Howard and Hussain 2011; Ghonim 2012). However, political developments that took place after the protests, and the question of whether a democracy was installed and/or sustained in Egypt, were likely more affected by factors other than internet use. For example, the refusal to use violence against protesters by the army, pressure from the international community and especially the US, the resignation of Mubarak, elections and the rule of the Muslim Brotherhood, enduring violence and the coup by the army were crucial in affecting whether Egypt became democratic or not, but had very little to do with the internet. In short, *if* a general trend as a result of internet use exists in authoritarian regimes, we are much more likely to find it by looking at mass protests than by looking into the eventual democratization of authoritarian regimes.

What Is Missing?

While an uncritical, unrestrained belief in the mobilising powers of the internet had a short revival with the Arab Spring protests, our knowledge on the topic has certainly not been stuck in the limitless cyber-optimism of the 1990s. Recent scholarly work has paid exhaustive attention to what authoritarian states are doing to control cyberspace (Deibert et al. 2008; 2010; 2012), and has profoundly analysed the ways in which internet use was important (or not) in particular protests (i.e. Lim 2012; Aday et al. 2012; Lynch 2011). And yet, despite some undeniable progress, my interviews with Anil Netto and others opened my eyes to some major flaws in our comprehension of the relationship that have previously been neglected.

First of all, we are often solely interested in what happens online just prior to, or during, a protest. For instance, studies look at whether Facebook or Twitter is used by protestors, whether the authorities block particular websites and platforms,

or whether the authorities even go as far as cutting off the entire internet (Tufekci and Wilson 2012; Wolfsfeld, Segev and Sheafer 2013; Hassanpour 2014). Though important, this is quite a narrow vision of what internet-enabled mobilisation *is*, as it overlooks the fact that internet use might have been critical in the mobilisation process by changing people's willingness to protest in the first place. As the opening quote from Malaysian activist Anil Netto illustrated, the use of the internet exposed Malaysians to information that they did not have access to before, thereby decreasing citizens' satisfaction with their own government, making them more susceptible to anti-government protest.

Secondly, we have developed a blind spot for the evolution of the technology itself. Most works rightfully acknowledge that contextual socio-political factors are very important in determining the internet's impact, yet few also account for the changing nature of the independent variable 'internet use' itself (Groshek 2010; Fielder 2012). This is unfortunate, since the internet has not remained similar throughout time. This was also illustrated by the opening quote where Netto remarked that in Malaysia, the rise of social media has been particularly important. Malaysians' increasingly started to share information with their peers on social media, and thereby also exposed Malaysians that were not politically interested to alternative political information.

Thirdly, although there is growing awareness of what states are nowadays capable of in cyberspace (Deibert et al. 2008; 2010; 2012), we are uncertain about what this means for internet-enabled protest. Increasing state control over cyberspace, sometimes even with a specific focus on hindering collective action (King, Pan and Roberts 2013), does not come across as good news for activists and protestors making use of the technology, yet whether internet use can still facilitate anti-government protesting in the face of on- and offline repression is something we simply know very little about.

Fourthly, and perhaps most problematically, almost everything we know about the relationship is based on studies of the Arab Spring. The above-described progress in our understanding of the topic therefore mainly concerns our grasp of what happened in these specific uprisings. Whilst it is of course great that we now know so much about whether or not internet use facilitated these uprisings, it has led to the undesirable situation in which a discussion on the topic is often conflated with one of the causes of the Arab Spring. Too often the Arab Spring findings are conveniently generalized to hundreds of other protests that have taken place under authoritarian rule (Schedler 2016), without any empirical grounds to rightfully do so.

How Internet Mobilizes under Authoritarian Regimes

This research moves beyond the Arab Spring uprisings with a general study into how internet use affects anti-government protest under authoritarian regimes. Its core contribution to the literature is twofold. First, rather than the democratization of authoritarian regimes, my study investigates whether internet use promotes anti-government protest. It provides systematic evidence that this is indeed the case, and reveals that authoritarian regimes' online repression is ineffective in reversing this trend, as well as that authoritarian states with relatively mild repression are most susceptible to internet-enabled protest. The second core contribution of this research is in tracing the causal mechanisms that link internet use to anti-government protest. By breaking up the causal chain between internet use and protesting into three separate steps, a profound investigation becomes possible into the internet's role in different stages of the mobilisation process. While my study finds that the extent to which internet use facilitates mobilisation differs in these three stages, as well as across different authoritarian contexts, a common thread throughout the analysis is the internet's challenge to *information scarcity* in authoritarian regimes. The regime's control over the media and citizens' inability to talk freely, traditionally limited the existence of a public sphere independent from the state, yet by increasing citizens' access to alternative political information, either long before, just before, or during an anti-government protest, internet use can in particular circumstances promote mobilisation.

My research finds most evidence for the internet's facilitative role in the first stage of the mobilization process. I show that in Malaysia, as well as in other authoritarian regimes, online information offers citizens living under authoritarian rule a different perspective on their own government, thereby making them more susceptible to anti-government mobilisation. I explain this by the relative freedom that the internet offers compared to traditional media, despite all of the internet's shortcomings. Whether authoritarian regimes cannot control the internet as strictly as traditional media, or deliberately leave some space online, is an intriguing question that follows from my findings.

In the second stage of the mobilization process, I explore whether internet use makes it easier to inform citizens about an upcoming anti-government demonstration. My research shows strong evidence here for a facilitative role of internet use, and social media in particular, in the case of Malaysia, but finds it less likely that similar dynamics apply to more repressive authoritarian regimes. In Malaysia, a call for protest spreads easily throughout society over social media, but in authoritarian societies where people do not dare to share political content, where they do not know or trust the movement that is behind the call, or where

the authorities can block access to particular content or cut off the entire internet, social media is less likely to facilitate the informing of people about an upcoming protest.

In the third stage of the mobilization process, I look at the decision-making of people prior to a protest, but here my research finds the least evidence for a facilitative role of internet use. Various causal mechanisms are explored which suggest that online information can give individuals the final push to take to the streets, yet just one mechanism is revealed to have some explanatory value in the Malaysian case. Namely, it is only through social media use that Malaysians become more susceptible to peer pressure, making them more likely to come into action if they see online that their friends are doing so.

Empirical Approach

My empirical approach was one of mixed methods, combining the best of both quantitative and qualitative approaches. In my research I moved from large-n country year analyses to in-depth exploratory qualitative fieldwork and then back again to a quantitative analysis of multiple authoritarian regimes.

The large-n quantitative studies, both at the country and the individual level, allowed me to investigate the internet's direct effect on anti-government protest systematically. To investigate the causal mechanisms, however, I 'went' qualitative, as the necessary quantitative data was mostly unavailable, and perhaps even more problematic, it was hard to know where to look as almost all causal mechanisms I had in mind were solely based on accounts of the Arab Spring. In order to examine the processes between the independent variable 'internet use' and the dependent variable 'protest', my research therefore conducted an in-depth case study of Malaysia, with two periods of intensive fieldwork. Initially this fieldwork was quite exploratory, mainly consisting of interviews with Malaysian activists and protestors. As my ideas on the mechanisms further crystalized over time, at a later stage I was able to examine the mechanisms in a more rigorous manner using Malaysian survey data. Some of this data came from an original nationwide survey that was specially commissioned for this research.

The aspect that makes my research distinct from most mixed-methods designs, in which regression analyses are combined with an in-depth case study, is that I made the 'full circle' by also taking the case study findings back to the large-n regression analyses comparing multiple countries. By using individual-level survey data, some of the most important Malaysian findings were tested in multiple other authoritarian regimes, thereby empirically examining their wider applicability.

An In-Depth Case Study of Malaysia

There were three primary reasons for selecting Malaysia as my case to do in-depth research into the causal mechanisms. First of all, I choose Malaysia because of its authoritarian nature. Ever since independence from the British in 1957, the multi-ethnic Barisan Nasional (BN) coalition has held sway over an ethnically divided country, mainly consisting of Malays (69%) with Chinese (23%) and Indian (7%) minorities (Department of Statistics 2018). With its 61-year-old long rule, BN holds the dubious record of being the longest sitting government in power worldwide. While Malaysia does not resemble a North-Korean-style polity, making other authors label Malaysia's regime as 'electoral-', 'competitive-', or 'semi-authoritarian' (Schedler 2006; Levitsky and Way 2010, Ottaway 2003), I argue that the regime in power violates important democratic conditions to such an extent that it should be seen as nothing less than an authoritarian regime. In order to remain in power, BN has –among other things- jailed the charismatic and popular opposition leader Anwar Ibrahim, manipulated the electoral system, used endless divide and rule tactics over the ethnically divided opposition, and frequently coerced civil society (Schedler 2006; Case 1996 in Yangyue 2011). Most crucially for my research, the Malaysian regime violates citizens' right to access alternative information, as well as their freedom of speech, by either directly or indirectly controlling all traditional media (Brown 2005; Abbott and Givens 2015). The net result of this is a very limited circulation of alternative political information, causing a Malaysian society that suffers from information scarcity. As Chapter two will further explain, it is this information scarcity, characteristic of authoritarian elites, that can be challenged by citizens' internet use.

Besides its authoritarian nature, including information scarcity, another reason for choosing Malaysia was that there were six outbreaks of mass protest between 1998 and 2016, while internet use rose from 3% to close to 80% in the same period. During the Reformasi protests in 1998-1999 internet use was scarce (3%), in the first Bersih protest (2007) internet use had already grown to over 50%, whereas in the four subsequent Bersih rallies (2011, 2012, 2015, 2016) there was both high internet *and* high social media usage. The different levels in internet and social media use across protests formed an interesting starting point to explore whether and how internet use has changed protest under authoritarian regimes. The relatively short interval between the Reformasi (1998-1999) and the last Bersih protest (2016) furthermore made it possible to speak to Malaysian activists that experienced these changes in technologies first hand. Figure one below shows the percentage of the Malaysian population using internet and Facebook -which is by far the most popular social media platform in Malaysia- as well as the anti-government protests. As one can see, internet use has risen steadily in Malaysia since the late 1990s, with roughly 78%

of the population using the internet in 2016. Social media, by contrast, only really started to be used around 2009 and has quickly grown in popularity since then with around 60% of the population using Facebook in 2016.
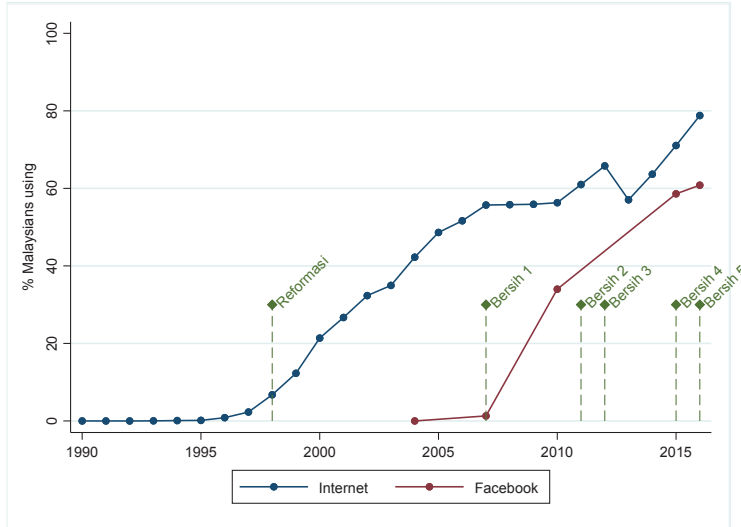
Figure 1: Internet, social media, and anti-government protest in Malaysia

Note: The drop in internet use in 2013 is due to a change in measurement. Until 2012 the numbers refer to the total population, since 2013 only the population aged 15+ is included (ITU Statistics 2018). There is no over-time data available on Facebook usage in Malaysia. The data points for the years 2004[1], 2007[2], 2010[3], 2015[4] and 2016[5] therefore come from multiple sources.

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1   "Facebook: 10 years of social networking, in numbers," The Guardian, https://www.theguardian.com/news/datablog/2014/feb/04/facebook-in-numbers-statistics (26 February 2018).

2   The share of world internet users in Malaysia is 0.6% according to the website Internet Live Stats (http://www.internetlivestats.com/internet-users/malaysia/ 22 February 2018) which uses ITU statistics. Facebook had 58 million active users worldwide in 2007 according to The Guardian. Thus, as a rough estimation one can expect around 0.35 million Malaysians had a Facebook account in 2007.

3   Lim Yung-Hui, "Facebook Hits 70% Penetration Rate in Malaysia," Forbes, http://www.forbes.com/sites/limyunghui/2011/12/20/facebook-hits-70-penetration-rate-in-malaysia/#7ab34dbd18d3 (4 January 2017)

4   "Mobile Internet and social media in Malaysia," Asean Up, http://aseanup.com/mobile-internet-social-media-malaysia/ (4 January 2017).

5   MCMC Report. "Internet Users Survey 2016," https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/IUS2016.pdf (23 March 2018).

Also the on- and offline repression show interesting changes in the period 1990-2016. Whereas Prime Minister Mahatir Mohammed ruled the country with an iron first until 2003, under Abdullah Badawi's reforms (2003-2009) Malaysia's political climate became less oppressive. Najib Razak, who succeeded Badawi after BN performed badly in the 2008 elections, initially presented himself as a moderate liberal, but after he came under increased pressure in 2015 due to his alleged involvement in a massive corruption scandal, he increasingly started to crack down on his critics (Human Rights Watch Report 2016). Interestingly, Malaysia's online repression does not run parallel to its repression offline. As Chapter four will discuss in much detail, the BN government deliberately refrained from intervening in cyberspace when internet use was in its infancy, believing intervention would scare off foreign economic investors. After its poor performance in the 2008 elections, however, the government concluded that the political costs of leaving cyberspace unregulated had become too high. Ever since then, the authorities have stepped up their game in cyberspace, employing strategies and tactics that are common to many other authoritarian states. In short, there were five mass protests in Malaysia in the period 1998-2016, with very different levels of internet use, social media use, as well as on- and offline repression, which allowed for or an in-depth study into how these phenomena affected the protests.

The third and last reason to choose Malaysia was more pragmatic in nature: it was a safe enough authoritarian context to conduct in-depth fieldwork. As Glasius et al. (2018, 22-23) explain, there are limits to what can be researched in authoritarian regimes. Not only because there are certain taboo topics ('red lines') that cannot be discussed, but also because in the most repressive regimes it is either impossible or too risky to enter the country as a researcher in the first place. In order to make sure that the exploratory fieldwork I had in mind could succeed in Malaysia, I read many academic as well as non-academic publications, and spoke to various people with relevant expertise. These exploratory investigations provided me with the necessary insights into some of the fieldwork's do's and don'ts, but also ensured that researching my topic 'on the ground' in Malaysia was possible and not irresponsibly risky. Another more pragmatic advantage of picking Malaysia was that my interviews could be held in English. As a consequence of Britain's colonial heritage, roughly 60% of the Malaysian population speaks English.[6] Among the Malaysians that I wanted to speak to, namely those who were involved in the Reformasi and Bersih protests, this number was likely to be much higher as both protest waves (especially Bersih) were mostly attended by higher educated urban dwellers. Illustratively, during my

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6   "Malaysia number 13 on World English Proficiency English," Free Malaysia Today, http://www.freemalaysiatoday.
     com/category/nation/2017/12/01/malaysia-number-13-on-world-english-language-proficiency-index-2/   (22
     March 2018).

fieldwork there was never a potentially interesting interviewee that could not be interviewed because of language issues. Admittedly, the limited English of some of my respondents did hamper the quality of the interviews with them, but I believe my inability to speak the local tongue was not a threat to the validity of my research. Moreover, without claiming that English is neutral, speaking in Bahasa Malaysian would also not be problem-free: Bahasa Malaysian has actively been promoted as the nation's language by the Malays, thereby being in constant tension with the Chinese and Indian minorities who speak other languages (mostly Mandarin and Tamil) and who often perceive promotional efforts of Malay language and culture as a direct challenge to their minority rights (Weiss 2006). Using English -despite its colonial denotations- might therefore be a safe choice for conducting political interviews in Malaysia's ethnically highly divided society.

How I Did Fieldwork in Malaysia
A strength of my Malaysian fieldwork (Jan-Mar 2016, Nov 2016) is that it combined initial exploratory work with more rigorous hypothesis testing at the end. In total I held 45 semi-structured interviews in Malaysia, primarily with Malaysian activists and sympathizers of an anti-government protest movement, but also with Malaysian journalists, academics and politicians. In line with most existing literature on the relationship, the interviews focused initially on the role of the internet when activists start to mobilize for a rally. It was during the exploratory interviews, however, that I found out this focus overlooked how internet use changes Malaysians' political ideas by exposing them to new information. This finding, as well as plenty of other insights, gave me more guidance on where to look for the causal mechanisms, led to more focused interviews, and even resulted in hypotheses testing with nationwide survey data. To do these tests, I made use of some well-known data sources, and also relied on data from the Malaysian Merdeka Research Center. A collaboration with this research company even allowed me to ask questions in a nationwide survey myself, to examine some specific causal mechanisms.

There is a difference between the activist and sympathiser interviews in terms of what could be concluded on the basis of them. With the 22 activist interviews, I am confident I came close to theoretical saturation (i.e. no new stories), making this empirical material sufficient to draw conclusions from. By contrast, the 17 sympathiser interviews were great as an exploration, but due to the snowball sampling and small number less solid on their own. Here the exploratory interviews needed to be complemented by a nationwide survey to substantiate the findings.

A possible limitation of the sympathiser interviews is that it was hard to get information on the emotions that led to the decision to join a protest. Although I tried to encourage interviewees to speak openly about emotions, for instance by

stressing that I myself would be scared or angry in their situation, many interviewees seemed keen to present themselves as smart, rational and analytical, rather than driven by emotions. This might also be a result of my convenience sample that mostly consisted of higher-educated, urban people that I could speak to in English.

While all my interviewees were given the option to remain anonymous, few found this important. As the upcoming chapters will demonstrate in more detail, the Malaysian context is doubtlessly repressive, yet not to such an extent that people generally keep their mouth shut or are afraid to speak out in an interview with a foreign academic. Activists are therefore cited by their real name in this research. The worry that they might in the future get into trouble because of statements made in my research is very unlikely, because the interviewed activists are already publicly known for what they stand for, and neither they nor I consider their interview quotes as politically sensitive. For the 'ordinary' protest sympathizers that I quote, I do use pseudonyms however, even when they themselves did not find this necessary. In contrast to the activists, these interviewees are not publicly known for their political ideas, making them possibly vulnerable in the future because of their statements in my research.

My interviews were recorded, transcribed and later analysed using NVivo software. In the few interviews where people did not feel comfortable with being recorded, I took notes. To store the interview transcripts on my PC and a (back-up) USB stick, I again made a distinction between the activists and protest sympathizers. Whereas the activists were mentioned in the transcripts by their real names, the ordinary protestors were pseudonymised, with their real names listed in a small hard-copy notebook that I kept in a safe place.

Finally, although I am interested in state repression as a contextual condition, I did not interview state officials because generally speaking they do not easily share politically sensitive information. I do not consider this to be a fatal flaw in my research, however, since what government officials do in cyberspace, and why they do it, was not my focus. State repression, both on- and offline, interests me as a contextual condition that needs to be taken into account to understand the internet's impact on the mobilization process, but is not something that I try to explain in and of itself. Moreover, secondary literature focusing on Malaysia's repression, as well as my interviews with Malaysians that suffered from repression, gave me sufficient insight into Malaysia's repressive practices.

Outline of the Thesis

The thesis is structured as follows: Chapter two defines the key concepts, introduces the two research questions, and proposes a theoretical framework –the mobilisation chain- to study the causal relationship between internet use and protest in separate stages. The chapter also presents the two contextual factors that moderate the internet's effect throughout all stages of the mobilization process: State repression, and the use of social media.

The empirical chapters, Chapters three until seven, follow the 'full cycle' of the mixed methods approach by starting the investigation quantitatively, going in-depth qualitatively in Malaysia, and ending with testing the most compelling hypotheses quantitatively again in multiple authoritarian regimes.

Chapter three demonstrates quantitatively a positive, direct effect of internet use on anti-government protest, both at the country and individual level of analysis. It furthermore reveals that the effect is stronger in authoritarian regimes than in democracies, and that the effect does not diminish over time. The chapter also shows that authoritarian regimes with some limited freedoms are most susceptible to internet-enabled protest, and finds no evidence that the state's online repression effectively prevents the internet's direct effect.

Chapter four is the first out of three Malaysia chapters that are structured on the basis of the three steps in the mobilisation process. In Chapter four I investigate whether internet use makes Malaysians more prone to protest by exposing them to more alternative political information. The chapter not only demonstrates the effect empirically, but also explains it by showcasing the relative freedom of the Malaysian internet compared to the traditional Malaysian media, and explains why the Malaysian authorities initially did not want to, and later could not control cyberspace as strictly as they could control Malaysian newspapers, radio and television.

Chapter five examines the extent to which internet use facilitates the process of informing Malaysian protest sympathizers about an upcoming demonstration. It does so by studying four waves of Malaysian anti-government protest: The Reformasi protests at the end of the 1990s, the first Bersih protest in 2007, Bersih two and three in 2011 and 2012, and Bersih 4 in 2015. Through interviews with 22 Malaysian activists, the chapter provides insight into how social media, rather than internet use as such, has changed the mobilisation process, and also reflects on the necessary conditions for social media to be facilitative.

Chapter six studies the role of the internet in pushing Malaysian protest sympathizers onto the streets just prior to a protest. Using qualitative interviews and an original nationwide survey, the chapter analyses the decision-making of Bersih sympathizers around going to a risky anti-government demonstration. The chapter

tests various causal mechanisms empirically, and thereby also shines a light on the conditions under which particular mechanisms are likely to have explanatory value.

Chapter seven completes the cycle of the mixed methods approach by taking the insights from the Malaysian case back to other authoritarian contexts. Here, the Malaysian' findings external validity are examined with new empirical tests that use survey data, as well as by using secondary literature. The chapter thereby provides more empirical proof for the causal mechanisms that explain the positive direct effect identified in Chapter three, as well as reflects on their scope conditions.

Chapter eight concludes by discussing all findings collectively and reflects on the findings' implications for authoritarian sustainability. It ends by giving some recommendations to civil society actors.

Chapter 2
A Theoretical Framework

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This chapter proposes a theoretical framework to study the relationship between internet use and anti-government protest under authoritarian regimes. While the chapter suggests that investigating the overall relationship is needed to gain insight into broader trends, it argues that a disaggregation of the mobilisation process is needed to acquire a profound understanding of the causal mechanisms and the conditions under which they are likely to hold. Staying away from both technological determinist ('the internet always causes'), as well as social determinist ('it always depends on the context') points of view, the chapter introduces 'the mobilisation chain' as well as two important contextual conditions that set the stage for a thorough, empirical study into the relationship.

The chapter commences with a brief discussion on the concept of authoritarianism, and subsequently argues that it is the condition of information scarcity in authoritarian regimes that enables internet use to potentially challenge the political status quo. After a discussion on the scholarly debate of the topic, my own project carves out its contribution by offering a framework that allows for a thorough investigation into the relationship between internet use and anti-government protesting, including a deeper interrogation of the causal processes. In its last section, the chapter proposes two contextual conditions –the level and sort of state repression, and the use of social media– that are likely to moderate the causal mechanisms in the mobilisation chain.

Authoritarian Regimes and Information Scarcity

A study looking into the internet's political consequences for authoritarian regimes cannot start before a clear definition of what is actually meant by the term 'authoritarianism'. Originally deriving from the Latin 'auctoritas', meaning authority, but also influence, sanction, advice, origin, and command, it was only in the 1970s that authoritarianism started to receive conceptual attention from political scientists as a category of states that fell in between democracies and totalitarian regimes. Although Linz ([1975] 2000) conceptualized authoritarianism without reference to its democratic counterpart, the term has since mostly been used by scholars as a synonym for a *non-democratic* government (Brooker 2009). This is the strand of

literature that I will follow in this research, making it imperative to clearly define democracy to give meaning to the notion of authoritarianism

Schumpeter ([1942] 1950) famously defended a minimal definition of democracy that requires only the regular competition of political representatives over the people's vote. While acknowledging the usefulness of this definition for its analytical precision and boundedness,[7] I argue –in line with the Dahlian school of thought– that in addition to free and fair elections, a set of civil liberties needs to be present in order to make political contestation meaningful. In other words, free and fair elections cannot truly be free and fair if there is no freedom of association, freedom of expression and free access to information. All citizens must enjoy "unimpaired opportunities" to "formulate" their political preferences, to "signify" them to others and to have them "weighed equally" in public decision-making (Dahl 1971, 2 in Schedler 2013).

Building on Dahl's abstract notions, Schedler (2013) proposes seven concrete conditions that need to be met in order to speak of a democracy. First, democratic elections need to authorize access to state power: Elections are not held to pick the national football coach or the winner of a beauty contest. Their purpose lies in the binding selection of the polity's "most powerful collective decision makers" (Huntington 1991, 7 as cited in Schedler 2013). Second, citizens must be free to form, join, and support parties with alternative visions of the common good and conflicting policy options. As Schedler (idem, 85) himself describes it, "the range of available alternatives must not be engineered by a manipulative government, but determined by active citizens themselves within a framework of fair and universal rules" (idem). Third, citizens need to have access to alternative sources of information. Only if voters have the opportunity to learn about alternative ideas and policy choices can they truly make a meaningful, informed political judgement at the ballot box. Fourth, all citizens must have equal rights of participation in the political community. In modern democracies, "the demos is supposed to include the entire adult population of permanent residents in a given territory" (idem). Fifth, citizens need to enjoy the freedom of expression to articulate their own political ideas and electoral preferences. Secrecy at the ballot box furthermore needs to protect people against outside pressure or coercion (idem). Sixth, votes must be counted honestly and be weighted equally. Fair elections therefore also require a certain level of bureaucratic integrity and professionalism in the administration. Seventh and last, elections need to have consequences in the sense that the winners of elections get access to state power. "Winning parties and candidates must be able to assume office, exercise power, and conclude their terms in accordance with constitutional rules" (idem, 85-86).

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7   This understanding of democracy with a sole focus on political contestation (i.e. elections) has been supported by, among others, Alvarez et al. (1996), Cheibub et al. (2010), Przeworksi (1999) and Svolik (2012).

Following Schedler, I see these seven conditions forming a 'democratic chain'. If any one of the seven conditions is violated, the democratic chain gets broken and the political system becomes not less democratic, but authoritarian. A state can only be marked as democratic if and only if all of the seven prerequisites are met. Whilst this means that from a theoretical point of view a political system can be authoritarian because merely one of the seven democratic conditions is violated, it is rare to see this in practice. If the democratic chain is not intact, one finds in most empirical cases it has been broken at multiple places.

Why -from a political point of view- do we expect internet use to change anything in authoritarian regimes in the first place? The answer to this question finds its roots in authoritarian states actively breaking the democratic chain's third and fifth condition. As a strategy to stay in power, authoritarian regimes vigorously violate citizens' right to alternative sources of information and freedom of expression, resulting in *information scarcity* in their societies. With the term information scarcity, I refer to the absence of alternative political information in society, which closely relates to the lack of, or a severely restricted Habermasian notion of the public sphere, understood as the virtual or imaginary community "made up of private people gathered together as a public and articulating the needs of society with the state" (Habermas 1962, 176). As there is no site independent of the state that allows for the "production and circulation of discourses that can in principle be critical of the state" (Fraser 1990, 57), citizens living under authoritarian rule face information scarcity.

Schedler (2013) identifies three contributing factors to this information scarcity. First, it results from a regime's attempt to control public information flows in society by monopolizing traditional media institutions. Through this, a regime can actively manipulate the information that is transmitted through television, radio, and newspapers, thereby preventing any information questioning the legitimacy of the regime from reaching the masses, whilst simultaneously feeding the state's subordinates with state-induced propaganda (see for instance Friedrich and Brzezinski [1956] 1961 or Arendt [1951] 1962, 326). Although the effects of state propaganda on citizens are not unambiguous —subordinates do not swallow everything the state feeds them (see for instance Geddes and Zaller 1989, Wedeen 1999 or Huang 2015) strict control over traditional media does contribute to a "poor information environment" (Magaloni 2006, 236). If every television channel, radio station, or newspaper ventilates the same state-instructed discourse, information scarcity is the logical result.

The second contributing factor to information scarcity is that, generally speaking, public politics in authoritarian regimes takes place behind closed doors. Whereas in democracies only a limited number of policy issues are discussed in secret, these being the exception rather than the norm, authoritarian elites mostly operate in

"clandestine darkness" (Przeworski 1982, 25). More often than not, very little is known about "who decides what, when, how, and why" (Schedler 2013, 38), as the authoritarian elite "is not subject to external institutional constraints that compel it to publicize its internal procedures" (Barros 2016, 955).

Third and last, violation of citizens' freedom of expression and belief is also conducive to information scarcity. It leads to mass "preference falsification" in society (Kuran 1995). In authoritarian regimes, "everybody plays roles, wears masks, measures her words, calculates her deeds, or can be assumed to do so" (Schedler 2013, 38), as the costs of not doing so are sometimes very high. Fear of reprisals makes citizens think twice before publicly articulating their true political preferences. Although the falsification of political preferences is an inevitable necessity for every life-loving individual living under authoritarian rule, the societal consequence is the creation of "a disjointed collection of private opinions that are mutually ignorant of each other" (idem, 39). In line with this, Wintrope (1998) notes that the scarcity of the information environment can be understood as a function of the dictator's power: the mightier the dictator, the more fearful people are to talk, the less he will be able to know about what his subordinates really think.

The Internet: Breaking Information Scarcity?

Newspapers, radio and television were (and still are) relatively easy for authoritarian elites to control. The 'one-to-many' network structure of these media, with one central node sending information to a large group of receivers and no option for receivers to send anything in return, was ideal for bombarding voiceless citizens with state messages and keeping the information environment scarce. Moreover, the technical, political and economic resources needed to become a central node were large, effectively limiting the broadcasting capacity only to the state –as was the case in Nasser's Egypt (Amin 2002) or Burma in the 1970s and '80s (Chowdhury 2008, 7)– or to a small group of actors that through cooptation and repression could often be easily manipulated by the regime, as was common practice in Franco's Spain (Gunther, Monteiro and Wert, 1999).

In the 1990s and early 2000s, various scholars, and moreover journalists and policymakers, asserted that the introduction of the internet was going to end information scarcity in authoritarian regimes, and hence authoritarians' grip on populations. Two features of the internet were deemed responsible for this. First was the internet's global and borderless nature. Whereas the traditional mass media were primarily operating within nation-states, the internet's technical set-up, in principle, supposedly did not recognize national borders. The internet, at its core a system of interconnected computer networks that use the internet protocol suite (TCP/IP) and

packet switching, could link devices worldwide.[8] With an internet connection, it would become as easy to exchange information with someone at the other end the world as with your neighbour. As a consequence, online information was expected to travel easily across the planet, transforming the world of nation-states into a global village, thereby flooding information-scarce authoritarian states with all sorts of information.

Second, there was the idea of many-to-many communication (Castells 2001), meaning that every individual internet user could potentially start to act as a receiver and as a broadcaster at the same time. As opposed to the earlier described one-to-many networks, the internet did not require major political and economic resources or privileges to become a central node in a network. Its horizontal network structure, moving information back and forth between users, did moreover not make any a priori assumption about who the sender is and who the receiver is. Everyone with an internet connection became a potential broadcaster. According to advocates of this idea, this would further limit authoritarian states' monopoly on mass communication, making it increasingly difficult to isolate dissident voices and hence to keep citizens voiceless and ignorant.

Based on these two attributes, former president Bill Clinton became an outspoken cyber-optimist, believing that the internet was inherently a force for democracy, an idea with which many leading business people and media commentators in the late 1990s concurred (Kalathil & Boas 2003, 1) Likewise, Clinton's successor in office George W. Bush asserted that the internet would bring freedom to China, while former Secretary of State Colin Powell stated that "the rise of democracy and the power of the information revolution combine to leverage each other" (idem).

An unbridled belief in the benevolent powers of the internet –dubbed by Morozov (2011) as 'cyber utopianism'- reached its peak with the Green Revolution in Iran in 2009 and the social unrest in the Arab world in 2010-2011. The idea that internet use and especially social media platforms like Facebook and Twitter were key to the success of the uprisings became a repeated mantra in (Western) media coverage, and was eagerly embraced by the social media platforms themselves (See for instance Spier 2017 and Morozov 2011). On the Iranian protests, *The Wall Street Journal*'s Dreazen wrote that that "this [revolution] would not happen without Twitter" (as quoted in Morozov 2011, 2), while CNN commentator Taylor suggested to name the Tunisian and Egyptian protests 'Facebook Revolutions'.[9]

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8   TCP/IP is the used communication protocol that sets the common 'language' in the system (Forouzan 2009). More technically, the protocol enables the breaking up of information into small packets for rapid transfer (the TCP segment) and then seamlessly reassembles data at the receiving end (the IP segment) (Fielder 2012, 28). In addition, packet switching enables the sending of data packets through the most efficient routes, dividing information into many small pieces that "each travel through hundreds of global servers to reach the recipient" (idem).

9   Taylor, Chris, "Why not call it a Facebook Revolution?," CNN, http://edition.cnn.com/2011/TECH/social.media/02/24/facebook.revolution/index.html (9 August 2017).

But then a sense of disillusionment with the emancipatory powers of digital technologies kicked in. Following several protests in the Arab Spring that led to undesired outcomes, and various occasions – not only in the Arab world – in which not citizens or activists, but mainly authoritarian elites profited from the use of internet and social media, many of the hopes pinned on the internet and social media's "revolutionary" or "democratic spirit" faded (Spier 2017, 6). Increasingly, cyber-pessimist visions found their way into the debate, emphasizing the ability of dictators to adapt to new technologies, as well as possibilities to use the internet to their own advantage.

With *The Net Delusion*, Morozov wrote a fierce critique on the "naïve belief in the emancipatory nature of online communication that rests on a stubborn refusal to acknowledge its downside" (2011, xiii). In 2013, Howard, whose 2011 book had stressed the democratic influences of the internet on the Islamic world, published an edited volume named *State Power 2.0* (2013) that discussed states' interferences in cyberspace. Similarly, an op-ed with the revealing title 'Why social media isn't the revolutionary tool it appears to be' (Chenoweth 2016) was written by a well-respected scholar on non-violent resistance, while international news outlets began publishing stories on how social media hurt rather than facilitated anti-government protest campaigns.[10]

Against Technological and Social Determinism and Internet-Centrism

Albeit radically different on the expected effects of internet use, what cyber optimists and pessimists have in common is a very determinist outlook on the political and societal impact of technology. Rather than assuming that the effects of the internet will vary per context, both perspectives presume the internet carries some preordained societal or political outcomes in its technological structure. In more recent times, however, the scholarly debate has fortunately moved beyond these deterministic assumptions, now offering more empirical rather than mere ideological insights into the issue. Few scholars, if any, still believe in absolute, built-in consequences –like democratization or a stronger authoritarian grip over society– that come with the use of the internet in authoritarian regimes. Instead, there is a widespread conviction that the social context matters, and that actors have agency, precluding the possibility of establishing any deterministic rule about the internet a priori.

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10   "How Facebook hurt the Syrian Revolution," Al Jazeera, https://www.aljazeera.com/indepth/opinion/2016/12/facebook-hurt-syrian-revolution-161203125951577.html (6 March 2018).

Likewise, the current debate is moving away from what Morozov calls internet-centrism. This, in short, refers to the reframing of democratic and social change in terms of the internet rather than the context in which that change is to occur (Morozov 2011 in Spier 2017). With internet-centrism, people and their grievances are no longer central when trying to make sense of social change, but the technical tools they use. It is perfectly illustrated by dubbing the Iranian or Egyptian protests Facebook or Twitter revolutions. Internet-centrism is not only problematic on an analytical level, as it limits a thorough understanding of what is going on, but also from an ethical point of view, as the focus is shifted from the demands of the protesters and the possible validity of their claims to a narrower story about the functionalities of new communication technologies.

Yet, by merely critiquing technological determinism or internet-centrism, one does not make a valuable contribution to the current academic debate. As previously mentioned, most current scholarship already acknowledges that the social context, with a multitude of variables – some of which we might not even be aware of – affects the impact of the internet on political outcomes. Even Shirky (2008; 2011), who is frequently brought forward as the academic mouthpiece of the cyber-optimists, as well as Morozov (2011), who is often conveniently framed as Shirky's pessimistic counter pole, are much more nuanced, and less technologically deterministic and internet-centrist than is often thought (for instance, O'Loughlin 2011 or Maréchal 2017). Neither Shirky nor Morozov believe that the use of the internet will always cause Y or Z. Statements like "One cannot understand the role of social media in collective action without first taking into account the political environment in which they operate" (Wolfsfeld, Segev and Sheafer 2013, 13) are therefore interventions directed to an academic audience that is already largely converted.

To acknowledge the importance of the social context, however, is not the same as saying that the political impacts of the internet are completely dependent on it. As many observers have warned –especially after the Arab Spring – about naïve technological determinism (as I do), I also warn against a total surrender to social determinism. Yes, the internet is a tool open to both "noble and nefarious purposes", as Larry Diamond (2012, xii) states, but by setting the boundaries and possibilities of human agency, the internet can still –under particular circumstances– make certain political outcomes more likely than others. Scholars and other observers working on the topic can and should do more than merely stating that the internet's impact 'depends on the context'. The question is not whether the social context matters –of course it does– but how it matters, and when.

Internet Use and Anti-Government Protest

An important reason why scholars doing empirical research on the topic have found it so hard to find their way through a web of seemingly important contextual factors, is that the questions they ask are often so broad that they are largely unanswerable (Aday et al. 2012). Whether the internet promotes the democratization of authoritarian regimes is perhaps the most striking example of this. There are so many causal paths that could potentially link internet use to democratization, ranging from economic development (Rueschemeyer, E. Stephens and J. Stephens 1992) and transnational advocacy networks (Risse, Ropp and Sikkink 2013) to political efficacy (Di Gennaro and Dutton 2006) and the successful mobilisation of disaffected groups (Foweraker & Landman 1997), that acquiring a profound theoretical understanding of the relationship is an almost impossible task.

A strategy to overcome this problem is to break up the long causal chain between internet use and democratization and to study different steps in the various causal paths separately. My project therefore does not study the effect of internet use on democratization, but whether internet use affects *anti-government protest* under authoritarian regimes. Besides the abundance of the (long) causal paths that hinder a profound understanding of the internet's effect on democratization, there are other multiple other reasons why anti-government protesting under authoritarian rule is something we should care about.

Firstly, anti-government protests *can* lead to a democratic transition (Ulfelder 2005; Kalandadze and Orenstein 2009; Collier and Mahoney 1997). Acknowledging anti-government protesting can lead to democratization, however, does not mean that it always does: Not every protest succeeds in achieving its goals, and more importantly, not every anti-government protest has democratic aspirations. Hence, I see anti-government protest as a method of resistance that, compared to violent resistance, increases the chances of democratization (Geddes, Wright and Frantz 2014, 325; Chenoweth and Stephan 2014, 95), without guaranteeing them.

Secondly because, if not always democratization, anti-government protests can be a starting point for many other less desirable outcomes that also should have our attention. The Andijan protest in Uzbekistan (2005), as well as Burma's protests (1988 and 2008), cost many protestors' lives due to regime crackdowns, while the Iranian protests in 1979 'merely' replaced one authoritarian regime for another (Geddes, Wright and Frantz 2014, 315), but –as we know by now– had huge domestic and international consequences. Most dramatically perhaps, some protests lead to civil wars, as was the unfortunate outcome of the Arab Spring protests in Syria and Libya, as well as Ukraine's Euromaidan protest (2014). Thus, while not always for the better, anti-government protests can be a dramatic political rupture, changing the lives of many.

The third and last reason why we should be concerned with anti-government protest under authoritarian rule is because it is one of the few oppositional strategies available to those who want to stand up against those in power (Geddes, Wright and Frantz 2014, 327). With regimes that by definition preclude a meaningful contestation of power in the electoral arena, and seldom allow the existence of an independent civil society, taking to the streets is a highly costly way to collectively articulate dissent.

Anti-government protests are thus one of the few methods through which authoritarian regimes can be challenged, with very diverse outcomes possible as a result. This should however not be misread as a deterministic understanding that an anti-government protest always challenges a regime. Recent work from Schedler (2016), as well as studies on China (Chen 2012) and Russia (Robertson 2010), suggest protest under authoritarian rule is a lot more common and less fatal for regimes than often assumed, making it imperative not to assume a priori that each anti-government protest poses a similar challenge.

With an anti-government protest I refer to the peaceful public gathering of people "for the primary purpose of displaying or voicing their opposition to government policies or authority" (Wilson 2014, 12). While the term 'anti-government' thus connotes opposition against the government, protestors do not necessarily need to demand the complete fall of the regime or the resignation of its strongman. Publicly showing opposition to government policies is enough reason to count a protest as anti-government, as it is not the protestors' demands that determine the level of threat to the regime. In some circumstances, protests against policies can pose a similar or even greater challenge to the regime than protests demanding the fall of a dictator.

Although the relevance of studying the internet's role in anti-government protests barely requires further elaboration, the importance can perhaps best be illustrated by authoritarian regimes' own response to the threat of internet-enabled protest. In the period January 2016 till September 2017 for instance, Access Now –an advocacy group dedicated to an open and free internet– reported no less than 111 internet shutdowns, which were primarily implemented by authoritarian regimes,[11] with 'stopping protests' as the most frequent mentioned reason for what caused the shutdown.[12] Likewise, in their 2016 Freedom of the Net report (2016b), Freedom House stated that "authoritarian regimes most frequently restricted communication apps to prevent or quell antigovernment protests". In their most recent report (2017),

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11   Surprisingly enough, India, a free country according to Freedom House (2017), is worst when it comes to internet shutdowns.

12   Access Now. "Keepiton#" https://www.accessnow.org/keepiton/(15 January 2018).

Freedom House furthermore remarked that governments tend to restrict live video, especially during protests. Moreover, in a widely cited study, King, Pan and Roberts (2013) have shown that China's infamous censorship programme primarily aims at curtailing collective action. In other words, the threat of internet-enabled protest is of great concern to authoritarian regimes, and not without reason. Protests that have supposedly been facilitated by the use of the internet have challenged authoritarian leaders in Iran (2009) (Golkar 2011), Tunisia (2010-2011) (Breuer, Landman and Farquhar 2015), Egypt (2011) (Ghonim 2012), Myanmar (2007) (Chowdury 2008) and Turkey (2013) (Haciyakupoglu and Zhang 2015)– to name just a few out of many more examples.

Remarkably, in spite of the huge societal importance, there are still large knowledge gaps in what we know about whether, when and how internet use facilitates anti-government protesting. On the one hand, social movement studies have attempted to understand how movements in democratic contexts can effectively use the internet for organizing collective action (Kelly Garrett 2006; Van Laer 2007; Van Laer and Van Aelst 2010; Van de Donk et al. 2004), but whether these theories still hold in authoritarian contexts is mostly unclear.

On the other hand, scholars that do investigate the relationship in authoritarian contexts have primarily focused on particular instances of successful mobilisation through the internet (Mungiu-Pippidi and Munteanu 2009; Goldstein 2007; Golkar 2011; Chowdury 2008), with most academic attention devoted to the Arab Spring.[13] This extensive attention for merely a few cases of (successful) mobilisation has led to a profound and nuanced understanding of the internet's role in those uprisings, but also runs the risk of overgeneralizing these findings to a much larger set of cases. According to Schedler (2016), in the period 1990-2012, 2962 protests took place under authoritarian regimes in African and the Caribbean alone.[14] For the majority of these protests we know close to nothing, let alone about whether or how the internet use played a role. What is much need, therefore, and what the ambition of this research is, is to provide a much broader investigation into the relationship that moves beyond what we know from the Arab Spring.

Another strand of literature has studied authoritarian regimes' capacity to control cyberspace (King, Pan and Roberts 2013, 2017; Deibert et al. 2008; 2010; 2012, Deibert 2013, 2015; Gunitsky 2015). While tremendously insightful in documenting the evolution of states' cyber controls, these studies have so far remained isolated from literatures looking into anti-government protesting or other forms of

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13   Among others: Tufekci and Wilson 2012; Lynch 2011; Howard and Hussain 2011; Breuer, Landman and Farquhar 2015; Gunning and Zvi Baron 2013; Ghonim 2012; Aday et al. 2012; Eltantawy and Wiest 2011; Wolfsfeld, Segev and Sheafer 2013.

14   Schedler uses the SCAD data that will be discussed in more detail in Chapter three.

contentious politics under authoritarian rule. At best, their findings are referred to as evidence that authoritarian states are getting smarter in the online realm, but seldom is the challenging question asked whether internet use *in the face of on- and offline repression* can still facilitate anti-government protesting. Providing an answer to this question is therefore another important aim of this research.

Question One: Does Internet Use Facilitate Anti-Government Protest Under Authoritarian Regimes?

Crucial for a profound understanding of the relationship is to study the broader trends. In quantitative studies, various scholars have found that internet use at the country level is not associated with rising levels of democracy (Groshek 2009; 2010; Groshek and Mays 2017; Rod and Weidman 2015), but similar up-to-date, consistent findings for the internet's impact on anti-government protesting is lacking as the existing country-level studies have so far only used limited data and shown contradictory results (Fielder 2012; Meier 2011). Unfortunately, moreover, survey studies examining the effect of internet use on protest behaviour at the individual level solely take place in specific authoritarian contexts, making it difficult to extrapolate their results to a wider group of authoritarian regimes (Tufecki and Wilson 2012; Beissinger, Mazal and Jazur 2015; Bozzoli and Brück 2011).

   The first purpose of this study is therefore to better explore whether there is a significant effect of internet use on anti-government protesting under authoritarian regimes. Conducting quantitative analyses, Chapter three looks into the relationship both at the country and the individual level. At the country level, do we see that increasing internet use facilitates anti-government protesting? And is this unique to authoritarian regimes or is a similar pattern identifiable in democracies? As a matter of fact, if we only find the effect to hold in authoritarian regimes, this would also count as proof for the information-scarcity assumption in those states. Do we also see at the individual level that those citizens with internet access are more likely to protest against their authoritarian governments than those without access to the internet? And how does on- and offline repression affect the impact of internet use? Is there any evidence that authoritarian regimes have learned over time how to prevent internet-enabled protesting?

Question Two: Tracing Causal Mechanisms, How and Under What Conditions Does Internet Use Facilitate Anti-Government Protest?

Chapter three's thorough investigation into the relationship, both at the country and individual level, intends to provide insight into whether internet use facilitates anti-government protesting, yet is unlikely to deliver much detailed knowledge about how and under what conditions this is likely to occur. For instance, does a positive correlation tell us that internet use is important in the formation of citizens' ideas about their government? Or does it mean that the internet is an effective tool that activists can use to spread the word about an upcoming anti-government protest? In addition, what does a positive correlation say about the capacities of authoritarian regimes to control the internet? Can the conclusion be drawn that regimes are unable to prevent internet-enabled mobilisation? And if that is so, why is that the case? And what would a positive correlation at the individual level tell us? That internet users are more willing to protest because their political ideas have changed as a result of online information? Or do internet users make different risk calculations the moment they have to decide whether to take to the streets?

In order to get a thorough understanding of these questions, it is crucial to look beyond correlations that merely capture the overall relationship. What is needed is a much closer examination –under different authoritarian conditions– of all the processes that internet use might facilitate, and that all together determine the strength and direction of the correlation coefficient. Hence, rather than jumping straight from internet use to people on the streets, the mobilisation process is disaggregated in Chapters four till seven by breaking it up into multiple specific stages. This disaggregation not only enables a study into the causal mechanisms under varying conditions in much more detail, like the in-depth analysis of Malaysia in Chapters four, five and six, but also makes it possible to differentiate between which mechanisms have most explanatory value in what situation.

Breaking Up the Mobilisation Chain

In contrast to earlier studies that have attempted to theoretically disentangle causal mechanisms (Lynch 2011; Rod and Weidman 2015; Little 2015), my framework examines *different steps* of the *mobilisation chain*. Borrowing from the literature on social movements in Western democracies, and especially the work of Oegema and Klandermans (1987) and Klandermans (1997), the mobilisation chain –also captured by the term 'micro-mobilisation'– can be understood as individuals' "(a) passage through analytically distinct steps of incorporation into collective action (b) each of which results in individuals being differentiated through cognitive (e.g. identity

development), affective (e.g. emotion development), and/or structural processes (e.g. recruitment and social ties)" (Ward 2016, 855).

Oegema and Klandermans' (1987; Klandermans 1997) framework, which I further build on, identifies four analytically distinct steps in protest mobilisation. For people to become a protest participant, they: 1) need to *sympathize* with the cause of a protest; 2) need to be *informed* about the upcoming protest; 3) must be *motivated* to participate; and 4) must *be able to participate* (Van Stekelenburg and Klandermans 2010, 7). It starts with the 'potential protestor', a category which consists of every individual in society. Subsequently, "with each step, smaller or larger numbers drop out until an individual eventually takes the final step to participate in an instance of collective political action" (idem, 8).

Most important for the purposes of this study is that their theoretical model allows for a profound investigation into the causal mechanisms linking internet use to anti-government protesting. Rather than a theoretical model explaining anti-government mobilisation, the framework can be seen as a heuristic device enabling a deeper investigation into the relationship of interest. Because the framework acknowledges that the processes through which individuals are differentiated at various steps in the chain can vary (Ward 2015, 2), it becomes possible to scrutinize the internet's role in each step separately. Figure one below offers a visual representation of the mobilisation chain, including the chapters in which the respective step will be discussed.
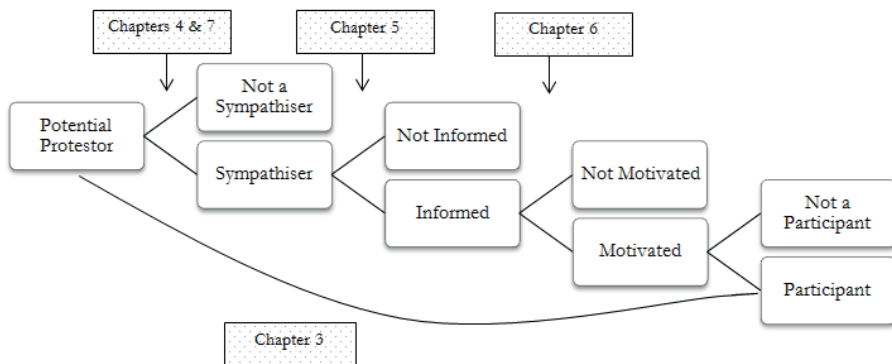
Figure 1: Visual representation of the mobilisation chain, based on the work of Oegema and Klandermans (1987).

The separate steps in the chain, which will be later explained in more detail, are temporally ordered from left to right. Although the process of being informed about an upcoming protest (step two) can in principle also occur before a potential protestor becomes sympathetic towards the cause of a protest (step one), it is most likely that the order is the other way around, or that the two processes take place simultaneously. In addition, step three requires that both previous steps have been passed in advance. The model does not make any assumption about the temporal duration of the steps. The processes can occur with long time-intervals separating the steps, but could also take place (almost) simultaneously. Lastly, rather than seeing the mobilisation process necessarily as unidirectional, and thereby protesting as the last and final step, I concur with Ward (2016) that participation itself can play an important explanatory role in continued participation.

The chosen theoretical approach, with the individual as its unit of analysis, inevitably has some limitations. For example, the framework cannot explain why, at a particular moment in time, internet use facilitated a protest, as structural changes are often –at least partly– responsible for the opening and closing of political opportunities (Klandermans 1997, 206-207). Nevertheless, the chosen approach does take the context in which the individual is embedded into account, and thereby does not neglect how for instance movement characteristics or political opportunities impact the mobilisation process (Klandermans 1997, 9). Moreover, the decline and emergence of a protest at the macro level also involve the beliefs and actions of individuals, and the analysed processes in the three steps can therefore be seen as the underlying mechanisms that explain the (non-) occurrence of a protest (idem). Concretely, this means that if the internet pushes large groups of individuals through the mobilisation chain, a positive relationship between internet use and protesting is not only be traceable at the individual level, but also at a more macro level, for instance by looking at countries.

The chapter will continue with a further discussion of how internet use might facilitate anti-government protesting in the separate steps of the chain. After this, two contextual factors –or intervening variables– are introduced that need to be taken into account when exploring under which conditions the various causal mechanisms are likely to hold.

Step 1: Becoming Sympathetic Towards an Anti-Government Protest Movement

In the first step of the mobilisation chain, the general public is divided into those who take a positive or sympathetic stance towards the goals (and means to achieve those goals) of an anti-government protest movement, and those who do not. I define

a protest movement as a collective challenge to the government by people with common purposes and solidarity, being in sustained interactions with that same government (Sidney Tarrow [1994] 2011). While the definition does not require a social movement to be of a certain magnitude, or to be formally organized, the 'sustained interactions' element prescribes that "it is only by sustaining collective action against antagonists that a contentious episode becomes a social movement" (idem, 12). This implies that a protest movement does not need to be behind every anti-government protest. If the challenge cannot be maintained, "movements will evaporate into the kind of individualistic resentment that James Scott (1985 as used in Tarrow) calls "resistance", will harden into intellectual or religious sects, or their members will defect from activism into isolation" (Tarrow [1994] 2011, 12).

The group of protest *sympathisers* can be seen as the 'mobilisation potential' or 'the reservoir the movement can draw from' (Klandermans and Oegema 1987, 519). Most literature on micro-mobilisation agrees that movement participation hinges on whether or not individuals have sympathy with a specific movement (Ward 2016, 856), yet surprisingly few studies look into the 'black boxes' of the initial formation of 'ideological-affinity pools'.

This lack of attention for the first step in the mobilisation chain also applies to the literature on the internet and protesting in authoritarian regimes. Too often, attention is only paid to the internet's role once a group of people already have the idea of organizing a protest against the government. How these people came to sympathize with a particular anti-government protest movement is frequently not part of the discussion but treated as an exogenously 'given' (see for instance Little 2015). This narrow focus, in which the process of how people's political attitudes are formed is completely neglected, leads to a limited analysis of the internet's role, and hence wrongly drawn conclusions. Wolfsfeld, Segev and Sheafer (2013, 120), for instance, make a frequently heard claim that the internet and social media "should be seen as facilitators of protest, rather than causes". In their view, the internet is 'merely' a tool that becomes important once people have enough reason to go on a protest against their government. In other words, people's anti-regime sentiment comes first,[15] and the internet only becomes relevant after that is set.

While Wolfsfeld, Segev and Sheafer (idem) are right in saying that people's anti-regime sentiment always lies at the basis of every anti-government protest, I will show that internet use can play an important role in the formation of this sentiment and the sympathy people feel for a protest movement. For people to become dissatisfied, frustrated or angry with their government, there not only needs to be objective,

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15   Chapter four discusses in more detail how anti-regime sentiment and sympathy for anti-government protest movements conceptually relate to one another.

material conditions –like repression, corruption or poverty– but also *subjective perceptions* of these conditions (Castells 2012). Anti-regime sentiment or sympathy for a protest movement, in other words, is always based on citizens' subjective understanding of political reality. Crucially, the internet can play an important role in determining how people perceive reality, especially in authoritarian societies where alternative political information is scarce.

The notion that internet use grows anti-regime sentiment in authoritarian regimes rests on the idea that the internet's many-to-many communication network, diminishing the role of traditional media-gatekeepers and allowing people to distribute their own information, reduces information scarcity in authoritarian regimes. The argument suggests that, with internet access, people will slowly turn into 'participant citizens', as they can now actively engage with information themselves, rather than merely being passive recipients of state propaganda (Nisbet, Stoycheff and Pearce 2012). Perhaps more important even is the expectation that, on the internet, people will be exposed to information– from electoral fraud to human right abuses– that the regime in power would not want them to see (Bailard 2014). This is what Bailard describes as the internet's 'mirror function': through the internet, a government's abuse of power gets revealed, and as a logical consequence, people's approval of the government is expected to diminish, possibly up to a point where they do not accept the status quo any longer and take to the streets. Simultaneously, the internet also offers a 'window' to learn about democratic practices in mature democracies (idem), as well as about protests that take place in other authoritarian regimes. This too could make citizens further dissatisfied with their own government, and hence more sympathetic towards anti-government protest movements.

While this story might sound plausible at first glance, many objections could be raised. First and foremost, the logic requires the internet to be an 'open commons', i.e. a separate, alternative sphere that exists outside of the influence of the state or corporate power. This is not the case. As documented extensively by scholars and other observers (for instance Deibert et al. 2008, 2010, 2012 or Freedom House's Freedom of the Net reports 2016b; 2017), cyberspace is a highly contested sphere where various actors, public and private, fight for influence. In the realm of authoritarian politics, it is the state in particular –with actions ranging from censorship to polluting social media– that attempts to constrain the circulation of alternative information or minimize its impact.

Next to the assumption of the internet as an open commons, there are a few other questionable underlying assumptions present in the aforementioned theory. For instance, there is the contested notion that internet users under authoritarian rule are interested in political information in the first place, an idea that is heavily

criticized by Morozov (2011). Rather than looking at Human Rights Watch reports, or documents on the integrity of the last elections, Morozov believes most people use the internet purely for entertainment purposes. Hence, the internet is likely to depoliticize rather than politicize citizens, according to Morozov, as it provides a great distraction from politics, making life bearable under authoritarian rule

Likewise, the theory assumes that if someone gets to know about government wrongdoings, she or he would automatically think less about the ones in power. This too is a conclusion that cannot be so easily drawn (Robertson 2015; Hill and Roberts 2107). For instance, research by Robertson (2015) on perception of electoral fraud among Russians suggests that people have "a tendency to treat evidence that confirms existing opinions in an uncritical manner but to discount more heavily information that does not fit a person's prevailing view of the world" (Robertson 2015, 592). According to Robertson, human reasoning is greatly affected by a 'confirmation bias'.

Whether internet use can still, despite active interventions of the state and other raised objections, affect the level of anti-regime sentiment in information-scarce regimes is the central question of Chapter four, where I examine the first step of the mobilisation chain in the context of Malaysia. Through an in-depth analysis, using both quantitative and qualitative methods, the chapter investigates the internet's impact on Malaysians' sympathy for anti-government protest movements and anti-regime sentiment.

Step 2: Being Informed About an Anti-Government Protest

The second step in the mobilisation process analyses the role of the internet in informing protest sympathisers the moment a protest is decided upon. The question here is thus no longer how internet use affects people's perception of political reality, but instead how internet use possibly changes the extent to which sympathisers can know about an upcoming rally in the first place. The chapter thereby connects to two strands in the literature: Resource mobilisation literature and the importance of weak and strong ties in the travelling of information.

Resource mobilisation scholars (McCarthy and Zald 1973; Edwards and McCarthy 2004) focus on the availability of resources for social movements to explain collective action (Breuer, Landman and Farquahar 2015). With the internet, this literature suggests, it has become much easier for a protest movement to *inform* a large magnitude of people about an upcoming protest (Van Laer 2007). Whereas in the pre-internet days many people would not show up at a rally because they would not know about it, or know about it too late, the internet is supposed to be a great new tool in the hands of protest movements, allowing them to challenge the information scarcity by inform many people in time about a planned rally.

While mostly used for understanding collective action in Western, democratic contexts, the approach has recently found its way –though more implicitly rather than explicitly – to authoritarian, non-Western contexts as well (Breuer, Landman and Farquahar 2015). Unfortunately, however, most of these empirical studies examine the internet's benefits for protest movements in rather generic terms, covering issues like raising awareness, monitoring government repression, or informing sympathisers all at the same time (see for instance: White and McCallister 2014; Eltantawy and Wiest 2011; Howard and Hussain 2011). To my knowledge, only Tufekci and Wilson's (2012) study on the Tahrir demonstrators really teases out the internet's role in informing people about a rally, and they do indeed find that many of the protestors knew about the protests through the internet.

An important reason why the resource mobilisation literature has such high expectations of the internet in terms of the travelling of information is not just because the internet is a great new tool in the hands of social activists, but also because the internet is believed to have changed the very structure of society's social networks. Arguably, the internet's many-to-many communication has facilitated the growth and sustainment of weak ties across different social groupings, which potentially enables news about a rally to travel much easier throughout society (Van Laer 2007, 7; Centola and Macy 2007). Informed individuals are therefore not merely objects of mobilisation, but also subjects because, once mobilized, they can become active in mobilizing themselves (Klandermans 1997, 24).

Yet here too, serious counterarguments could be raised. First of all, the authoritarian state should not be expected to be patiently waiting with its hands tied behind its back. Instead, authoritarian states are actively intervening in cyberspace, and according to some research even focusing on preventing the circulation of material that has collective action potential (King, Pan and Roberts 2013). To do this, regimes can –among other things– shut down specific oppositional websites or communication platforms that advertise a demonstration, both permanently or only during sensitive moments in time, but can also –as was for instance bluntly shown during the Saffron Revolution in 2008 (Chowdury 2008), Egypt in 2011, and China's province Xinjiang in in 2009 (MacKinnon 2012, 51)– cut off internet access completely.

Rather than only preventing information about a rally being spread, authoritarian states can also start counter-information campaigns online themselves (Gunitsky 2015) to frustrate the information campaigns from protest movements. For instance, regimes can report that the rally is cancelled, hinder the movement's campaign by mentioning that the protests are instigated by foreign powers, or raise fears that the protest will result in a riot. While these last responses also attempt to influence the sympathy people feel for the protest movement (step one), it potentially raises

so much confusion and doubt that it limits the travelling of information from the movement.

Moreover, the assumption that information will travel easily across cyberspace over weak links –crossing social boundaries– is a debatable one. More than an alternative public sphere where information is eagerly shared between social groupings with opposing views, the internet is described by some as a 'filter bubble' (Pariser 2011) where everyone comfortably resides in a personalized environment that is "tailored to the individual's own opinions, designed to be free of disturbance, and primarily filled with easy to consume information" (Spier 2017, 22). In other words, perhaps the internet only allows a protest movement to reach out to people that reside in the same bubble.

Chapter five attempts to answer the question whether internet use facilitates the informing of protest sympathisers under authoritarian rule in Malaysia. The chapter uses original interview material with the people that are believed to make use of the technology in their mobilisation efforts: the core Malaysian activists themselves. This, together with quantitative survey data, forms the empirical basis to investigate the internet's role in the second step of the mobilisation chain.

Step 3: Being Motivated to Join an Anti-Government Protest

The third step of the mobilisation chain analyses the internet's impact on informed sympathisers' *motivation* to join a street rally. The mobilisation chain assumes that sympathizing with an anti-government protest movement and knowing about an upcoming rally is not enough to participate in it. An informed sympathiser still has to decide whether the benefits of joining outweigh the costs. This holds in democracies, but especially in authoritarian societies where the costs of street protesting can be very high.

By examining the decision-making of informed sympathisers under high risk, the third step in the chain engages with the literature on 'high-risk activism' that emerged out of McAdam's seminal study in 1986. Most of these studies emphasize the importance of the micro-structural position of the informed sympathiser (McAdam 1986; Witfang and McCadam 1991; Nepstad and Smith 1999; Gladwell 2010; Lawrence 2016). In short, they suggest that what ultimately drives risky action is not ideological commitment, but the strength of personal ties to those that do participate in risky events.

In contrast to the importance of personal ties, the role of the internet in this third step is relatively unexplored. While some authors have speculated on it theoretically (Lynch 2011; Little 2015), to my knowledge no study has tried to examine the internet's impact on informed sympathisers' motivation in a systematic, empirical

manner. Ideas about how internet use could push informed sympathisers onto the streets can roughly be grouped into three categories.

The first category relates to the perceived risk of the informed sympathiser. Arguably, one of the most urgent concerns of an informed sympathiser is whether 'enough' other people will take to the streets (Kuran 1995; Lohman 1994). Only if there is a 'safety in numbers' –the argument suggests– would he or she dare to go out as well. Whereas in an information-scarce, pre-internet environment this was very hard to find out, in a time with the internet it has supposedly become much easier to learn about how many people have joined a protest or are planning to do so. By taking away this uncertainty, internet use could possibly push informed sympathisers onto the streets.

The second category proposes that online peer pressure plays a key role in determining who takes to the streets and who doesn't. Transposing the idea that personal ties matter to the online realm, the mechanism suggests that if you are embedded in a social context where it is considered the right course of action to join a protest, your online visibility for your peers will pressure you to do the same. While peer pressure is obviously nothing new, the mechanism suggests that the intensive use of social media has made it only more paramount in our behaviour. As we are constantly under the radar of our peers, we better act according to their wishes to prevent becoming a social outcast.

Last and third, building on the work of Weyland (2009; 2010; 2012) and the social movement literature stressing the role of emotions (Jasper 1998; Jasper and Poulsen 1995; Risley 2011), the final category assumes that informed sympathisers will be exposed to such dramatic audiovisual material on the internet that it is likely to overwhelm them, thereby making a careful assessment of risks impossible and pushing them onto the streets. Rather than making a rational cost-benefit analysis, the argument suggests that when people see the very vivid footage that often goes viral during protests, like for instance chanting crowds or security forces committing human right abuses, they will no longer care about the risks involved and take to the streets anyway.

Yet, all three categories of mechanisms are built on rather uncertain theoretical foundations. The first category for instance proposes that internet use can guarantee 'safety in numbers' on the streets, but what happens if an informed sympathiser finds out through the internet that the protest turnout is actually lower than expected (Little 2015)? Similarly, the second mechanism proclaims that online peer pressure will be conducive to mobilisation, but what is the impact of a person's online embeddedness if it is clearly 'not done' to join a rally in your online social circles? Lastly, the third mechanism hypothesizes that dramatic images and videos will instigate emotions like anger or euphoria, but how sure can we be that they do not prompt an emotion like fear that makes people only more risk-averse?

Rather than treating these questions as theoretical, Chapter six tries to answer them empirically in the context of Malaysia. Using both original interview and survey material from informed sympathisers of a Malaysian, anti-government protest movement about their decision-making, Chapter six contributes to the relatively unexplored terrain of the internet's role in the third step of the chain.

Step 4: Participating in an Anti-Government Protest

The last step in the framework, step four, differentiates the informed, motivated sympathisers into those who ultimately participate in a protest and those who do not. People that are not feeling well on the day of the protest, for example, or those who cannot physically be present at the protest site might ultimately not become a participant although they did successfully pass the previous three steps. While fully acknowledging that individuals might indeed drop out of the chain for such reasons, the fourth step will largely be ignored here because the focus in this analysis lies on the extent to which the internet facilitates anti-government protesting. As internet use is unlikely to play a major role in the differentiation process of step four, there is no reason to examine it in much detail in this research.

Under What Conditions Does Internet Use Facilitate Anti-Government Protest?

The disaggregation of the mobilisation chain into the four different steps allows for a more profound investigation into the how question, but is unable to shine much light on the contextual conditions under which internet use facilitates anti-government protesting. An explicit aim of this research, however, is not to give in to social determinism, but to identify contextual factors –i.e. intervening variables– that make the internet's facilitative role in a specific step of the chain more likely. The following chapters attempt to identify those factors and will argue that two contextual conditions in particular are likely to determine whether internet facilitates protesting or not. These are: the level and sort of state repression; and the use of social media.

State Repression
The mobilisation chain has so far solely been used for understanding mobilisation in modern, Western, democratic political contexts. However, there is no reason to believe that the mobilisation chain could not be equally helpful as an analytical tool in authoritarian contexts as well. The four steps of the framework apply to mobilisation in *all* political contexts; the difference lies in what processes determine the differentiation at every single step of the chain.

Crucial for the wide applicability of the framework is that although micro mobilisation takes the individual as its unit of analysis, it considers the social and political context in which the individual is embedded as very important in determining whether a person drops out of the mobilisation chain or not (Klandermans 1997). Or, in the words of Van Stekelenburg et al. (2012, 253), "the type of demonstration, the mobilisation context, and the features of a country determine who shows up, why, and how".

What is most characteristic about the authoritarian context where I transfer the mobilisation chain to is the repressive political climate, with by definition little respect for civil and political rights. Following Davenport (2007, 2), I define state repression as "the actual or threatened use of physical sanctions against an individual or organization, within the territorial jurisdiction of the state, for the purpose of imposing a cost on the target as well as deterring specific activities and/or beliefs perceived to be challenging to government personnel, practices or institutions". More concretely, state repression concerns violations of the freedom of belief and religion, the freedom of opinion and information, as well as the right to peaceful assembly and association, with the purpose of fending off political challenges.[16]

Paradoxically, state repression –and the resulting information scarcity in particular– is both the contextual factor behind the expectation that internet use challenges the political status quo, as well as the factor that might (still) push a lot of individuals out of the mobilisation chain. In other words, state repression is responsible for the information scarcity that is the precondition for a lot of the more cyber-optimist ideas about how the internet challenges authoritarian sustainability, as well as the tool with which cyber-pessimists expect the internet's potential could be curbed.

Violations of the abovementioned freedoms can take place not only outside of, but also inside the online sphere. I therefore use the term *online repression* to refer to state repression that responds to challenges in the online realm. As a consequence of this definition, online repression does not necessarily need to take place on the internet. When a blogger gets arrested for a critical piece of writing on the internet, I see this as an act of online repression because the perceived challenge to the state has its roots in the online realm.[17] Importantly, however, while using the term in contrast to offline repression, I do not claim that a rigid separation between the two is always possible. As the on- and offline lives of challengers of the state are often intertwined, so are the state's responses (Morozov 2012, 47).

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16   These freedoms concern Articles 18, 19 and 20 of the Universal Declaration of Human Rights.

17   With this understanding of online repression, I remain close to Freedom House's Freedom of the Net (2016b; 2017) methodology which also includes in its understanding of internet freedom the extent to which bloggers or other ICT users are subject to extralegal intimidation or physical violence by state authorities.

Whereas the level of offline repression has obviously fluctuated a lot within authoritarian regimes over the last two decades –some countries getting more repressive, others less– online repression has increased in nearly all authoritarian states since the 1990s (see for instance Deibert et al. 2012). Yet, despite this overall trend, there are still, similar to offline repression, large differences between authoritarian states in what they can and want to do in cyberspace. Countries like Azerbaijan, Angola and China are all authoritarian regimes, yet while Azerbaijan and Angola use relatively mild forms of online repression, possibly also due to lower state capacity, China has the least free internet of all countries worldwide, according to Freedom House (Freedom House 2016).[18]

In the subsequent chapters, the importance of the level and sort of on- and offline repression in explaining the internet's impact on mobilisation under authoritarian rule will be further discussed. More precisely, the chapters will demonstrate how varying levels of on- and offline state repression in authoritarian regimes make the internet's facilitative role in different steps more or less likely. For now it is sufficient to mark state repression as the first conditional factor of interest, and move on to the second, namely social media.

Social Media

Next to the on- and offline state repression, the research will demonstrate that the sort of internet that is available –i.e. the availability of social media– is important in determining the internet's impact in various steps of the chain. In line with Fuchs et al. (2012, 3), I choose to define social media as "web-based platforms that predominantly support online social networking, online community building, and maintenance, collaborative information production and sharing, and user-generated content production, diffusion, and consumption".

The shift towards the use of social media, also described as the evolution of Web 1.0 into Web 2.0, roughly took place in 2005. However, a clear distinction between the two types of internet, the latter with social media and the former without, is not undisputed. As Spier (2017, 20) notes: "The term suggests a linear development (between "Web 1.0" and "Web 2.0") on the one hand and a degree of technical novelty that fundamentally, perhaps radically, changes the Web upon all its components on the other; both dimensions, when seen in a sober light, do not apply".

Yet, while it is hard to technically pinpoint what exactly has changed with the move from Web 1.0 towards social media, I use the term social media and Web 2.0 to allude to a shift in how the general public uses the internet (Spier 2017). Most

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18   Not all countries of the world are included. Countries like North Korea or Turkmenistan for instance, that possibly have even more stringent internet controls, are not measured by Freedom House.

importantly, it refers to a move from a period where internet users were primarily passive consumers of information to a time where they started to actively contribute to the internet's content (Jenkins 2008; Castells 2009; Shirky 2008). Castells (2009) refers to this process as a shift towards 'mass-self communication', while Axel Bruns speaks about 'produsage', which he defines as the "hybrid user/producer role which inextricable interweaves both forms of participation" (Bruns 2008, 21).

As the subsequent chapters will show, the rise of social media has affected the internet's impact on various steps in the mobilisation chain. What this exactly entails, as well as what different levels and sorts of state repression do, will be outlined in the upcoming chapters. For now it is enough to stipulate the availability of social media as the second intervening variable that should be taken into account.

Conclusion

This chapter has provided the necessary theoretical framework to investigate whether, how and under what conditions internet use facilitates protesting under authoritarian regimes. It argues that while studying the overall relationship between internet use and protesting is necessary to get insight into whether internet use has a significant impact at all, a disaggregation of the mobilisation chain is required to better understand the causal mechanisms underlying this relationship, as well as the conditions under which the mechanisms are likely to matter. Three distinct steps of the mobilisation chain were introduced that allow for a profound investigation of the internet's role in various stages of the mobilisation process. These are: (1) the process of becoming sympathetic towards an anti-government protest movement; (2) being informed about an upcoming protest; and (3) being motivated to join this protest. Finally, two conditional factors (or intervening variables) were introduced that should be taken into account when studying the internet's role in the various steps. These are the level and sort of state repression, and the availability of social media. Chapter three will continue looking into broader trends, exploring whether internet use facilitates anti-government protesting under authoritarian regimes.

Chapter 3

Does Internet Use Facilitate Anti-Government Protest Under Authoritarian Regimes?

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Through quantitative analyses, both at the country and individual level, this chapter finds that increasing internet use facilitates protesting in authoritarian regimes. Additional analyses furthermore indicate that the identified positive effect is stronger in authoritarian regimes than in democracies, and that the effect is primarily driven by regimes that use only relatively mild forms of repression. Surprisingly, moreover, both the country- and individual-level analyses show that greater online repression does not limit the internet's facilitative role, nor is there any evidence for authoritarian regimes learning over time. Finally, no evidence is found for the idea that the internet's effect has become stronger in the social media years.

   The chapter commences with an explanation of why it is important to study the direct effect of internet use on anti-government protesting. Thereafter, a short overview is given of what we already know about the relationship at the country level, followed by a presentation of the hypotheses to be tested. Subsequently, the research design sets the stage for a study at the country level, followed by a presentation of the findings. The second part of the chapter presents the individual-level analysis that has a similar structure. In the last section of the chapter, the conclusions of both analyses are discussed in relation to each other and I reflect on what the findings can and cannot tell us about the internet's effect on protest under authoritarian regimes.[19]

Why is it Important to Study the Direct Effect?

In order to understand *when* and *how* internet use affects anti-government protest in the three steps of the mobilisation chain, it is vital to first know *whether* there is a significant effect of internet use on protesting at all. Only if that question is answered positively does it become relevant to explore why this is so. An investigation into the direct effect of internet use, visualized in the long line at the bottom of figure one in

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19   The findings from this chapter were also published in article form in: Ruijgrok, Kris. 2017. "From the Web to the Streets: Internet and Protests under Authoritarian Regimes." Democratization 24 (3): 498-520.

the previous chapter, is however also valuable in and of itself, as it can already provide insights into whether and when internet use facilitates protesting under authoritarian regimes. In addition, an investigation into the internet's effect over time allows us to explore whether authoritarian regimes have recently become better at preventing internet-enabled protesting, or alternatively, that social media's rise has made the internet's effect extra strong. Another puzzle that an examination into the internet's direct effect on protesting can begin to unravel is whether authoritarians' online repression diminishes the internet's mobilizing potential, or that despite the state's meddling in cyberspace, the effect persists. Finally, investigating the internet's direct effect also makes it possible to compare its mobilizing power across regime types, comparing democracies with authoritarian regimes, but also authoritarian regimes with each other, as possibly not every authoritarian regime is equally susceptible to internet-enabled mobilisation.

Country-Level Analysis of the Relationship

As stated, I examine the internet's direct effects both at the country and the individual level of analysis. The previous chapter explained why it is relevant to also look at higher levels of aggregation, despite the fact that the mobilisation chain takes the individual as its level of analysis. Scholars looking at the internet's effect on the country level have so far mainly focused on the democratization of authoritarian regimes (Groshek 2009; 2010; Groshek and Mays 2017; Rod and Weidman 2015). Similar studies looking into the internet's direct effect on anti-government protesting at the country level are much less common, however, and the studies that do exist –two unpublished PhD dissertations from Fielder (2012) and Meier (2011)- have some important shortcomings.

The data that these two studies use is first of all rather limited in the time period it covers. Fielder's data only begins in 1999, while in some countries the general public started to use the internet much earlier (ITU statistics 2018). Meier's data, by contrast, stops in 2007 and therefore misses the more recent 'social media years' of the internet. Secondly, online state repression is either absent in their models or inaccurately operationalized: Whereas Meier does not take it into account at all, Fielder only measures state censorship and soft controls,[20] thereby missing important other forms of control such as the manipulation of online information, a legal framework that can suppress online dissent, or the surveillance of internet users. Thirdly, both authors look exclusively at authoritarian regimes, making it impossible to establish whether identified patterns differ across regime type.

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20   With soft controls, Fielder measures controls that "tap into cultural and behavior norms to influence user behavior: in other words, convincing users that accessing forbidden information is wrong" (Fielder 2012, 86).

As a result of differences in the respective research designs, moreover, the two studies show quite contradictory results. Fielder's dissertation (2012) shows some evidence for the positive effect of internet use on protesting under authoritarian rule, but also finds that the effect decreases once a certain threshold of internet use is reached. Meier (2011) by contrast finds no significant effect at all. Moreover, Fielder's study -the sole study that looks into the potentially moderating effect of online repression- finds that censorship has only a very limited curbing effect, but "of the two censoring methods -technical and soft- soft controls appear to have the greatest chilling effect on Internet mobilisation" (idem, 94).

Because of these shortcomings, the inconsistent evidence, as well as the earlier-mentioned reasons why it is important to study the direct effect of internet use on anti-government protesting under authoritarian rule, a new, more complete empirical analysis is desirable. The first hypothesis my country-level analysis therefore tests is whether internet use facilitates anti-government protesting under authoritarian rule:

H1: Increasing internet use increases the likelihood of anti-government protest under authoritarian regimes.

The second purpose of the empirical exploration is to investigate whether the effect of internet use on anti-government protesting has changed over time. Two rival explanations make it necessary to look into this. On the one hand, there is reason to believe the internet's effect has diminished over time as authoritarian states have increasingly started to intervene in cyberspace, with measures that get more and more sophisticated. Deibert et al. (Deibert et al. 2008; 2010; 2012) identify various waves of internet controls over time, and whereas the first generation of controls (2000-2005) merely consisted of blocking and filtering online content, newer generations are believed to be deepening and extending information controls into society "through laws, regulations, or requirements that force the private sector to do the state's bidding by policing privately owned and operated networks according to the state's demands" (Deibert 2015, 65), as well as by using "surveillance, targeted espionage, and other types of covert disruptions in cyberspace" (idem, 68). Underlining this trend of authoritarian regimes' growing control over cyberspace, Freedom House (2016b) reported that, in 2016, internet freedom around the world declined for the sixth consecutive year in a row.

On the other hand, the aforementioned rise of social media has possibly contributed to a reverse trend. Arguably, it was only with the increasing use of social media, roughly from 2005 onwards, that the internet really started challenging the information scarcity in authoritarian regimes. With internet users beginning to

actively share information, alternative political information was no longer 'hidden away' in the corners of the web, but pushed towards everyone. Illustrative in this regard is that our notion of something going 'viral' is inextricably linked to the use of social media, and not the internet as such. Additionally, internet users' transformation from consumers into active producers of content is also believed to have contributed to growing 'citizen journalism', making it more difficult for authoritarian states to keep possible failures hidden from public scrutiny. To investigate these two opposing visions on the internet's impact over time, the second hypothesis is:

H2: The effect of internet use on the likelihood of anti-government protest under authoritarian regimes changes over time.

The third hypothesis relates to the second by examining directly whether online repression decreases the effect of internet use on anti-government protesting. Although there is an overall trend towards more one repression over time, there is still great variation in the levels of internet control, when comparing authoritarian regimes with democracies, but also when comparing authoritarian regimes with each other (See for instance Deibert et al. 2010, the Open Net Initiative 2017, or Freedom House' Freedom of the Net reports 2016b; 2017). The control that a country like China has over cyberspace, supposedly operating "the largest and most sophisticated filtering system in the world" (Deibert et al. 2008, 263), is incomparable to what authoritarian states like Mugabe's Zimbabwe, Myanmar or the Gambia under Jammeh could do (Freedom of the Net 2017). Hence, in the third hypothesis I explore whether different levels of authoritarian online repression moderate the internet's effect on anti-government protesting:

H3: The effect of internet use on the likelihood of anti-government protest under authoritarian regimes decreases with higher online repression.

The last goal of the investigation is to examine whether identified effects of internet use on protesting are unique to authoritarian regimes, or are in fact more universal trends that occur due to increasing internet use irrespective of regime type. As explained in the previous chapter, it is the potential to challenge information scarcity that makes internet use a problem to authoritarian regimes. Hence, if my test of the internet's effect across regime types reveals that internet use facilitates protesting especially in authoritarian regimes, it is further proof for the information-scarcity assumption. The last hypothesis to be tested is therefore:

H4: Increasing internet use increases the likelihood of anti-government protest more in authoritarian regimes than in democracies.

Research Design

Data

To test the general argument, I conduct a time-series cross-national analysis using annual data. Available data on internet use restricts the sample to the period 1990–2013 (ITU statistics 2018). In line with Schedler's (2013) seven links of the 'democratic chain', my operationalization of regime type needs to be broader than merely looking at whether elections are being held. Ideally, I would operationalize each of the seven links separately and then make a theoretically sound decision of what the cut-off point is for each democratic condition to mark it as 'violated' and hence to see a state as authoritarian. While not entirely impossible in theory, this would in practical terms lead to working with multiple different data sources that are often highly incompatible in terms of data-gathering processes as well as coverage, making a (complete) classification of countries across regime types very difficult and possibly also more arbitrary.

Schedler (2013, 189-190) himself does not look into each (possible) violation of a democratic condition separately. Instead, he uses the Freedom House (FH) Freedom of the World index (2017b), as this measurement instrument comes close to capturing his seven democratic conditions at once. Freedom House's index, known for its broad understanding of democracy, is based on expert surveys that ascribe countries a score between 1 and 7 on both political and civil liberties. The political liberties index looks at the electoral process, political pluralism and participation in a country, as well as the functioning of the government, while the civil liberties index measures the freedom of expression and belief, associational and organizational rights, the rule of law, and personal autonomy and individual rights.

While measuring the seven democratic conditions all at once with the FH data is a solution to the lack of available (comparable) data for all seven links, one still has to decide when the political and civil rights are violated 'enough' to mark a state as authoritarian. Based on the two indices, Freedom House makes a tripartite division of countries separating them into 'free', 'partially free' and 'non-free countries'. The 'non-free' countries fit quite neatly into my category of authoritarian regimes as these states severely violate the democratic conditions. The 'free' states, by contrast, can be categorized as democracies as their democratic chain can be assumed to be largely intact. For the 'partially free' states, however, it is less obvious how they relate to my understanding of authoritarianism and democracy. Is this a group of flawed democracies or imperfect authoritarian regimes?

I consider the 'partially free' states 'partial authoritarian regimes' as in many of these polities the democratic conditions are so severely violated that it is unhelpful to consider them as a subtype of democracy. For instance, in Jordan, which is a partially free state according to FH, "the kingship and its government still dictate all major policy stances, and the security apparatus continues to loom over civic life with overarching authority" (Yom 2013, 128). In Morocco, also considered partially free, the king's powers remain largely unconstrained, while after the Arab Spring the regime "began a campaign of outright repression on protestors and regime critics" (Lawrence 2016). In another partially free regime, Myanmar, "a small circle of insiders effectively runs the country", while the military ethnically cleanses the country's Muslim Rohingya minority.[21] Hence, while still acknowledging that partially authoritarian states violate the democratic conditions less than the group of 'full' authoritarian states, the violations are often so grave that it effectively breaks the democratic chain. So this leads me to a tripartite distinction of regime type, separating democracies (FH score of 1 till 2.5) from partial authoritarian regimes (FH score of 3 till 5) and authoritarian regimes (FH score of 5.5 till 7).

Variables

Dependent Variables

To ensure that my results are not affected by using one particular measure of protests, I use two operationalizations. Similar to work by Fielder (2012) and Meier (2011), I use Bank and Wilson's Cross- National Time-Series (CNTS) Data Archive (2017). However, I use the Social Conflict Analysis Database (SCAD) as a second operationalization (Salehyan et al. 2012).

Protests (CNTS): Bank's CNTS Data Archive (2017) provides data on anti-government protests and distinguishes these from strikes and riots. The variable counts the number of anti-government demonstrations in each country-year. Anti-government demonstrations are defined as "any peaceful public gathering of at least 100 people for the primary purpose of displaying or voicing their opposition to government policies or authority, excluding demonstrations of a distinctly anti-foreign nature" (Wilson 2014, 12). The data derives from coding newspaper articles from *The New York Times* and has a broad temporal and geographical coverage to capture political conflict.

Protests (SCAD): An advantage of SCAD over CNTS is that it relies on newswires from two agencies, the Associated Press (AP) and Agence France Presse (AFP), instead of those from a single newspaper. It therefore covers more protests than CNTS. A disadvantage is that it only has data on Africa, Mexico, Central America, and the

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21   Max Fischer, "Myanmar, Once a Hope for Democracy, Is Now a Study in How It Fails," The New York Times, https://www.nytimes.com/2017/10/19/world/asia/myanmar-democracy-rohingya.html (8 March 2018).

Caribbean. SCAD has detailed event reports on demonstrations. However, since data for the key explanatory variable is only available in a country-year format, the event reports are aggregated to count the yearly number of demonstrations in each country-year. The variable includes organized and spontaneous demonstrations and excludes pro-government protests.

Independent Variable

Internet use: Data from the International Telecommunication Union (ITU) measuring the percentage of the population using the internet (1990–2013) are used (ITU Statistics 2018). This indicator includes internet use from all devices, including mobile phones, in the last 12 months. An increasing number of countries are measuring internet use with data from household surveys from the ITU. In situations where surveys are not available, ITU estimates are based on the number of internet subscriptions.

Interaction Variables

Internet use*year: To test whether the effect of internet use changes over time (H2) a variable had to be made interacting internet use with year.

    Internet use*online repression: To test whether the effect of internet use decreases with higher online repression (H3) an interaction variable is required combining the two. To measure online repression, I make use of FH's Freedom of the Net data. From 2007 onwards, FH has attempted to capture countries' online repression on a global scale.[22] Whereas in the early days only 15 countries were included, in more recent years this number has increased to 65. Yet, despite FH's increasing coverage, the data on online repression is still much more limited in the time it covers compared to the other variables, making the sample for a test for the moderating effect of online repression much smaller as a consequence. The major advantage of using this data over other recent attempts to measure online repression is that FH understands online repression rather broadly, and acknowledges that internet freedom can be affected by many different types of state (and non-state) interference such as obstacles to access,[23] limits to content,[24] and violations to user rights.[25] By contrast, other existing measurements

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22   Freedom of the Net measures internet freedom, but because their measurement runs from 0=complete freedom to 100=no freedom, I prefer to speak of their variable as 'online repression' since a high score on this variable means no freedom.

23   Obstacles to access "details infrastructural and economic barriers to access, legal and ownership control over internet service providers, and independence of regulatory bodies" (Freedom House 2017, Methodology section).

24   Limits on content "analyzes legal regulations on content, technical filtering and blocking of websites, self-censorship, the vibrancy and diversity of online news media, and the use of digital tools for civic mobilisation" (Freedom House 2017 section Methodology).

25   Violations on user rights "tackles surveillance, privacy, and repercussions for online speech and activities, such as imprisonment, extralegal harassment, or cyberattacks" (Freedom House 2017, Methodology section).

look at specific types of internet control such as censorship and filtering (Open Net Initiative 2017 and the V-Dem Project from Coppedge et al. 2017) or at internet shutdowns (Howard, Agarwal and Hussain 2011) and are therefore too narrow to capture the overall level of online repression in society. Countries get a score between 0 (no online repression) and 100 (extreme online repression).[26]

*Internet use*regime type (FH):* As earlier explained, FH data is used to operationalize regime type. A categorical measure is created in which democracies receive a 0, partial authoritarian regimes a 1, and authoritarian regimes a 2 (Freedom House 2014). This variable is interacted with internet use to determine whether the internet's effect varies across regime type (H4).

*Internet use*regime type (PIV):* To increase robustness, Polity IV data is also used as an alternative categorization of regime type.[27] Again, a tripartite distinction is made, wherein democracies score a 0, partial authoritarian regimes a 1, and authoritarian countries a 2.[28] This operationalization is also interacted with internet use.

Control variables

A major concern for measurement error with regard to data on protests from newspapers and newswires is that only a small portion of protests makes it into the foreign press (Herkenrath and Knoll 2011). Even more problematic is the fact that measurement error is not constant across countries, since developing countries receive "significantly less coverage the greater their geographical and cultural distance from the centres of political power in the global North" (idem, 117). To overcome this bias, I include a variable to account for the over- and under-reporting of events in particular countries in newspaper sources. The variable is created using Lexis Nexis and counts how many times per year the name of a country appeared in the headline of *The New York Times*. For instance, if 38 articles appeared in 2004 in *The New York Times* with Syria in the headline, Syria will score a 38 in 2004 on this variable. In order to ensure this highly skewed variable is more normally distributed, a natural log is used.

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26   For more information on Freedom House methodology, see: https://freedomhouse.org/report/freedom-net-methodology

27   Although Freedom House's broad conceptualization including civil rights is preferred for theoretical reasons, it is often criticized for its arbitrary aggregation rules and the subjectivity of its coding process (Cheibub, Gandhi and Vreeland 2010; Coppedge et al. 2011). Hence, as a robustness check and alternative operationalization of regime type, the widely used Polity IV index is used (Marshall, Gurr and Jaggers 2015). In contrast to Freedom House, Polity IV only looks at the electoral process and disregards civil liberties. Since Rød and Weidman (2015) have shown that regime type does not determine internet adoption rates there is no reason to worry about an overlap between internet use and regime type.

28   Using Marshall, Gurr, and Jaggers (2015) "Polity IV" (Polity score –10 to –6=2, –5 to 5=1, 6 to 10=0).

Additional control variables suggested in previous research account for the state of the economy, elections, education,[29] population size, a youth bulge and urbanisation as important determinants for contentious political action. Poor economic performance is likely to increase the willingness of people to protest and also might be correlated with internet use (Brancati 2014). To measure the state of the economy, unemployment,[30] inflation rate,[31] and gross national income (GNI) per capita[32] are included as control variables. Protests might also correlate with the occurrence of presidential or parliamentary elections since elections are often contentious moments that activists use as focal points for coordinating collective action (Tucker 2007). Data from the Database of Political Institutions is used to create a dummy variable coded 1 if an executive or legislative election were held in a country-year, or 0 otherwise (Beck et al. 2001). In addition, regimes with large populations face more problems in regard to controlling their citizens than regimes governing smaller populations (Nordås and Davenport 2013). I therefore include the logged value of the population size for each country year (World Bank Statistics 2018). Furthermore, the variables measuring the youth bulge and urbanisation are included as controls. Various studies have indicated that a youth bulge positively affects different forms of contentious politics, and that overcrowded urban centres not only cause but also exacerbate problems and inequalities in societies (Lagraffe 2012). To control for these two possible confounders, World Bank data measuring the percentage of the total population between the ages of 15 and 24, and the percentage of the population living in urban areas, is included. Lastly, an exploration of the dependent variable shows that the authoritarian regimes that faced the most protests in the study period were all affected by the Arab Spring. Out of the eleven authoritarian states in the data with the highest number of protests per year, there were no less than eight Arab countries in the period 2011-2013 (See Table one). To make sure that a possible effect is not merely driven by the Arab Spring, I made an extra control where I scored a 1 for every Arab country for the years 2011-2013 if it faced at least one protest in one year according to the CNTS data.[33]

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29   Education is likely to be related to protesting but is not included in the models since it reduced the size of my sample severely (from 2723 to 2019) and was not significant, and nor did it change the coefficients of other variables.

30   Unemployment: percentage of the total labour force that is without work but available for and seeking employment (World Bank Statistics 2018).

31   Inflation: rate at which the general level of goods and services is rising, measured using the annual change (in %) in the consumer price index (World Bank Statistics 2018).

32   GNI per capita is based on purchasing power parity from the World Bank (Statistics 2018). Data is in current international dollars based on the 2011 International Comparison Program round. To make the coefficient easier to interpret I divided the GNI per capita by 1000.

33   I considered a country as Arabic if it is a member of the Arab League (22 members). Somalia, Comoros, UAE, and Qatar were excluded as these countries did not face any protests in the CNTS data.

Figure one gives insight into some patterns across regime type (using FH). Per regime type, both the average internet use and total number of protests are shown over time. Unsurprisingly, internet use has risen over time in all types of regime. Democracies have the highest percentage of internet users. Remarkably, there is a very large peak in the number of protests in both democracies and authoritarian states around the year 2011. For the authoritarian states this stems primarily from the protests in the Arab World. The high protest values for democracies are mainly due to the large numbers of protests in the United States in 2011, 2012 and 2013 which is unsurprising given that *The New York Times* is the data source and the Occupy movement was very active in the US in these years. Other democracies that faced a high number of protests in this period were Greece and Spain.

Estimation Technique

Since the dependent variable is an overdispersed count variable, I use a negative binomial regression model to estimate the coefficients (see Table A1 in the Appendix for means and standard deviations).[34][35] To reduce concerns regarding reverse causality, independent variables are lagged by one year. To take into account the serial correlation, a one-year lag of the dependent variable is included in all models. Furthermore, standard errors are clustered on countries and independent variables are lagged by one year.

Results

H1: Increasing internet use increases the likelihood of anti-government protest under authoritarian regimes.

Table two below shows the results of six negative binomial regression models to test hypothesis one. The first model is my base model to test the hypothesis, while the other five models serve as robustness checks. In all six models the sample consists only of authoritarian regimes. Model one confirms the proposed hypothesis by

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34   Tests show very strong evidence in support of using the negative binomial regression model over a Poisson model and only weak evidence for using a zero-inflated negative binomial regression model instead of a negative binomial regression model. The BIC and AIC scores of the negative binomial regression model (BIC=−16607.6230; AIC=1.784) lie very close to the BIC and AIC scores of the zero-inflated negative binomial regression model (BIC=-16689.322; AIC=1.731). Specification tests also recommended a zero-inflated model, but this model would only be appropriate if a different theoretical process drives the zeros. There are few reasons to believe such distinct processes are justified in the country-year observations of protests.

35   I ran a zero-inflated negative binomial regression model as a robustness check, inflating both regime type and population size. However, the coefficients of interest showed similar results.

Table 1: Authoritarian regimes in sample that faced most protests

Country	Year	Protests
Yemen	2011	55
Egypt	2011	46
Bahrain	2011	33
China	2012	25
Egypt	2013	24
Bahrain	2012	15
Iran	2009	15
Russia	2012	13
Iraq	2011	13
Jordan	2011	13
China	2011	13
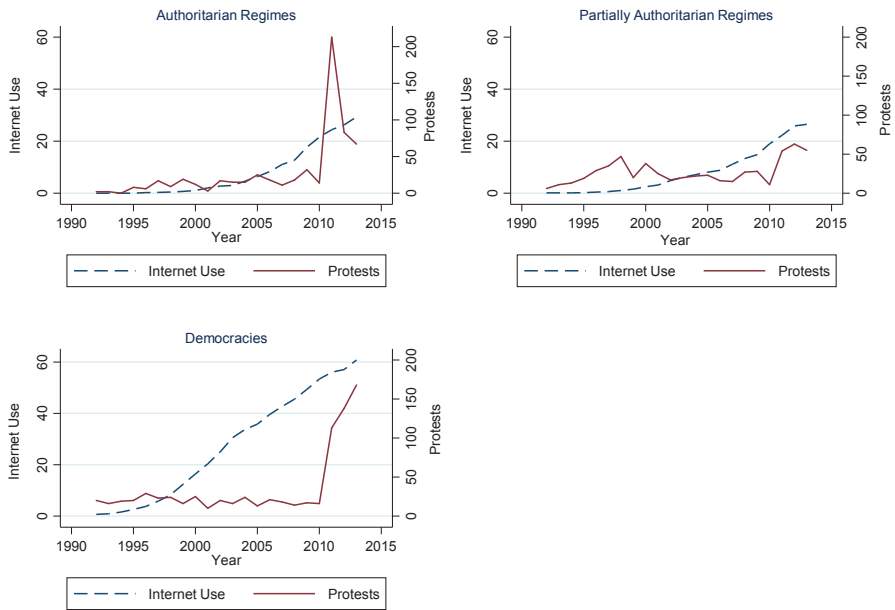
Figure 1: Trends across regime type

showing that internet use has a positive effect on anti-government protesting and is significant using a 99% confidence interval. Because coefficients in negative binomial regression cannot easily be interpreted in substantive terms, the incidence rate ratios shown in Table A2 of the Appendix help to clarify the regression coefficients.[36] With a 1% increase in internet use, the number of expected protests increases by a factor of 1.071. The second model uses Polity IV rather than Freedom House to identify authoritarian regimes. Although the strength of the effect is slightly lower here, internet use remains significant at the 99% level. In the third model, SCAD instead of CNTS data is used to measure protesting. Here, surprisingly enough, the effect of internet use disappears. The explanation for this disappearance could lie in SCAD's limited country coverage. SCAD only covers countries from Africa, Central America, and the Caribbean, and not –for instance- the authoritarian regimes with high levels of internet access in the Gulf region or South East Asia. Alternatively, the significance of the effect of internet use could also decrease because the sample shrinks from 574 to 274 observations when using SCAD.[37]

The fourth model shows a fixed effects model, which accounts for the time invariant characteristics of countries, limiting the estimation to within-country effects of internet use on protest. Here the effect of internet use is significant again at the 99% level. The fifth model includes first differences of internet use rather than levels and thus explores whether a change in the level of internet use rather than overall levels has a similar effect on protests. To be more concrete, model five captures the dynamic effect of changes in internet use rather than more slowly changing levels. The effect of internet use is significant here too, demonstrating that it is not only the level of internet use that matters for protests, but that changes over time also have similar effects. Importantly, this model also helps address possible concerns over stationarity in internet use. In the last model, model six, the Arab Spring control variable is included. Although the effect of internet use is less strong here –with a 1% increase in internet use, the number of expected protests increases with a factor of 1.032- the effect remains positive and significant (at the 95% level), showing that the effect exists irrespective of the Arab Spring.

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[36]   If the independent variable goes up by 1 point, the difference in the logs of expected counts of the dependent variable will change by the respective regression coefficient.

[37]   The non-significance of internet use in model three can also be a consequence of the difference in operationalization as well as sources used by SCAD, but it is unclear why this would be the case. As earlier mentioned, SCAD relies on slightly more news sources and does for example not use a minimum number of protestors that needs to be present in order to speak of a protest whereas CNTS does (100 protestors at a minimum).

Table 2: Internet use and anti-government protest

	1. Base Model	2. Polity IV Model	3. SCAD Model	4. Fixed Effects Model	5. First Differences Model	6. Arab Spring Model
	Regime type: FH	Regime type: Polity IV	Regime type: FH	Regime type: FH	Regime type: FH	Regime type: FH
	Dep. Var.: Protests (CNTS)	Dep. Var.: Protests (CNTS)	Dep. Var.: Protests (SCAD)	Dep. Var.: Protests (CNTS)	Dep. Var.: Protests (CNTS)	Dep. Var.: Protests (CNTS)
Protests (CNTS) (t-1)	-0.005	0.082		-0.009	0.018	-0.015
	-0.035	-0.081		-0.015	-0.045	-0.033
Protests (SCAD) (t-1)			0.021*			
			-0.012			
Internet use (t-1)	0.068***	0.041***	0.031	0.053***		0.032**
	-0.015	-0.012	-0.021	-0.009		-0.013
Δ Internet use (t-1)					0.119*	
					-0.064	
Total number of articles (logged) (t-1)	0.504***	0.259	0.092	0.119	0.634***	0.428***
	-0.121	-0.196	-0.097	-0.121	-0.171	-0.109
Unemployment (t-1)	0.023	0.016	0.046***	-0.04	0.035	-0.023
	-0.026	-0.045	-0.012	-0.035	-0.033	-0.032
Inflation (t-1)	0	0	-0.001	0	-0.002	0
	-0.001	-0.001	0	-0.001	-0.002	0
GNI per capita (/1000) (t-1)	-0.048***	-0.009	-0.02	-0.077***	-0.017	-0.056***
	-0.014	-0.016	-0.029	-0.027	-0.017	-0.018
Elections (t-1)	-0.185	0.847*	-0.360**	0.092	0.345	-0.245
	-0.302	-0.451	-0.175	-0.207	-0.374	-0.264
Population size (t-1)	0.07	0.303	0.317***	0.233*	-0.023	0.155
	-0.107	-0.196	-0.091	-0.132	-0.123	-0.095
Youth bulge (t-1)	3.841	-3.657	5.633	0.863	-4.662	-1.016
	-5.186	-5.909	-4.606	-5.353	-6.056	-4.626
Urbanisation (t-1)	0.01	-0.001	0.001	0.01	0.011	0.013
	-0.009	-0.016	-0.01	-0.011	-0.011	-0.011

Table 2: Continued

Arab Spring						2.746***
						-0.352
Constant	-4.751**	-6.598**	-5.939***	-5.783**	-1.904	-4.693**
	-2.164	-3.34	-1.711	-2.524	-2.359	-1.899
Observations	574	336	274	427	538	574
Number of Countries				35		

***p<0.01, **p<0.05, *p<0.1.

Now that it has become clear that –except for the SCAD model- there is relatively robust evidence for the internet's effect on protesting in authoritarian regimes, it is also interesting to examine whether different effects can be identified *within* the category of authoritarian regimes. Possibly, the authoritarian regimes with the most severe repression, are better able to avert the threat of internet-enabled protests than the authoritarian regimes with slightly more freedoms. Note that I am still only looking within the category of authoritarian regimes here; the partially authoritarian regimes are not part of the analysis yet. To check for different effects within the group of authoritarian regimes, I have split the 574 authoritarian country-years that were part of the base model in Table two into two: one category consisting of the authoritarian regimes with some limited freedoms, with a Freedom House score of 5.5 (n=270) (see Table A3 in Appendix for the country/years that are included); and one consisting of the authoritarian regimes with the least freedom worldwide, with a Freedom House score of 6, 6.5 or 7 (n=304) (See A4 in Appendix for this group). Noteworthy is that some of the authoritarian regimes with the most extreme forms of repression, like North Korea, Turkmenistan and Eritrea, are not part of the analysis due to missing data.

Table three below shows the tests for both types of authoritarian regimes while controlling for the Arab Spring (IRR in Appendix in Table A5). Interestingly, only in the authoritarian regimes with some limited freedoms does internet use have a significant positive effect (99% level) on protesting. In the authoritarian regimes with the least freedom, the effect is non-significant. Additional tests –as can be seen in the Appendix in Table A6- show that the same results appear when using SCAD rather than CNTS data. When the Arab Spring control variable is excluded (also in Table A6), both the authoritarian regimes with some limited freedoms as well as the ones with the least freedom face more protests because of rising internet use. This indicates that during the Arab Spring some very repressive regimes did suffer from internet-enabled protests, but that this is the exception rather than the rule.

Table 3: Internet use and anti-government protest with varying levels of freedom

	1. Authoritarian Regimes with some Limited Freedoms	2. Authoritarian Regimes with the Least Freedom
	Regime type: FH (5.5)	Regime type: FH (6-7)
	Dep var. Protests (CNTS)	Dep var. Protests (CNTS)
Protests (CNTS) (t-1)	-0.012	0.004
	-0.064	-0.047
Internet use (t-1)	0.048***	0.014
	-0.015	-0.017
Total number of articles (logged) (t-1)	0.297**	0.340**
	-0.143	-0.159
Unemployment (t-1)	-0.058	0.026
	-0.053	-0.052
Inflation (t-1)	-0.016	0
	-0.019	-0.001
GNI per capita(/1000) (t-1)	-0.072***	-0.051*
	-0.021	-0.027
Elections (t-1)	-0.583	0.002
	-0.384	-0.351
Population size (t-1)	0.417***	0.202
	-0.159	-0.131
Youth bulge (t-1)	2.026	-5.628
	-6.907	-5.983
Urbanisation (t-1)	0.015	0.015
	-0.013	-0.014
Arab Spring	2.769***	3.051***
	-0.608	-0.52
Constant	-8.991***	-4.671**
	-3.123	-2.276
Observations	270	304

***p<0.01, **p<0.05, *p<0.1.

H2: The effect of internet use on the likelihood of anti-government protest under authoritarian regimes changes over time.

The second hypothesis is interested in whether the effect of internet use has changed over time. Arguably, contemporary authoritarian regimes are better able to respond to the challenges the internet poses compared to regimes in the 1990s and the early 2000s (Deibert et al. 2012; Deibert 2015). Alternatively, the rise of social media since 2005 has made the internet's effect stronger. To check for these two rival explanations, an interaction variable was made of internet use with time (years). Table four shows the results of this test, demonstrating that the interaction variable is insignificant. There is thus no proof in the data for a learning effect on the side of the regimes in power, nor for a special 'social media effect'. This could mean that both explanations are irrelevant, but also that they cancel each other out.

H3: The effect of internet use on the likelihood of anti-government protest under authoritarian regimes decreases with higher online repression.

Table five demonstrates a test of the third hypothesis. The interaction term of online repression and internet use shows whether the effect of internet use on protesting changes with rising online repression in authoritarian regimes. Contradicting the hypothesis, the interaction term is not significant in the model. Yet, as mentioned earlier, by including the variable measuring online repression, the sample is drastically reduced (n=66), thereby increasing the uncertainty of the drawn conclusions. In other words, it is too early to draw strong conclusions on online repression on the basis of the results in Table five.

H4: Increasing internet use increases the likelihood of anti-government protests more in authoritarian regimes than in democracies.

Table six tests hypothesis four (IRR in Appendix under Table A7). In the base model, internet use is interacted with regime type –democracies, partially authoritarian, and authoritarian regimes- to examine whether the internet's effect varies across regime type. Democracies are the reference category. Supporting the hypothesis, the positive and significant coefficient of the interaction term that combines authoritarian regimes with internet use shows that increasing internet use indeed facilitates protests under authoritarian rule, more than in democracies and partially authoritarian regimes. Since interaction terms with continuous variables are difficult to interpret, Figure two shows the marginal effects of the interaction between internet use in democratic and authoritarian regimes. Whereas the effect of increasing internet use on protests is

Table 4: The internet's effect over time

	Internet Use Over Time
	Regime type: FH
	Dep var. Protests (CNTS)
Protests (CNTS) (t-1)	-0.016
	-0.031
Internet use (t-1)	-10.567
	-8.466
Internet use (t-1)*Year	0.005
	-0.004
Year	-0.019
	-0.031
Total number of articles (logged) (t-1)	0.524***
	-0.113
Unemployment (t-1)	0.021
	-0.027
Inflation (t-1)	0
	-0.001
GNI per capita (/1000) (t-1)	-0.048***
	-0.015
Elections (t-1)	-0.19
	-0.306
Population size (t-1)	0.067
	-0.103
Youth bulge (t-1)	5.029
	-5.542
Urbanisation (t-1)	0.012
	-0.009
Constant	32.511
	-61.436
Observations	574

***$p<0.01$, **$p<0.05$, *$p<0.1$.

insignificant in democracies, the predicted number of protests increases substantially when internet use increases in authoritarian regimes. Holding all variables at their means, an authoritarian country that goes from 0% of the population using the internet to 50% faces almost four instead of zero protests. It is important to note that the confidence intervals become wider with increasing internet use because these values are empirically rare, as illustrated by the kernel density plot of internet use presented in the figure (the dashed line). From 50% internet use onward, the confidence intervals for authoritarian and democratic regimes overlap.

Table 5: Internet use and anti-government protest with online repression

	Internet Use and Online Repression
	Regime type: FH
	Dep var. Protests (CNTS)
Protests (CNTS) (t-1)	0.002
	-0.022
Internet use (t-1)	0.042
	-0.062
Online repression (t-1)	0.004
	-0.04
Online repression (t-1)*Internet use (t-1)	-0.001
	-0.001
Total number of articles (logged) (t-1)	0.730***
	-0.234
Unemployment (t-1)	0.197
	-0.133
Inflation (t-1)	-0.072**
	-0.035
GNI per capita(/1000) (t-1)	0.055**
	-0.022
Elections (t-1)	0.929**
	-0.372
Population size (t-1)	0
	-0.234
Youth bulge (t-1)	-4.643
	-6.953
Urbanisation (t-1)	-0.018
	-0.023
Constant	-2.009
	-3.635
Observations	66

***$p<0.01$, **$p<0.05$, *$p<0.1$.
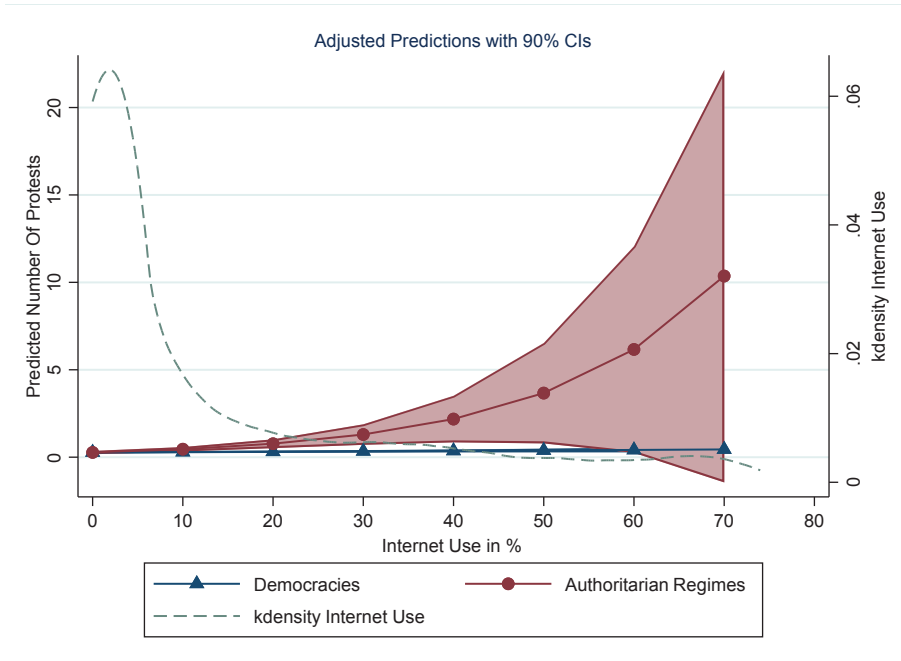
Figure 2: Predicted number of protests with rising internet use

The second model uses the Polity IV categorization instead of Freedom House but the results remain unchanged. Increasing internet use facilitates protests in authoritarian countries more than in democracies. There is no significant difference in the effect of internet use in authoritarian regimes and in partially authoritarian regimes when using Polity IV data.[38] In the third model, SCAD data is used to measure the dependent variable. Similar to the Polity IV model, both the partially authoritarian and authoritarian countries face significantly more protests with increasing internet use as compared to democracies.[39] These findings thus indicate that although there is not a positive effect of internet use in authoritarian regimes when using SCAD (as demonstrated in Table two, model three), we do see with this same SCAD data that rising internet use leads to more protests in both partially authoritarian and authoritarian regimes as compared to democracies. In model four a fixed-effects model is shown. Again, the interaction effect of internet use in authoritarian countries (as compared to democracies) is positive and statistically

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38   Possibly because many states that Freedom House sees as non-free or partially free end up in a more free category in Polity IV because of its more minimal conceptualization of democracy.

39   An additional test with partial democracies as a reference category (not shown) shows moreover that there is no significant difference between the partial democracies and authoritarian countries.

significant. The interaction term with partially authoritarian regimes is no longer significant. The results from model five derive from a first differences model, investigating whether a change in the level of internet use rather than overall levels cause the internet's effect on protests. More than in partially authoritarian regimes and democracies, instant changes in internet use lead to more protests.

Only in the Arab Spring model, model six, does the significance of the interaction effect completely disappear. Hence, while we saw that the effect of internet use remains significant in authoritarian regimes once controlled for the Arab Spring (Table two model six), a difference in effect across regime type disappears. This result can probably be explained by the fact that the countries affected by the Arab Spring were primarily authoritarian regimes, while -as one can see in Figure one- democracies also faced many protests in the period 2011-2013. In other words, the Arab Spring variable explains away so much of the variance that the interaction term of internet use with authoritarian regimes is no longer significantly different from the reference category (the interaction term with democracies).

Table 6: Internet use and anti-government protest with varying regime types

	1. Base Model	2. Model Polity IV	3. Model SCAD	4. Fixed Effects Model	5. First Differences Model	6. Arab Spring Model
	Regime type: FH	Regime type: Polity IV	Regime type: FH	Regime type: FH	Regime type: FH	Regime type: FH
	Dep var. Protests (CNTS)	Dep var. Protests (CNTS)	Dep var. Protests (SCAD)	Dep var. Protests (CNTS)	Dep var. Protests (CNTS)	Dep var. Protests (CNTS)
Protests (CNTS) (t-1)	0.129***	0.135***		0.028***	0.132***	0.128***
	-0.041	-0.042		-0.007	-0.04	-0.04
Protests (SCAD) (t-1)			0.044**			
			-0.018			
Internet use (t-1)	0.007*	0.008**	-0.004	0.013***		0.006*
	-0.004	-0.003	-0.007	-0.003		-0.003
Δ Internet use (t-1)					-0.056**	
					-0.024	
Authoritarian regime type (t-1)*Internet use (t-1)	0.045***	0.046***	0.042***	0.015***		0.007
	-0.011	-0.01	-0.012	-0.005		-0.009
Partially Authoritarian regime type (t-1)*Internet use (t-1)	0.008	0.025*	0.028***	0.007		-0.002

Table 6: Continued

	-0.006	-0.013	-0.01	-0.006		-0.005
Authoritarian regime type (t-1)	-0.014	-0.288	0.177	-0.009	0.44	-0.06
	-0.255	-0.278	-0.205	-0.201	-0.324	-0.259
Partially Authoritarian regime type (t-1)	0.186	0.083	0.317*	0.308*	0.318	0.241
	-0.177	-0.185	-0.177	-0.159	-0.195	-0.172
Authoritarian regime type (t-1)*Δ Internet use (t-1)					0.160***	
					-0.059	
Partially Authoritarian regime type (t-1)*Δ Internet use (t-1)					0.047	
					-0.04	
Total number of articles (logged) (t-1)	0.362***	0.363***	0.166**	0.241***	0.334***	0.361***
	-0.071	-0.073	-0.069	-0.056	-0.08	-0.063
Unemployment (t-1)	0.013	0.015	0.029***	-0.013	0.016	0
	-0.014	-0.013	-0.009	-0.015	-0.015	-0.013
Inflation (t-1)	0	-0.000*	-0.001	0	0	-0.000*
	0	0	-0.001	0	0	0
GNI per capita (/1000) (t-1)	-0.021**	-0.027***	-0.009	-0.029***	-0.01	-0.023***
	-0.01	-0.009	-0.016	-0.01	-0.007	-0.008
Elections (t-1)	0.222*	0.241**	-0.221**	0.027	0.264**	0.232**
	-0.119	-0.121	-0.09	-0.086	-0.131	-0.112
Population size (t-1)	0.226***	0.236***	0.331***	0.076	0.222***	0.227***
	-0.058	-0.06	-0.058	-0.061	-0.063	-0.059
Youth bulge (t-1)	2.087	2.595	-0.515	-0.881	-1.451	-0.568
	-2.839	-2.514	-4.397	-2.728	-3.37	-2.614
Urbanisation (t-1)	0.007	0.007	0.002	0.010*	0.010**	0.006
	-0.005	-0.004	-0.005	-0.005	-0.005	-0.005
Arab Spring						2.700***
						-0.329
Constant	-6.547***	-6.718***	-5.353***	-3.525***	-5.990***	-5.915***
	-1.132	-1.152	-1.332	-1.219	-1.236	-1.153
Observations	2,723	2,723	900	2,346	2,612	2,723
Number of Countries				132		

***p<0.01, **p<0.05, *p<0.1.

Summarizing the Country-Level Analysis

Taken together, the results show robust evidence for the idea that internet use facilitates protesting under authoritarian regimes (H1), and in line with the information-scarcity assumption that the effect is stronger in authoritarian regimes than in democracies (H4). The results of the partially authoritarian regimes were inconsistent, sometimes performing like democracies, sometimes like authoritarian regimes, possibly resulting from the category's diverse set of countries. Additional tests within the group of authoritarian regimes moreover showed that the ones with some limited freedoms, having slightly milder repression, faced more protests due to rising internet use than the most repressive authoritarian regimes with the least freedom. Important to mention for generalizability here is that authoritarian regimes with the most extreme forms of repression worldwide were not included in the analysis due to missing data.

Hypothesis two, which proposed that the effect of internet use changed over time, was not significant. Hence, there is no evidence for the idea that authoritarian states have learned over time how to prevent internet-enabled protesting, neither for the claim that the internet's effect has become stronger in the 'social media years'. Also for hypothesis three, testing whether online repression decreased the effect of internet use under authoritarian regimes, no evidence was found. However, the very reduced sample here made it hard to draw strong conclusions on the basis of these findings.

Individual-Level Analysis

The country-level analysis provided evidence at the macro level, yet it remains to be seen whether similar effects can be found at lower levels as well. As mentioned in Chapter two, the mobilisation chain takes the individual as the unit of analysis, so in order to use the framework it is necessary to not only find a positive direct effect at the country level, but also at the individual level of analysis. In addition, there are two substantial issues in the country-level analysis that an individual-level analysis can possibly solve, thereby increasing the quality of the drawn causal inferences so far.

Unlike the country-level analysis, the individual-level analysis does not rely on newspaper reporting for measuring protest that, despite attempts to solve the issue with a control variable, remains a potential concern for causing bias. As Weidman (2016) has shown, internet use at the country level is likely to be correlated to the reporting of protests, which could cause an overestimation of internet's effect and hence wrongly drawn conclusions. Also in tracing the internet's direct effect on protest behaviour, an individual-level analysis is preferable to a study at the country level. In the latter, one essentially looks at the correlation between internet penetration rates and reported protests, without being sure that those using the internet actually have anything to do with the reported protests

in the country. In the individual-level analysis, by contrast, one can be more certain that it was internet use that contributed to someone taking to the streets.

At the individual level of analysis, existing evidence of the internet's effect on protesting is even more scarce than at the country level, however. Various studies have found that internet users were overrepresented among the protestors in Egypt and Tunisia during the Arab Spring (Breuer, Landman and Farquhar 2015; Tufekci and Wilson 2012; Beissinger, Jamal and Mazur 2015), yet there is to my knowledge just one academic study that looks at individual internet use and protest participation in another authoritarian setting. Investigating Ukraine's Orange revolution, Bozzoli and Brück's study (2011) looks at individual determinants of protest participation for both supporters of the Ukrainian revolution in 2010 as well as the counterrevolutionaries that protested against it. Very much in line with the Arab Spring findings, the authors find that internet use was positively correlated to protest participation in Ukraine.[40]

Yet, evidence from Tunisia, Egypt and Ukraine, the latter a country that Freedom House considered 'free' at the time of the investigated protest in 2010, is insufficient to build statements for the broader group of authoritarian regimes. Since to my knowledge there is no academic study that investigates the relationship between internet use and protest participation in authoritarian regimes at the individual level, the following analysis is therefore the first of its kind to fill this void. The first hypothesis that this analysis tests is very much in line with the first (confirmed) hypothesis of the previous country-level investigation, yet this time at the individual level:

H1: Increasing (individual) internet use increases the likelihood of (individual) participation in protest under authoritarian regimes.

As I will make use of cross-sectional rather than panel data in my individual level analysis, it is impossible to test whether the effect of internet use has changed over time (H2 in the country level of analysis). It is possible to test whether online repression decreases the internet's effect at the individual level, though (H3 at the country level). Whereas no evidence for the moderating effect of online repression was found at the country level –possibly also due to the small sample- it is still possible that online repression is able to break the link between internet use and protesting at the individual level. Hence, the second hypothesis is that:

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40   This was only the case for the Orange revolutionaries, not for the Blue counter-revolutionaries.

H2: The effect of (individual) internet use on the likelihood of (individual) protest participation under authoritarian regimes decreases with higher online repression (country).

Research Design

Data

To test the two hypotheses I make use of a multilevel (hierarchical) regression model. The advantage of such an analysis is that it allows an individual level analysis to be made, while at the same time accounting for important systematic variation at the country level. To select my sample, I again used FH's tripartite categorization of regime type to select only the authoritarian countries. Since testing my hypotheses, especially the second one, requires information on both the country and the individual level, my analysis is restricted to those regimes on which the needed data is available on both levels. I use the same FH Freedom of the Net (2017) data as I used in the previous country-level analysis to measure online repression at the country level.

To be able to test the hypotheses, not only country level but also individual level data is needed on internet use, protest participation, as well as on important control variables such as age and education. While various research projects gather data on politically-relevant attitudes worldwide, I use data from the Asian Barometer (2018), African Barometer (2018) and Arab Barometer (2018) data project, as their coverage is most complete, both in terms of countries/years that are covered, as well as in the questions that are asked to the respondents. As the Barometer project does not have data on the Post-Soviet region, data from the World Value Survey (WVS) (2018) is used to cover this region.[41]

Looking into protest participation through surveys could be problematic as respondents might be too afraid to speak freely. As Tannenberg rightly states (2017, 1): "Given that authoritarian regimes often pay close attention to what their citizens do and say in order to sanction those who challenge the official discourse (Linz [1975] 2000), there is a real risk that citizens associate public opinion surveys with government intelligence gathering. Citizens can therefore be expected to appease the regime with their responses out of fear that failure to do so may result in repression, physical or otherwise".

In Tannenberg's study (2017) of Afro barometer data, which is to my knowledge the only research looking into this issue, he indeed finds that primarily in autocratic

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41   Both data projects use either full probability or a combination of probability and stratified sampling to select a representative sample of the population with around 1200 respondents (margin of error of around 3%). WVS data had to be recoded to make it in line with the Barometer data.

countries as opposed to democracies, a respondents' belief about who administers the survey affects answers to politically sensitive questions. His research moreover indicates that the more authoritarian a country becomes, the larger the measurement validity problem is likely to be. As a potential way forward, Tannenberg (idem, 17) launches the promising idea of constructing reliability weights to enable the researcher to account for biases in the analysis.

The measurement validity of my dependent variable measuring protest participation is thus a serious concern. However, until the suggested weights or any alternative instruments measuring protest participation have been developed, the current Barometer and WVS data are the best systematic measurements available. The research organizations are aware of these problems outlined and have developed techniques to minimize them. For example, their interviews are always conducted face-to-face and not by telephone, and the Barometer project trains interviewers to "create an atmosphere in the interview process that allows respondents to feel comfortable in answering sensitive questions" (African Barometer 2014). All interviewers furthermore stress the confidentiality of the interview, emphasizing that the interviewee remains completely anonymous. Moreover, a potential bias in the data is likely to lead to an under- rather than an overestimation of the protest participation in society, making it less problematic for the causal inferences drawn in this chapter. Taken together, while not treating the measurement validity issue lightly, I am confident using the Barometer and WVS data in my analysis as the most valid, reliable, comparable measurement of protest participation under authoritarian regimes.

There are eight different authoritarian regimes for which both the required country-level as well as the individual-level data is available. The dataset contains 23779 respondents covering the period 2010-2015. For some countries multiple waves were available so these countries have observations for more than one year.[42] Table seven below displays the countries included, the year in which the survey was held, the number of respondents that were surveyed in the respective country in that wave, as well as the FH overall freedom score (1-7), with a high score indicating less freedom, and the online repression score (1-100), where a higher score connotes more repression. To prevent endogeneity issues, the FH scores on freedom and online repression are used from one year prior to the year in which the survey was conducted.

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42   Egypt, Zimbabwe and Sudan.

Table 7: Authoritarian regimes that are part of the sample

Country	Year Survey	N=	FH score (1-7)	Online Repression (0-100)
China	2011	3473	6.5	83
Egypt	2013	2386	5.5	60
Egypt	2015	1198	5.5	61
Vietnam	2010	1191	6	73
Zimbabwe	2012	2400	6	54
Zimbabwe	2014	2400	6	56
Azerbaijan	2011	1002	5.5	48
Sudan	2013	1199	7	63
Sudan	2015	1200	7	65
Jordan	2013	1795	5.5	46
Belarus	2011	1535	6.5	69
Kazakhstan	2011	1500	5.5	55
Russia	2011	2500	5.5	52

Variables

Dependent variable:

Protest: To measure protest participation, my dependent variable measures whether the respondent has attended a demonstration or protest march during the last three years.[43] The variable is a dichotomous variable, scoring a one if the respondent has attended a demonstration, and a zero if not.[44] The variable does not ask respondents about their attendance on anti-government rallies, yet protest participation is the best measurement available.

Independent variable:

Internet use: The independent variable of interest, internet use, is an ordinal variable measuring the frequency of internet use and ranges from 'never', 'hardly ever/few times a year', 'at least once a month', 'at least once a week', to 'almost daily'.[45] A high score on this variable indicates high internet use of the respondent.

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43   The Arab Barometer data speaks of a protest, march or sit-in but this is treated similarly in my dep. variable. The World Value Survey data on the Post–Soviet region, as well as the African Barometer data, asks respondents about protest attendance in the last year rather than in the last three years. This is neglected in the analysis, however, as it is unlikely to lead to systematic errors in the drawn inferences.

44   Originally, the variable was ordinal, but the categories 'protested once' and 'protested multiple times' were conflated into one.

45   For Africa the categories go from 'Never', 'Less than once a month', 'A few times a month', 'a few times a week', to 'every day'. For the Post-Soviet countries the categories range from 'Never', 'Less than monthly', 'monthly', 'weekly' to 'daily'.

Interaction variable:

Internet use*Online repression (Country level): Here the individual internet use of the respondent is interacted with the country-level online repression. The online repression measurement is operationalized as in the country analysis.

Control variables:

At the individual level I control for *age, gender, urbanisation, education, employment,* other *media use, political interest* and *income.* Internet users are often male and young. Moreover, we know that age –or biographical availability- is an important determinant of engaging in risky collective action (Wiltfang and McAdam 1991). With regard to gender, in many societies women and men have unequal access to resources that could potentially affect both their access to the internet and their protest participation (Bailard 2014).[46] Urbanisation,[47] education,[48] employment,[49] and political interest[50] are also all factors that could have an influence on both internet use and protest participation, making it important to include them as controls. Other media use,[51] as well as income[52] are also important controls, but have a lot of missing data, which is why I put them in separate models.[53]

At the country level, it is important to control for factors that are likely to determine protest participation. While it is impossible to capture every phenomenon that could influence citizens' decision to join a protest, I incorporate the most important ones by including in the models: The level of *corruption, repression, GDP per capita,* the *fairness of the elections, the level of democracy,* and the level of *internet penetration rates.* Corruption is measured using the Transparency International Corruption

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[46] Age is measured as the actual age of the respondent, gender is a dichotomous variable where 1=male, 2=female.

[47] Urbanisation is included as a dichotomous variable measuring whether a respondent lives in a rural or urban area (0=rural, 1=urban). For some Barometer data there is more information available on the number of inhabitants of the respondent's place of residence. If this is so, I coded towns with fewer than 50,000 inhabitants as rural areas, and over 50,000 as urban areas.

[48] Education measures the education level of the respondent. It has 5 categories 1= No education, incomplete primary, 2=Complete primary, incomplete secondary, 3= Complete secondary/Vocational type, 4= Some university education, and 5=MA and Above.

[49] Employment measures whether a respondent is employed or not (0= no, 1=yes). If not, this doesn't necessarily mean the respondent is unemployed and looking for work. However, data on whether the respondent is unemployed against his/her own will is missing for many countries.

[50] Political interest measures on an ordinal scale whether the respondent is interested in politics or not. 1 stands for not interested at all, 4 for very interested.

[51] 1 means daily use of the medium, 5 means no use of the medium at all.

[52] The variable measuring income is an ordinal one with 5 categories asking the respondent in which income group his/her household falls, so the variable in fact measures relative income rather than absolute income. For the Post-Soviet states 10 categories are changed into 5, by combining two categories into one.

[53] The variable measuring television, radio and newspaper use is not available for the Asian countries, whereas the income variables lacks data for the Arab/Middle Eastern countries, as well as for the African states.

perception index (scale from 1 till 10) (Transparency International 2018). The index uses business people opinion surveys, as well as a group of country/risk/ expert analysts to determine the country scores.[54] Repression is captured using data from the Political Terror Scale (Gibney et al. 2016). On the basis of Amnesty International Reports, US State Department Country Reports, and Human Rights Watch Reports, the index measures the levels of political violence and terror that a country experiences in a particular year.[55] Economic development is operationalized using the World Bank's GNI per capita, converted to international dollars based on power purchasing parity rates (World Bank 2018). Additionally, I control for the level of democracy with FH Freedom of the World data (Freedom House 2016)[56] and for fairness of the electoral process using a FH subcomponent.[57] Lastly, the internet penetration rate measures the percentage of the population using the internet.[58] In the Appendix under A8, a table with the descriptive statistics can be found.

Estimation Technique

Since my dependent variable is a dichotomous variable, a test of the hypotheses requires a logistical multilevel regression model. My model contains random effects for internet use, meaning that internet use (at the individual level) is allowed to vary across countries to account for additional variation in the dependent variables. Comparing a model with no random effects for internet use with one that has random effects shows a better model fit for the latter.[59]

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54 A high score on this scale means more transparency, a low score higher corruption. For more information, see: https://www.transparency.org/cpi2010/in_detail#4

55 A 1 refers to low/absent political violence, a 5 to a society where political violence and terror has expanded to the whole population. For more information, see: http://www.politicalterrorscale.org/

56 A 1 stands for complete freedom, a 7 for no freedom at all.

57 This variable is an index going from 0 (not fair) to 12 (completely fair). For more information, see: https://freedomhouse.org/report/methodology-freedom-world-2017

58 This data comes from the International Telecommunication Union (2018). For more information see: http://www.itu.int/en/ITU-D/Statistics/Pages/default.aspx

59 Intercept and slope are allowed to vary in the models.

Results

H1: Increasing (individual) internet use increases the likelihood of (individual) participation in protest under authoritarian regimes.

Table eight shows the test of hypothesis one. In the Appendix, Table A9, models can be found where other media use and income are included, and where the sample is smaller as a result (these models show similar results though). The model shows that increasing internet use has –ceteris paribus- a positive effect on the likelihood that someone participates in a protest under authoritarian regimes (and is significant at 99% level). With every 1-point increase in internet use, the log odds of having attended a protest increase by 0.167. Or, to put it differently, the odds of attending a protest increase by around 17% with a 1-point increase in internet use.

Figure three demonstrates the probability someone attends a protest at different levels of internet use while the other variables are held at their mean. As one can see, for someone not using the internet, this probability lies just above the 5%. For those that use the internet almost daily this is almost 10%. As one would logically expect, being male, young, urban, and more highly educated increases the likelihood of someone participating in a protest.
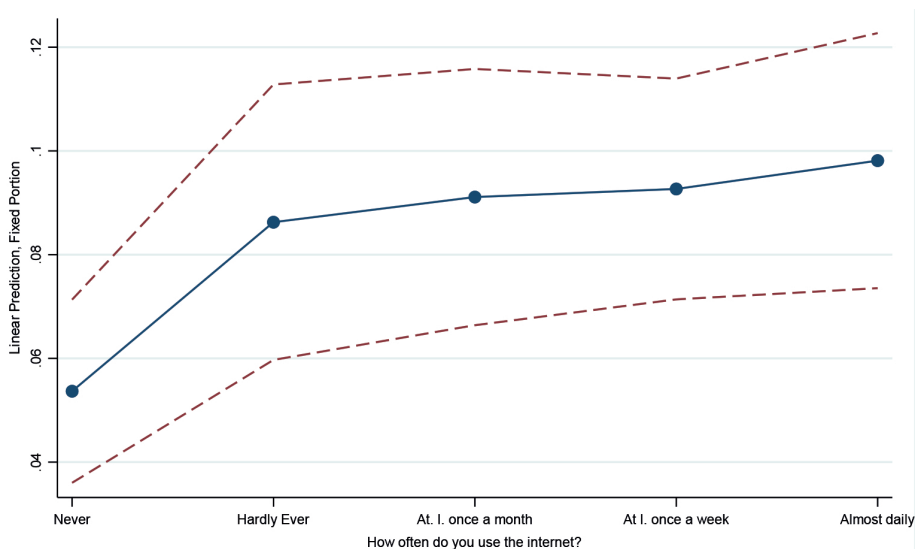
Figure 3: Predicted probability of protest

Note: Prediction in blue with circles, dashed red lines form the 95% CI.

Table 8: Internet use and anti-government protest

	Base Model Protesting
Internet use	0.167***
	-0.056
Urbanisation	0.178***
	-0.059
Gender	-0.274***
	-0.059
Age	0.006***
	-0.002
Education	0.073***
	-0.027
Employment	0.065
	-0.068
Political interest	0.365***
	-0.034
Elections	-0.16
	-0.107
GDP per capita	0
	0
Level of democracy	-1.504***
	-0.438
Corruption	-0.048
	-0.142
Repression	1.344***
	-0.204
Internet pen.	0.005
	-0.018
Constant	0.357
	-2.611
Random effects parameters	
Var (Internet use)	0.023
	0.0131
Between country variance	0.364
	0.23
Covariance	-0.08
	0.05
Between person variance	
Observations	21,060
Number of groups	9
Av. no. of obs. per Country	2,340

***p<0.01, **p<0.05, *p<0.1.

In the country-level analysis, additional analyses showed that the effect within authoritarian regimes was primarily driven by the authoritarian regimes with some limited freedoms, rather than the least free authoritarian states with higher repression. To investigate whether the same holds at the individual level, I interacted individual internet use with the FH score. No such effect could be found at the individual level, (See Table A10 in Appendix), but the fact that only eight different authoritarian regimes are part of the sample makes it difficult to draw conclusions with much certainty here.

H2: The effect of (individual) internet use on the likelihood of (individual) protest participation under authoritarian regimes decreases with higher online repression (country).

Table nine shows a test of hypothesis two. Here too, robustness checks with other media use and income are presented in the Appendix (see Table A11, also for an explanation of the results that change here somewhat). Contradicting the hypothesis, yet similar to the country-level analysis, the interaction effect is not significant, indicating that the effect of individual internet use on (individual) protesting does not decrease with rising online repression. Similar to the exploration of the effect within authoritarian regimes, however, the small number of countries included (nine in this case) raises doubt about the reliability of the findings. Interestingly, while the interaction effect is insignificant, the direct effect of online repression on protesting is negative and significant, indicating that citizens in countries with higher online repression are less prone to protesting.

Table 9: Internet use and online repression

	Model with Online Repression Protesting
Internet use	0.075
	-0.291
Online repression	-0.034*
	-0.019
Online repression*internet Use	0.002
	-0.005
Urbanisation	0.176***
	-0.059
Gender	-0.273***
	-0.059
Age	0.006***
	-0.002
Education	0.074***
	-0.027
Employment	0.068
	-0.068
Political interest	0.365***
	-0.034
Elections	-0.262**
	-0.115
GDP per capita	0
	0
Level of democracy	-0.724
	-0.554
Corruption	-0.029
	-0.126
Repression	1.131***
	-0.214
Internet pen.	-0.008
	-0.019
Constant	-1.379
	-2.622
Random effects parameters	
Var (Internet use)	0.022
	0.013
Between country variance	0.215
	0.174
Covariance	-0.058
	0.044
Between person variance	
Observations	21,060
Number of groups	9
Av. no. of obs. per Country	2,340

***p<0.01, **p<0.05, *p<0.1.

Summarizing the Individual-Level Analysis

The individual-level analyses show that increasing internet use increases the likelihood that someone attends a protest under authoritarian rule. No difference in the individual effect could be found within the group of authoritarian regimes, however, which might also be due to the low number of countries included. Finally, the individual-level analysis showed no evidence for the idea that higher online repression decreases the effect of internet use on protesting, yet here too the low number of countries makes it difficult to make claims with a lot of certainty.

Conclusion

The presented quantitative analyses, both at the country and individual level, showed robust evidence that increasing internet use facilitates protesting under authoritarian regimes. Interestingly, the country-level analysis showed that the effect is stronger in authoritarian regimes than in democracies, which further substantiates the information-scarcity assumption. The analysis also demonstrated that within the category of authoritarian regimes, the effect is primarily driven by the subset of regimes that have some limited freedoms, i.e. the states that have a somewhat milder type of repression. Important to note here is that some of the most repressive authoritarian states worldwide were not part of the sample due to missing data. The analyses furthermore showed no evidence for the claim that higher online repression decreases the effect of internet use on protesting, possibly also due to the low number of available observations. The chapter found no proof for a changing effect of internet use over time, indicating that there is no evidence for authoritarian learning how to prevent internet-enabled protest over time, nor for a social media effect of internet use in the last decade, but it could also be that the two processes cancel each other out.

The first question of this research, namely whether internet use facilitates anti-government protesting under authoritarian regimes, can thus largely be affirmed. The when and especially the how questions, however, remain mostly unanswered. In spite of the empirical exploration into online repression's effect, I am also not really able to say that much about its effectiveness yet. The very limited amount of data raises uncertainty, and even if there were indeed no evidence for a decreasing (moderating) effect of online repression on internet-enabled protesting, we would still not know how to interpret this. Regimes might be unable to prevent internet-enabled protesting despite high internet controls, they might allow internet-enabled protests as most of them are not overly threatening to their rule, or high online repression might actually be a response from regimes to an effect that was already there.

To further delve into the causal mechanisms linking internet use to anti-government protest, the following chapters use the earlier-presented mobilisation chain for an in-depth investigation into internet-enabled protesting under authoritarian rule in Malaysia. Moving the analysis from many countries towards one allows for a better examination of the causal mechanisms that lie between internet use and protesting (Landman [2000] 2008, 90), as well as a better assessment of the importance of state repression and social media as intervening variables.

Chapter 4
Internet Use and Sympathizing with an Anti-Government Protest Movement

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The previous chapter demonstrated that both at the individual and country level, increasing internet use facilitates anti-government protesting under authoritarian regimes. Chapter four till six will now delve deeper into the question why this is so by focusing on the authoritarian context of Malaysia. As explained in Chapter one, the choice for Malaysia was first of all informed by its information scarcity. With the traditional media under strict government control, Malaysians have little access to alternative political information. Secondly, the selection was driven by Malaysia's variation over time in the key variables of interest: internet use, social media use, the (non-)occurrence of anti-government protests, as well as the state's on-and offline repression all vary greatly, allowing an investigation into the internet's effects. Thirdly, Malaysia was also chosen for practical reasons, as it is an authoritarian context where it is safe enough to do fieldwork, and where interviews could be conducted in English. Chapter three's analysis adds yet another reason for selecting Malaysia that was unmentioned in Chapter one: Malaysia fits the category of authoritarian regimes with limited freedoms that were found to be most susceptible towards internet-enabled protesting: While electoral manipulation, tight media control, and coercive action against civil society effectively break Malaysia's democratic chain, Malaysians' civil and political rights are still respected to some extent (Schedler 2006; Case 1996; Yangyue 2011). This makes Malaysia a good (typical) case to study the general relationship in much more detail (Seawright and Gerring 2008).[60] Devoting a separate chapter to the internet's role in each step of the chain, the chapters provide a deeper insight into the causal processes that link internet use to anti-government protesting as well as the circumstances under which this is likely to occur.

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[60] In the period under study (1990-2013) Malaysia even fell just outside of the group of authoritarian countries into the partially authoritarian regimes. Malaysia scored 5, 4.5 and 4 on the Freedom House scale, in which the countries with a 5.5 were found to be most susceptible towards internet-enabled protesting. However, because Malaysia's score is really close to this 5.5 point, because the country meets the information-scarcity assumption, the most important reason to expect an effect of internet use on protesting under authoritarian rule, and because the results for the category of partially authoritarian regimes were very ambiguous, sometimes behaving similarly to the group of authoritarian regimes, I do not see it as problematic that Malaysia falls just on the other side of the cut-off point, into the group of partially authoritarian regimes.

This chapter examines the internet's role in the first step of the mobilisation chain, analyzing whether internet use –by challenging information scarcity in society- has made Malaysian citizens more sympathetic towards anti-government protest movements. It argues that this is indeed the case and finds its explanation in Malaysia's *asymmetry in information controls* (Kerr 2013), meaning that compared to the traditional media, the internet is relatively free from state control. Due to this freedom online, many Malaysians accessing the web have been exposed to flows of political information, which are often highly critical towards the authorities, thereby increasing Malaysians' anti-regime sentiment and their sympathy for anti-government protest movements. The Malaysian government was slow to realize the internet's political potential, and was therefore rather late with its response. Despite increased state attempts in the last decade to control the internet, the chapter finds no evidence that the Malaysian authorities have been able to make their information controls more symmetric. Interestingly, the chapter even shows that the effect of internet use has been strongest in the more recent period, when the government's online repression was highest. This rather counterintuitive finding can at least partly be explained by the long endurance of the asymmetry in information controls as well as the presence of social media.

The chapter starts with a discussion on what we already know about the internet's role in the first step of the chain. In the remainder, the core question –whether internet use affects sympathy for anti-government protest movements- is answered by first exploring how much freedom there is on the Malaysian internet compared to the traditional media. After it has been established that there is an asymmetry in information controls, the chapter examines how this asymmetry affects the internet's effect on Malaysians' sympathy for anti-government protest movements.

Internet Use: Affecting the Sympathy for Protest Movements?

As briefly outlined in Chapter two, the debate in the first step of the chain revolves around the question of whether internet use has put authoritarian regimes' control over information under pressure. This idea builds on the notion that in the 'old media model' (Chowdhury 2008, 7), traditional media -like radio, television and newspapers- were easily controlled by authoritarian regimes, thereby allowing the state to strictly regulate what information subordinates got exposed to, resulting in a lack of alternative political information in society (Friedrich and Brzezinski [1956] 1961; Geddes and Zaller 1989).

Nowadays, the internet's global many-to-many communication is believed by many to have challenged authoritarian societies' information scarcity (Howard and

Hussain 2012; Howard 2011; Lynch 2011, Castells 2008; Ferdinand 2000), as it has turned citizens from passive information consumers into participatory information producers, whilst at the same time allowing foreign information to travel easily across authoritarian borders. As a result, the quantity and diversity of information that a citizen under authoritarian rule with internet access gets exposed to is arguably incomparable to what a citizen without internet access gets to see and read. While those using traditional media are merely fed the state's discourse, internet users can access an alternative public sphere that is supposedly uncontrolled by the state, and where they can freely share information that the state would prefer to sweep under the carpet.

The argument suggests that when citizens can learn about policy failures, corruption, economic inequality, or protests and democratic practices in other countries, their perception of reality changes. As the government turns out to have many more skeletons in the closet than the traditional media admits, whilst democratic expectations simultaneously rise as a result of the internet's window onto the rest of the world, the net result is likely to be a growing disenchantment with the authoritarian leadership (Bailard 2012; 2014; Lynch 2011) and a rising sympathy for those standing up against the ones in power.

Examples in the existing literature that support the idea of a cyberspace that decreases citizens' approval of their authoritarian government through exposure to alternative information are abundant. Prior to Ukraine's Orange Revolution, for instance, a vibrant, critical online alternative media environment is believed to have increased the number of Ukrainians challenging the Kuchma regime (Goldstein 2007, 7-8). Similarly, Moyo (2011, 251) describes how in Mugabe's Zimbabwe, cyberspace exposed Zimbabweans to vote rigging, violence, rape, abductions, torture, and hunger, thereby directly challenging the legitimacy of the regime. In that same line, Lei's (2011) research demonstrates that Chinese internet users are more critical and politicized than fellow citizens that do not go online, while McGlinchy (2009) also finds that internet users in Kyrgyzstan have lower trust in their government. In Tunisia too, activists and journalists have "consistently used the internet to publish critiques of the Ben Ali regime", eventually contributing to the mobilisation of Tunisians to take to the streets (Chomiak 2014, 26).

Yet, these cyber-optimistic accounts have been challenged on various grounds. Crucially, rather than being the prime absentee, the authoritarian state is, according to many, able to effectively intervene in cyberspace (Greitens 2013; Morozov 2011; Deibert 2015; Nisbet, Stoycheff and Pearce 2012), denying citizens access to all sorts of information, while feeding them with online information that praises their rule, defames oppositional forces, or –in the case of China- that distracts citizens from sensitive issues (King, Pan and Roberts 2017). Deibert et al. (2008; 2010; 2012)

have extensively documented all sorts of state interventions in cyberspace -from censorship to the pollution of social media- and notice an increased capacity of the authoritarian state to regulate and manipulate information online (Deibert 2015).

Critics have also contested the notion that internet users under authoritarian rule are interested in politics in the first place. Kendzior (2012, 5) for instance, reports that most Uzbeks do not go online for political purposes, but to socialize and go on entertainment websites. Reuter and Szakonyi (2015) also found that during the 2011 Russian parliamentary election many Russians used non-politicized social media, and that their perceptions on electoral fraud therefore remained unaffected. Morozov (2011, 80) has even suggested that the internet's endless entertainment is an ideal distraction from politics, thereby depoliticizing citizens living under authoritarian rule. Similarly, a study by Kern and Hainmuller (2009) found that contrary to conventional wisdom, East Germans exposed to West German television during the Cold War were actually more supportive of the East German regime. Rather than creating a sense of relative deprivation and frustration of the conditions they had to live under, the East Germans turned out to be primarily entertained by West German television.

It is moreover questionable whether those that are interested in political news will search for information online that is critical towards the authorities. Looking at media consumption and Russians' perception of electoral fraud, Robertson (2015) finds that similar to democracies' citizens, citizens living under authoritarian rule primarily consume information on the basis of what they already believe in. Pro-regime supporters consume pro-regime information, while regime critics prefer oppositional media — a finding that is in line with Hill and Roberts' (2017) study on Chinese citizens' selection of media sources.

Lastly, even the assumption that exposure to critical information about a government decreases a person's approval of it is debatable. Robertson (2015, 592) finds "a tendency to treat evidence that confirms existing opinions in an uncritical manner but to discount more heavily information that does not fit a person's prevailing view of the world". In other words, according to Robertson, human reasoning is greatly affected by a 'confirmation bias'. Huang and Yeh's (2017) research on Chinese netizens even further complicates matters by showing that "reading relatively positive foreign media content about foreign countries can improve rather than worsen the domestic evaluations of citizens" (idem, 1). The authors explain this counterintuitive finding by arguing that the "reputable Western media outlets' reports are generally more realistic than overly rosy information about foreign socio-economic conditions that popularly circulates in China" (idem).

What the outlined debate teaches us is that a positive effect between internet use and sympathy for anti-government protest movements cannot be taken for granted.

Important when studying the relationship is first of all to take online repression into account, and whether the state is able to control the internet as strictly as traditional media. Arguably, it is only when cyberspace is freer than traditional media, i.e. when there is an asymmetry in information controls, that internet use challenges information scarcity in society, thereby affecting citizens' sympathy for protest movements. In addition, the outlined criticism of the cyber-optimistic accounts urge us not to assume a priori that an asymmetry in information controls leads to a particular outcome, as what citizens do with a relatively free cyberspace or how they respond to alternative political information is undetermined.

Conceptual Clarifications

Before I explain how I have investigated the internet's effect on Malaysians' sympathy for protest movements, two conceptual clarifications need to be made. First, I make a clear distinction between sympathy for Malaysian anti-government protest movements and supporting the political act of street protesting. Due to a collective trauma in the late 1960s,[61] when street rallies ended in mass ethnic violence, many Malaysians have long had very negative associations with street demonstrations, thinking they will lead to chaos and ethnic unrest. Hence, a large segment of Malaysia's society sympathizes with the demands of anti-government protest movements without agreeing with the method of taking to the streets. In this chapter, however, I am interested in whether people sympathize with anti-government protest movements irrespective of whether they also support the act of street protesting.

Second, instead of discussing how the introduction of the internet has affected sympathy for protest movements, many authors have examined the internet's effects on citizens' anti-regime sentiment (Nisbet, Stoycheff and Pearce 2012; Bailard 2014). Hence, it is important to clarify from the start how I see the relation between those two concepts. Anti-regime sentiment is in my conceptual understanding not equal to sympathy for anti-government protest movements: someone who detests the government is not necessarily in favour of an anti-government protest movement. In fact, a person can dislike both. Vice-versa, however, it is hard to imagine a person that is sympathetic towards an anti-government protest movement, but that he or she has no grievances against the government. Hence, I see anti-regime sentiment as a necessary but insufficient condition for sympathy towards anti-government protest movements.

Whilst acknowledging their conceptual distinctiveness, the chapter is interested in exploring the internet's effect on both phenomena, as they are both traceable outcomes of the process that I am interested in: How alternative online information possibly

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61   Known as the '13th of May incident'.

decreases the information scarcity in authoritarian societies and thereby diminishes citizens' satisfaction with their own government.

Research Design

How did I investigate the internet's effect on both sympathy for anti-government protest movements, and anti-regime sentiment? Qualitative interviews with a wide range of Malaysian actors, from activists, protestors, protest sympathisers and politicians to journalists and academics, as well as secondary literature were used to explore freedom of both traditional and online media in Malaysia, resulting in the finding that the internet was and is more free than the traditional media.[62] The secondary literature was mostly used in triangulation with the interviews. To prevent the one-sided tracing of only works from Western outsiders observing Malaysia, my research also makes use of accounts from Malaysian academics and journalists.

To examine the consequences of the Malaysian asymmetry in information controls, both quantitative survey data as well as qualitative (mainly interview) data is used. Quantitative survey data is used to estimate the internet's effect on Malaysians' sympathy for protest movements and anti-regime sentiment in a systematic manner. This data comes from the Asian Barometer Project, the World Value Survey and the Merdeka Research Center. The Asian Barometer (2018) and WVS (2018) data is similar to the data used in the previous chapter, only this time using a different dependent variable and looking only at Malaysia. The used Merdeka Research Center data is two survey waves on the Malaysian population,[63] held in 2015 and 2016. I commissioned the latter myself, and I was also present at the call centres to oversee the process and to brief the interviewers. The 2015 survey was held without my involvement and is also not publicly available, but was made accessible by Merdeka upon request. The Merdeka polls cover the entire population of Malaysia and make use of a multi-stage stratified random sampling method along the lines of ethnicity, gender, age, states and parliament constituencies.[64]

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62   In Table B1 in the appendix all interviewees are listed, with some background information.

63   Merdeka Research Center is a Malaysian opinion research firm that designs and implements all sorts of social, political and economic surveys, including public opinion polls on the Malaysian population. See http://www.merdeka.org/index.html for its website.

64   All of the constituencies (14 states and across 222 parliament constituencies) are surveyed by telephone and the selection of the respondents is proportional to the population in each parliament constituency as provided by the Election Commission of Malaysia. The surveys are translated into Malaysia's two most-spoken languages Bahasa Malay and Mandarin. The 2015 survey was held between 15 and 21 August 2015 and was conducted across all states in Peninsular Malaysia among 1010 registered voters aged 21 years old and above (with margin of error, ± 3.08%). The 2016 survey took place between the 21 November and 5 December 2016 and was held in Peninsular Malaysia, Sabah and Sarawak among 1211 registered voters aged 21 years and above (with margin of error, ± 2.82%). Merdeka Research Center does pre-testing on approximately 20 respondents prior to a full roll-out of a questionnaire.

As discussed earlier with the Barometer and WVS data, asking political questions to citizens in an authoritarian regime can be a tricky business. Although with the Merdeka data I also cannot rule out there is a small bias in my data because people are afraid to reveal their dissatisfaction with the government or their sympathy for a protest movement, I am convinced there are no huge validity issues at stake. Firstly, because Merdeka is a well-known, professional research centre that has been surveying the Malaysian population for years and that many Malaysians know and trust. Secondly, because generally speaking Malaysia's mildly repressive political climate allows Malaysians to openly express their dissatisfaction with the regime. Thirdly, conversation with phone interviewers during and after the implementation of the 2016 survey demonstrated, according to the interviewers, that the majority of respondents did not seem to have any trouble speaking about the survey's topic. Fourthly and lastly, even if there is still a bias in the data because people are afraid to speak out, it is likely to lead to an under- rather than an overestimation of the impact of internet use on sympathy for protest movements and anti-regime sentiment. The specific survey questions used by Merdeka, as well as how they are used as variables in my models, will be explained prior to presenting the models. Besides the survey data, the interviews are also used to explore the consequences of Malaysia's asymmetry in information controls on Malaysians' anti-regime sentiment and their sympathy for protest movements.

The chapter will now continue with an exploration of Malaysia's media freedoms, demonstrating that an asymmetry in information controls exists. I will do this by first showing that Malaysia's traditional media is under strict state control, after which I reveal that Malaysian cyberspace was and is much less controlled.

How Free is the Traditional Malaysian Media?

Ever since independence from the British in 1957, the Malaysian authorities have strictly controlled traditional media (Rodan 2004). Broadly speaking, one can distinguish three control mechanisms: Control over media content, control through media access, and control as a result of media ownership.

The government controls what media content is produced through various laws. Frequently used, especially over the last years, is the Sedition Act, a law that criminalizes speech with a "seditious tendency", including that which would "bring into hatred or contempt or to excite disaffection against the regime" or provoke "feelings of ill-will and hostility between different races" (Human Rights Watch 2016, 11). The Official Secrets Act furthermore allows the government to prosecute any journalist who publishes official information without authorization (Abbott 2011). The vague, all-encompassing definition of what 'official secrets' are, however,

obstructs journalists who seek information deriving from government institutions, as their professional duty prescribes (Anuar 2005). Moreover, until 2012, when it was repealed, the authorities could make use of the Internal Security Act (ISA). This allowed the police to arrest, without warrant, any person suspected of acting in "any manner prejudicial to the security of Malaysia or the economic life thereof" (Abbott 2004, 81). Although the ISA was primarily used to target opposition leaders and activists, rather than journalists or commentators, the law had a chilling effect as it steered journalists clear of covering stories that might result in their prosecution (George 2006).

The Barisan Nasional coalition (BN), Malaysia's alliance of government parties, also regulates media access. This is, according to George (2006), the "routine on-going mode of political control" (idem 47). Through an effective licensing system the authorities determine who owns and operates the means of media production. The Printing and Publications Act, for example, requires every newspaper publisher to have an official permit from the government, and to renew this permit every year. Jahabar Sadiq, executive editor of *The Malaysian Insider* -a critical online news portal that ceased to exist at the beginning of 2016 due to the government's block of the website- said about the licensing system: "You have to jump through 25 hoops and a beauty pageant" (Human Rights Watch 2015, 65). Others working in the press also view the licensing regime as oppressive (idem). The popular online news portal *Malaysiakini,* known to be very critical towards the authorities, was denied a license to print a newspaper because its news reports were "controversial in nature and do not have elements of neutrality" (idem 67). Television and radio operators have to deal with similar, often arbitrary, government decisions (George 2003, 253; 2007).

Lastly, the cooperation of the traditional media is further assured through patterns of media ownership (Anuar 2005; George 2007; Abbott 2011). All major media industries –both operating in newspapers, as well as in television and radio- are either in the hands of the BN government, or are managed by forces closely aligned to the regime (Anuar 2005; Abbott and Givens 2015).

The result of these three types of control is that the traditional Malaysian media are "shackled" (Brown 2005). Alternative voices cannot reach the masses (Abbott 2004) and dissenting voices in the public sphere are sidelined almost to exclusion (Brown 2004, 84). In general, the media are there to praise the government's economic endeavours and to refrain from making genuine criticism of its policies (Anuar 2005). Various studies have empirically demonstrated a clear pro-government bias in the Malaysian mainstream press (Anuar 2005; Abbott 2011; Abbott and Givens 2015). Research into media coverage during the general elections of 2008 and 2013 also showed that the BN coalition gets significantly more and also more favourable coverage than the political opposition (CIJ Reports 2008; 2013).

How Free is the Malaysian Internet and How Can the Asymmetry in Information Controls be Explained?

I argue that in contrast to the traditional Malaysian media, the Malaysian internet was and is relatively free. Whereas in the traditional media opposition voices and alternative narratives are seldom heard, in the online realm the opposite is true. The explanation for this asymmetry in information controls is not a purely technical story about an internet that is impossible for the state to control. Instead, the Malaysian case shows different explanations over time, emphasizing the importance of (changing) state ideas about cyberspace, domestic and international constraints, the impossibility of the state to regulate American social media platforms, as well as a lack of effectiveness of online repression.

The Internet: A Vehicle for Economic Development Rather Than a Political Mass Medium

Although invented decades earlier, the internet only became available to the general public in the 1990s. In contrast to previous communication technologies (like television), the Malaysian authorities did not aim at introducing the new technology as a propaganda tool. Telling in this regard is the fact that the information ministry, responsible for propaganda from the government, was not in charge of institution building and lawmaking on IT development in the 1990s (George 2003). Instead, the private sector had a leading role, facilitated by other ministries. For example, the working groups of a National Information Technology Council that was established in 1996 to give advice to the government on its IT development were not chaired by the information ministry but by the ministers of telecommunications, education, and international trade and industry portfolios (idem). In addition, the chair of the E-Sovereignty working group, the most ideologically oriented function that aimed to enhance "the identity and integrity of the nation in an increasingly borderless world", was handed to a think-tank chief and not to the information ministry (idem, 257).

Rather than in a political frame, "the internet's Malaysian seeds were planted within a technological and research environment, and later hothoused in an all-encompassing modernization vision in which private enterprise would take the lead" (George 2006, 63). With great optimism, the Prime Minister at the time, Mahatir Mohamad, embraced the internet as crucial in his 'Vision 2020' to transform Malaysia into a developed country in 30 years. In this vision, the internet was absolutely indispensable in bringing development to the country and its introduction was thus discussed within a discourse of science, technology, and the development of a new information economy (idem).

As part of Mahatir's Vision 2020, the authorities pursued an aggressive internet implementation policy (Open Net Initiative 2017b). The Multimedia Super Corridor –which according to Mahatir would serve as Malaysia's bridge "from the Industrial to the Information age" (George 2005, 909)- was the most visual and striking example of this. A strip of 290 square miles was established in the 1990s near Kuala Lumpur meant to attract foreign IT research and investors through an attractive fiscal climate and infrastructural support (Open Net Initiative 2017b). Related programmes included the intensive training of an IT-literate workforce through specific training programmes and the provision of financial incentives to individual consumers to buy personal computers (idem).

In order to attract foreign investment to Malaysia, in 1997 Mahatir Mohamad promised potential investors in California not only the world's best soft infrastructure of supporting laws, policies, and practices but also guaranteed that his country would not censor the internet (George 2005). This governmental pledge was statutorily enshrined in in the Communication and Multimedia Act of 1998 (idem). Legally, someone could still be sued for producing online content, using the same laws that applied to other media content, yet there was a firm belief that if the authorities wanted to build a strong image of an IT-friendly regime, they couldn't afford themselves any interventions online. As George (2006, 70) describes it: "If they wanted to create the image of an IT-friendly regime, the authorities would have to live up to that spirit, and not just the letter of the no-censorship guarantee."

The BN government remained committed to its policy of non-interference on the internet, even at the end of the 1990s when opposition Malaysian forces went onto the streets for the Reformasi protests, after the sacking and jailing of the popular Vice President Anwar Ibrahim. Although the Reformasi-minded people with internet access used the internet intensively in their political communications, more on which later, there was a genuine belief among the authorities that censoring the internet would do Malaysia more harm than good, as it would hurt the Malaysian economy by deterring investors. So, even when the Mahatir administration was harshly repressing protestors on the streets, as well as jailing political activists, the internet remained untouched. A government official in the Mahatir administration later remarked: "Even when Mahatir went through the lowest of the low, and there were calls to block the worst websites, he resisted" (George 2003, 70). In line with this, an interviewed activist said:

"They invested so much in this Vision 2020 and this Multimedia Supercorridor. It really would have sent   the wrong signal to crack down on internet activists".[65]

The absence of open interference from the authorities in cyberspace was not because the BN government was technically unable to do so. The Malaysian government

65   Interview with Faisal Mohammed, 22 November 2016, Kuala Lumpur.

frequently declared they could take a harder stance online if they wanted to (Rodan 2004). Neighbouring Singapore, for example, had required internet service providers to route traffic through proxy servers since 1996, so they could filter sites they found objectionable,. The Singaporeans also set up a licensing system that made it necessary for websites covering sensitive issues (like religion and politics) to register with the authorities (George 2007, 71). There is no reason to believe that the Malaysian authorities, with relatively strong state institutions at their disposal, were technically not able to do the same. However, unlike Singapore, Malaysia was not really seen as a high-technology haven and therefore felt a much stronger urge to attract foreign investment by building an IT-friendly image (Abbott 2004, 82).

Importantly, the Malaysian government's decision at the time to clearly prioritize economics over politics needs to be understood in its historical context. Suffering badly from the Asian financial crisis that began in 1997, Malaysia was desperate to economically recover and to attract capital back into the country. And without accrediting it solely to Mahatir's Vision 2020 or the policy of non-censorship online, creating an attractive foreign investment climate clearly contributed to Malaysia's economic success in the 1990s, as well as its recovery from the crisis that was "among the strongest of the Asian crisis economies" (IMF 2001). Moreover, in hindsight, and as will be shown later, one could also say that the authorities underestimated the internet's political potential.[66] The internet was quite new and unknown, and the low internet penetration rates at the time -below 10% during the Reformasi- made it, in the eyes of the authorities, more a medium for the rich, urban elite than an information channel for influencing the masses.

In the years after the Reformasi, under the leadership of the less repressive PM Abdullah Badawi (2003-2009), the government's attempts to control cyberspace were still limited. Partly due to rising internet penetration rates, the authorities slowly started to realize the internet's political effects, yet the continuing concern with Malaysia's reputation as an IT-friendly country, together with the more reformist agenda of Badawi, made its policies to restrict internet freedoms confined and moreover as covert as possible. With the exception of the raid on the office of the critical online news portal *Malaysiakini* in 2003,[67] the authorities mostly used deniable repressive measures, allowing them to publicly still stick to a free Malaysian internet. For instance,

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66   Interview with Tian Chua, 23 November 2016, Kuala Lumpur; Interview with Mohammed Fatih Aris Omar, 22 January 2016, Kuala Lumpur.

67   There is no clarity up until today on why the authorities with the raid broke so radically with the policy of non-interference and whether it was in fact a deliberate decision. See George 2006, 171 and Rodan 2004, 170 for more information.

the government used deniable DDoS attacks,[68] hackers and viruses to target online opposition platforms (Abbott 2004, 84), and was allegedly able to put enough pressure on an American hosting company to take down some oppositional websites (idem; George 2006). Less covert, but still not severely damaging to Malaysia's reputation, were the government's attempts to frustrate the work of online oppositional activists and media by delegitimizing them in the mainstream press, denying them access to press conferences from state officials (Rodan 2004), and from 2006 onwards by occasionally arresting –but not yet punishing- political bloggers (Tan and Ibrahim 2008). While these attempts were sometimes bothersome for the people affected, they were insufficient in making the Malaysian information controls more symmetric. Compared to traditional media, the exchange of alternative political information could still flourish in cyberspace. Steven Gan, chief editor and founder of *Malaysiakini*, said about this period:

> "The Badawi years were the best for Malaysian online activists and journalists. We were not recognized as journalists, and had problems getting into press conferences, but mostly were left alone".[69]

Increasing Attempts to Control Cyberspace

In late 2007, three mass anti-government protests erupted and a year later the BN government lost its two-thirds majority in the Malaysian parliament for the first time since independence. Various academic authors claim internet use –by then, more than half of the Malaysian population was online- contributed greatly to this political 'tsunami' in Malaysian politics (Miner 2015; Steele 2009; Case 2010; Suffian 2010; Pepinsky 2013; Weiss 2013; Yangyue 2014; Gong 2011). More important than what academics believe, however, is that with these political events the government's own perception of cyberspace changed. After the elections, PM Badawi remarked that the government had lost the online 'war' and said the authorities had made a serious misjudgement in thinking that the internet was not important.[70] His predecessor Mahatir Mohamad, founder of the Vision 2020 and the policy of non-interference in cyberspace, moreover said: "When I said there should be no censorship of the Internet, I really did not realize the power of the Internet to undermine moral values, the power to create problems and agitate people" (as quoted in Abbott and Givens 2015, 467). The BN government realized that a relatively free internet came at a fairly high political price and decided action needed to be taken.

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68   A DDoS attack attempts to make a website unavailable by flooding the targeted machine with superfluous requests. By doing so, it tries to overload the system and to prevent some or all legitimate requests from being fulfilled.

69   Interview with Steven Gan, 3 March 2016, Kuala Lumpur.

70   "Internet Served a Painful Lesson," New Straits Times, 26 March 2008.

The government started to increase its own presence in cyberspace, mirroring the opposition's successful 2008 election campaign. For instance, BN officials began to actively use Facebook and Twitter to communicate their message and to reach a wider audience (Weiss 2013), and the government allegedly invested heavily in websites that resembled research-based journalism. Similar to a website like *Sarawak Report*, a whistle-blowing website that revealed many government scandals, the government set up various portals attempting to look like investigative journalistic efforts, to discredit political opposition members or oppositional civil society actors.[71]

The government is also believed to have made a start with investing in paid cyber-troopers to influence public opinion and to counterbalance opposition forces (Yangyue 2014; Hopkins 2014). BN's dedicated bloggers deny accepting payments for their efforts (Freedom House 2015), yet many of my interviewees believe -without being able to prove it- that many pro-government online commentators are on BN's payroll. Journalist Zan Azlee remarked:

> "Well, I am not 100% sure, but when you would post something on social media that is anti-governmental, they respond that you are wrong and stuff...And when you go to their accounts on Twitter, you see there is an account, but they only have like 1 follower. It looks very weird and suspicious".[72]

Malaysiakini even came up with a technical system to detect comments from cyber-troopers on their website. Steven Gan said:

> "We have a list of people that are clear-cut spammers. They only say stuff like 'Najib[73] is the best'. That kind of talk. Sometimes they cut and paste even. Making the same comment with different accounts".[74]

In an attempt to tie important online opposition actors more to the regime, the government also reached out to various critical online voices. Steven Gan remembered how immediately after the 2008 elections he received, for the first time since the founding of *Malaysiakini*, a phone call from the information minister. In the lunch meeting that followed, the minister was very good-natured, and asked Gan how the government could assist *Malaysiakini* in their journalistic activities. A similar approach was taken with the influential blogging community. Meetings were

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71   Interview with Masjalizah Hamzah, 24 January 2016, Kuala Lumpur.

72   Interview with Zan Azlee, 8 February 2016, Kuala Lumpur.

73   Najib refers to the current Prime Minister of Malaysia Najib Razak, who assumed office in April 2009.

74   Interview with Steven Gan, 3 March 2016, Kuala Lumpur.

organized between the government and bloggers in order to better understand the bloggers' sentiments and to give them a platform to make themselves heard (Hopkins 2014). Besides BN's attempts to bolster its legitimacy online and to co-opt strategic actors, the authorities also took more repressive measures. Political bloggers got increasingly persecuted and punished (Open Net Initiative 2017b; Yangyue 2014), and critical online websites started to suffer from more and more DDoS attacks (Freedom House 2015). The government also formed a panel to monitor cyberspace and occasionally instructed dissidents to remove articles and comments (Freedom House 2011).

State attempts to control cyberspace slowly increased in the years thereafter, and further intensified in 2015 when PM Najib Razak –who took over from Badawi as PM in 2009- came under increasing pressure because of a major corruption scandal (Human Rights Watch Report 2016). Breaking its promise made in the Bill of Guarantees, the government blocked access to two major online news portals that covered the scandal -*Sarawak Report* and *The Malaysian Insider*- and arrested various journalists (idem 2015). Since 2015, not only major news portals, but also ordinary online citizens have occasionally been persecuted by the authorities. Online comments on sensitive issues like religion, race, the royal family and corruption have led to arrests, intending to send a clear signal to Malaysians that their online freedom is limited (idem 2016, 3-5).

Why the Malaysian Information Controls Are Still Asymmetric

Despite these increased attempts to bring cyberspace under their control, I argue the Malaysian authorities have not been able to make Malaysian information controls fully symmetric. Still, there is much more freedom to exchange political information on the internet than over other communication channels. The explanations for why the asymmetry in information controls persist lie in the domestic and international constraints the government faces, the existing socio-technical obstacles for online repression, as well as a lack of effectiveness of the state's online repression.

Domestic and international constraints

Due to domestic and international constraints, the authorities cannot repress as much as they would perhaps like to in order to stop Malaysians from exchanging political information online. Malaysian civil society is relatively strong and is often able, in the wake of announced repressive measures, to produce a large public outcry that is too loud for the authorities to ignore. For instance, when the government launched the idea of a nationwide filtering system, or wanted bloggers to officially register with the authorities, dissatisfaction among the public and especially in civil society circles was so big that the authorities were forced to abandon their plans

(Freedom House 2011; Open Net Initiative 2017b; Yangyue 2014b). The online civil society is also too large and too committed to be successfully co-opted by the regime. Online dissenters are not easily compromised, and even if they can be aligned to the regime in rare circumstances, there are just too many others that will take up the gauntlet.

Moreover, although far from free from political interferences, the Malaysian judicial system also puts restraints on the repression the government can employ. Frequently, activists and journalists get arrested and charged, but ultimately not convicted. For example, activist Lawrence Jeyaraj was arrested for two Facebook posts that allegedly insulted Prime Minister Najib but was released after two days as there were insufficient grounds to prosecute him (Human Rights Watch Report 2016). Likewise, *Malaysiakini*'s journalist Susan Loone was charged with sedition, but was not sent to prison or fined (idem).

Whether the Malaysian government still feels restrained in its use of online repression out of concern for its international (economic) reputation is hard to tell. Toh Kih Woon, a former government official now supporting the opposition, remarked in an interview that it does:

> "Now if you try to block, and this goes out to international media…what would Malayisa's image be? People would be questioning whether this would be a good place to invest. And we are very reliant on ICT. So they are kind of caught".[75]

However, although Malaysia still likes to present itself as a country with no constraints on internet freedom,[76] the pressure on Najib Razak also led his administration to take some bold repressive moves in cyberspace that did not go unnoticed internationally (Human Rights Watch Reports 2015; 2016). In their latest report, for instance, Human Rights Watch (2016) remarks that "the situation for activists, political opposition members, and those using social media" has deteriorated to such an extent that it is now seriously "harming Malaysia's democracy and its international reputation", while the blocking of *Sarawak Report* made it to *The Guardian*[77] and *The Independent*.[78] In other words, it seems that increased domestic threats have made the government somewhat less concerned about their international reputation. What also could play a role here is that internationally it is becoming

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75   Interview with Toh Kin Woon, 14 February 2016, Penang.

76   "Minister maintains new Internet laws not to curb free speech," The Malay Mail Online, 12 May 2015.

77   "Sarawak Report whistleblowing website blocked by Malaysia after PM allegations," The Guardian, 20 July 2015.

78   "Sarawak Report whistleblowing website blocked by Malaysia after PM corruption allegations", The Independent, 20 July 2015.

increasingly accepted that states intervene in cyberspace –for instance to protect national security or fight terrorism (Deibert 2015) -, possibly also making it easier for the Malaysian authorities to justify online repression.

Socio-Technical Obstacles for Online Repression

Another factor that makes it difficult for the Malaysian authorities to symmetrize information controls is because the popularity of American-based social media platforms Facebook and Twitter provide 'safe havens' for the producers of alternative political information online. Fearing a large public outcry that a block of Facebook or Twitter would cause, the Malaysian government has thus far not dared to take these platforms down, and is unable to censor specific Facebook pages or users. Hence, in line with Zuckerman's cute cat theory (2008), Malaysians using Facebook and Twitter for apolitical purposes contribute in creating a space for those who want to challenge the state in cyberspace. For instance, while *Sarawak Report's* website has been blocked, it can still distribute its content over Facebook. For *Malaysiakini* too, spreading information over Facebook (they have 2.7 million fans) is the main backup plan if the authorities block their website.[79]

What the Malaysian government can do, besides blocking access to the platforms completely, is ask Facebook or Twitter to remove particular content. This is something that governments around the world increasingly do.[80] Facebook's transparency reports show that the Malaysian government makes dozens of requests per year, yet does not disclose what the requests entail.[81] Steven Gan, chief editor of *Malaysiakini*, said he was confident that Facebook and Twitter would never remove *Malaysiakini*'s content,[82] but whether this optimism is justified remains to be seen. So far, however, the platforms are not involved in censoring alternative Malaysian content systematically. Chapter five further discusses the role of American-based social media platforms in protecting freedom of speech and information under authoritarian rule.

Lack of effectiveness

The last factor explaining the authorities' inability to symmetrize information controls, despite increased attempts, is that the government's online repression often does not have the desired effect. For instance, cyber troopers are regularly easily revealed as such, as they often write exactly the same pro-government comment

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79   Interview with Steven Gan, 3 March 2016, Kuala Lumpur.

80   "Government requests for your Facebook data continues to grow, report says," Digital Trends, https://www.digitaltrends.com/social-media/facebook-transparency-report-2017-first-half/ (11 March 2018)

81   Facebook Transparency Report Malaysia. https://transparency.facebook.com/country/Malaysia/2017-H1/ (11 March 2018)

82   Interview with Steven Gan, 3 March 2016, Kuala Lumpur.

with many different accounts.[83] Other government online campaigns frequently lack credibility. On this, Sadiq, former chief-editor of the blocked online portal *The Malaysian Insider*, said:

> "The government still doesn't know how to deal with the internet, the online audience is a bit higher educated. They are online to ask questions and find answers themselves. They try to find answers with their peers. The government's online campaign is very glossy, and people don't buy it. It is not honest".[84]

The blocking of critical Malaysian news portals, moreover, does not preclude many Malaysians from getting access to the content of these websites. Many Malaysians are internet-savvy enough to circumvent the blocks using VPN connections and the blocked website *Sarawak Report* even explains explicitly in its Facebook posts how its content can be read from within Malaysia. If Malaysians want access to denied online content, and they are just a little savvy, they can still have it.

Furthermore, the suing of individuals for 'inappropriate speech' online or 'insulting' the Prime Minister does not seem to instigate much fear among Malaysians online. On this journalist Sharaat Kuttan remarked:

> "The problem for the government is that people aren't that afraid as they were in the late nineties. We had seventeen years of practice....So what's scary? Yeah, you can get arrested. It's a hassle. You have to wait around..... But activists are not murdered in this country..... People don't disappear".[85]

This resonates with something that I heard frequently in my interviews, and which will be dealt with more extensively in the next two chapters: Malaysians' anxiety for state repression seems to have decreased over the past two decades, making government's attempts to instil fear much less effective.

To quickly recap, the sections above have outlined how Malaysia's traditional media is far more controlled than the country's internet. Whereas in the early years of the internet the government was unwilling to control the internet, I argue that in more recent times it is unable to do so due to domestic and international constraints the government faces, due to socio-technical obstacles for online repression, and because of a lack of effectiveness of the state's online interventions. The chapter

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83   Interview with Jahabar Sadiq, 1 March 2016, Kuala Lumpur; Interview Zan Azlee, 8 February 2016, Kuala Lumpur.

84   Interview with Jahabar Sadiq, 1 March 2016, Kuala Lumpur.

85   Interview with Sharaat Kutan,7 February 2016, Kuala Lumpur.

will continue to explore what the consequences of the asymmetry in information controls are for Malaysians' anti-regime sentiment and their sympathy for protest movements.

What Are the Effects of the Asymmetry in the Malaysian Information Controls on Anti-Regime Sentiment and Sympathy for Anti-Government Protest Movements?

I will start the examination quantitatively, looking first into the consequences of the asymmetry in information controls on anti-regime sentiment, and thereafter I investigate the impact on the sympathy for anti-government protest movements.

Consequences for Anti-Regime Sentiment – Quantitative Evidence

Asian Barometer data allows me to investigate the consequence of the asymmetry in information controls on Malaysians' anti-regime sentiment, the latter operationalized as the perceived corruption of officials, satisfaction with the government, the perceived fairness of the elections, the perceived level of democracy in the country, trust in the government, and trust in the Prime Minister. As a consequence of the asymmetry in information controls, I expect internet use -the independent variable- to be positively correlated to these indicators of anti-regime sentiment.

The Asian Barometer database provides two waves of data for Malaysia for the years 2007 and 2011. I analyzed this data together but control for time effects by controlling for the year in which the survey was held. As the used dependent variables are all ordinal, going from low (1) to high (4),[86] I used ordered logistic regression models to estimate the coefficients. Additional tests were carried out to check whether the proportional odds approach is reasonable.[87] My independent variable of interest is an ordinal variable with six categories that measures the frequency of internet use (1=Never, 2=Hardly ever, 3= Several times a year, 4=At least once a month, 5=At least once a week, 6=Almost daily). A similar set of controls is included in the models as in the individual analysis in Chapter three.[88] As Malaysia is an ethnically divided country with allegedly discriminatory state policies against the Chinese and Indian subpopulations, it is important to control for ethnicity as well. Asian Barometer does not have data on the ethnicity of the respondents, but the religion of the respondent is

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86   With four categories; see Appendix B2 on exact wording of the question and categories.

87   If the assumption was not reasonable I ran gologit2 models to check whether the variable of interest, internet use, violates the assumption. If that was the case, I listed in the footnotes how internet use affects the chance of being in one of the 4 categories of the dependent variable.

88   These were education, age, income, gender, unemployment and urbanisation. In the appendix (B2) the exact wording of the questions and related categories of the variables are listed.

a very good proxy of ethnicity: All Malays are Muslim by law, and the majority of the Chinese are Buddhists and the Indians Hindu.

Table 1: Internet use and anti-regime sentiment

	Perceived Corruption	Satisfaction with Government	Level of Democracy	Trust Government	Trust PM	Fairness Elections
Internet use	0.0504*	-0.0974***	-0.037	-0.0582**	-0.0699**	-0.0860***
	-0.028	-0.027	-0.026	-0.027	-0.028	-0.026
Education	0.013	-0.027	-0.0722***	-0.034	-0.024	-0.0808***
	-0.025	-0.024	-0.026	-0.024	-0.024	-0.025
Age	-0.004	0.002	0.003	-0.002	-0.002	0.00728**
	-0.004	-0.003	-0.004	-0.004	-0.003	-0.004
Income	0.109**	-0.0848*	-0.0752*	-0.106**	-0.100**	-0.152***
	-0.046	-0.044	-0.044	-0.045	-0.044	-0.043
Gender	-0.041	-0.005	0.172*	0.081	-0.011	0.312***
	-0.089	-0.087	-0.089	-0.086	-0.086	-0.086
Unemployment	-0.080	0.138	0.060	0.079	0.158	-0.046
	-0.140	-0.118	-0.123	-0.118	-0.118	-0.120
Urban	0.040	-0.203***	-0.158***	-0.165***	-0.158***	-0.129**
	-0.060	-0.056	-0.061	-0.058	-0.057	-0.059
Year (2011)	-0.186***	0.125***	0.0552**	0.0920***	0.103***	0.016
	-0.030	-0.028	-0.028	-0.028	-0.027	-0.029
Christian (ref Muslim)	-0.184	-0.077	0.040	-0.236*	-0.492***	-0.003
	-0.167	-0.135	-0.159	-0.140	-0.146	-0.149
Hindu (ref Muslim)	-0.116	-0.054	0.187	-0.014	-0.323*	0.556***
	-0.222	-0.170	-0.181	-0.175	-0.166	-0.198
Buddhist (ref Muslim)	0.882***	-0.659***	-0.766***	-1.123***	-1.240***	-0.124
	-0.110	-0.104	-0.115	-0.110	-0.110	-0.114
Other (ref Muslim)	0.916***	0.029	-0.593***	-0.650***	-0.529**	-0.252
	-0.267	-0.204	-0.228	-0.224	-0.226	-0.226
Constant cut1	-376.6***	246.1***	106.9*	180.5***	202.2***	28.130
	-59.790	-56.200	-55.960	-55.870	-53.510	-57.550
Constant cut2	-373.4***	248.2***	108.6*	182.5***	204.1***	29.050
	-59.780	-56.210	-55.960	-55.880	-53.520	-57.550
Constant cut3	-371.4***	250.7***	111.5**	184.9***	206.4***	31.330
	-59.780	-56.210	-55.960	-55.880	-53.530	-57.540
Observations	2086	2304	2251	2265	2282	2169
Prop. Odds approach reasonable?	yes	no	no	no	no	no
Gologit2: Internet problematic?		yes[1]	no	no	no	yes[2]

*** p<0.01, ** p<0.05, * p<0.1

[1] Internet users are especially unlikely to be very satisfied with the government.

[2] Internet users are especially unlikely to think elections are completely free and fair.

As can be seen in Table one below, in line with the asymmetry in information controls, internet use has the expected effect in all but one of the models. Internet use makes Malaysians think there is more corruption in the national government and makes them less satisfied with the government. Moreover, it makes them more sceptical about the fairness of the elections, and decreases trust in both the Prime Minister and the government. These effects hold even when controlling for other important explanations that are also significant such as the income of the respondent, and (the proxy of) the ethnicity of the respondent. The models also clearly show the dissatisfaction with the political status quo is largest among the urban Chinese population. Interestingly, when the models are run for the two waves separately, the internet's effect is stronger in 2011 than in 2007.[89] The stronger findings for 2011 are surprising given that this was the period when the BN government did most to symmetrize its information controls. Later in the chapter I will further discuss this counterintuitive finding.

A similar analysis into the internet's effect on anti-regime sentiment was conducted using WVS data. Here the findings were somewhat more ambiguous, as I explain in Appendix B3.

Consequences for Sympathy for Anti-Government Protest Movements - Quantitative Evidence

I use data from the Merdeka Research Center to look into how the asymmetry in information controls has affected Malaysians' sympathy for anti-government protest movements. Merdeka's two waves of surveys, from 2015 and 2016, measure the level of sympathy for one of the most well-known Malaysian anti-government protest movements, Bersih. Bersih demands free and fair elections in Malaysia and an end to corruption in the country, and in recent rallies also called for the resignation of the allegedly corrupt Prime Minister Najib Razak. It attracts tens, sometimes hundreds, of thousands of Malaysians onto the street with its rallies and is one of the largest opposition movements in Malaysian society. Chapter five and six will discuss Bersih in more detail;, here it is sufficient to mark it as an anti-government protest movement and to examine whether Malaysians' sympathy for Bersih depends on their internet use.

Because both the 2015 and 2016 waves use similar survey questions, the waves could easily be combined into one, while still taking into account the year in which the survey was held. The dependent variable of interest here is a dummy measuring whether the respondent sympathizes with Bersih (0=no, 1=yes). Rather than merely measuring (the frequency of) internet use, the independent variable measures whether internet is the

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89   In the 2007 wave, internet use is significant in two out of six models at the 90 CI level, and in 2011, five out of six models, one at the 90 % level, and four at the 99% level.

most important or second most important source of information about the country's domestic and political affairs (0=no, 1=yes). Other controls are quite similar to the ones in the Barometer and WVS data, though Merdeka data also allows a control for whether the person works for the government or not. More details on all variables can be found in the Appendix (B4). As the dependent variable is a dummy, a logistical regression model is run to estimate the coefficients.

Table two below shows the results. Once again underlining the importance of the asymmetry in information controls, internet use turns out to be a strong predictor of sympathy for Bersih. These results hold at the 99% CI level, controlling for all other relevant explanations, and also when running the model for the two waves separately. Also the strength of the effect proves to be very strong. If someone uses the internet as a source to follow the country's domestic political situation, the odds of being sympathetic with Bersih increase by 70%. Also ethnicity proves to be an important determinant of sympathy for Bersih, as the movement is much more popular among Indian and Chinese Malaysians than Malays.

Table 2: Internet use and sympathy for an anti-government protest movement

	Sympathy for Bersih
Internet most important news source	0.701***
	-0.147
Education	0.060
	0.085
Age	0.031
	0.031
Income	0.104*
	0.062
Gender	-0.528***
	0.127
Unemployment	0.206
	-0.557
Urbanisation	0.335**
	0.138
Year (2016)	0.000***
	-0.094
Chinese (ref Malay)	3.097***
	0.191
Indian (ref Malay)	2.095***
	0.248
Muslim Bumiputera (ref Malay)	-1.200**

Table 2: Continued

	0.594
Non-Muslum Bumiputera (ref Malay)	1.381***
	0.311
Working for the Government	-0.849***
	-0.196
Constant	-1.734***
	0.196
Observations	1749

*** p<0.01, ** p<0.05, * p<0.1

In short, there is strong quantitative support that as a consequence of Malaysia's asymmetry in information controls, internet use positively affected Malaysians' anti-regime sentiment and their sympathy for protest movement Bersih. Remarkably, the study into anti-regime sentiment showed that the impact of internet use was strongest in a time when the Malaysian government was doing most to control cyberspace. While the presented statistical models are good at showing a correlation, they are unable to explain why exactly the asymmetry in information controls led to more anti-regime sentiment and more sympathy for protest movements. This is where my qualitative evidence comes in.

Consequences for Anti-Regime Sentiment and Sympathy for Anti-Government Protest Movements - Qualitative Evidence

The consequences of the asymmetry in information controls started to manifest back in 1998 when the popular vice president Anwar Ibrahim was jailed on dubious grounds, culminating in the Reformasi protests. Since the traditional media did not explain what was going on, Malaysians with internet access –around 3% (Brown 2005)- were eager to go online in search of credible Reformasi information.[90] Hungry for news, 50 pro-Anwar websites emerged within months. Here, as well as on the various mailing lists, Malaysians could read Anwar's letters from prison, eyewitness accounts of demonstrations and foreign news reports on Malaysia (idem; Weiss 2006, 158). Famous was the mailing list Sang Kancil, led by journalist M.G.G. Pillai, Sabri Zain's Reformasi Diary with eye-witness accounts of most Reformasi events, as well as Raja Petra Kamarudin's Malaysia Today. Admittedly, not all emergent online media were evenly high in quality. Some produced highly partisan, fiercely anti-government, pro-Anwar content, and the fact that people could contribute

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90   Interview with Anil Netto, 15 February 2016, Penang.

themselves to the discussions led to a lot of rumour-mongering.[91] Nevertheless, without neglecting this nor the relatively small number of internet users at the time, the Reformasi period can be seen as a period where Malaysians discovered the asymmetry in information controls, became increasingly exposed to alternative political information, and began to question the government's legitimacy as a result.

With increasing internet use over time, from around 3% at the end of the 1990s to around 70% now (ITU statistics 2018), the importance of the asymmetry in information controls has only become more relevant in decreasing the legitimacy of the Malaysian government. Corruption scandals, nepotism, ethnic discrimination and many other government wrongdoings were exposed to an ever-growing online crowd on a frequent basis, undercutting the credibility of the government (Weiss 2014, 877), and lending "a sense of empowerment to promote investigation and critique" (Weiss 2013, 598). My own interviews also provide very strong evidence that the asymmetry in information controls has contributed to increasing anti-regime sentiment and sympathy for anti-government protest movements. With near unanimity, the interviewed Bersih activists, whose interviews form an important empirical source for Chapter five, agreed on this.[92] For instance, the earlier-introduced Toh Kin Woon stated:

> "Now with internet people have access to all kinds of information. We get access to a website which tell us so much about corruption scandals and so many other issues. This that has helped to create negative images of the ruling elite in the minds of people".[93]

Likewise, activist Hilman Idham, who currently works for the opposition party PKR, said about this:

> "The empowerment of people must start through their knowledge about what is it happening in this country. So I think internet and social media was the platform for them to get know what the issues are, what is actually going on in this country".[94]

Also according to the founders of two major critical online news portals, Steven Gan and Jahabar Sadiq, the internet provided critical journalists a platform, outside of state control, where they could inform Malaysians about all sorts of things that

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91   Interview with Chin Huat Wong, 21 February 2016, Kuala Lumpur.

92   Among others: Interview with Medaline Chang, 24 February 2016, Kuala Lumpur; Interview with Toh Kin Woon, 14 February 2016, Penang; Interview with Hilman Idham; 6 February, 2016, Kuala Lumpur; Interview with Andrew Khoo 17 February 2016; Kuala Lumpur; Interview with Sabri Zain, 10 November 2016, on Skype.

93   Interview with Toh Kin Woon, 14 February 2016, Penang.

94   Interview with Hilman Idham, 6 February, 2016, Kuala Lumpur.

would never be covered in the traditional media.[95] Perhaps more important than the perspective of Malaysian civil society is how sympathisers of anti-governmental protest *themselves* see the internet's role in affecting their political attitudes and ideas. The interviews I conducted with 17 Malaysians that sympathized with the demands of Bersih, and which will form an important empirical source for Chapter six, can shine a light on this. Although these interviewees were a convenience sample based on snowballing,[96] this is not a major problem since the goal here is not to present them as representative of something, but to further examine the explanatory logic's validity in the light of the earlier-presented quantitative findings. Unambiguously, these interviewees support the idea that the asymmetry in Malaysian information controls creates more anti-regime sentiment and sympathy for anti-government protest movements. Nothing can illustrate this better than to let some of the interviewees speak for themselves. Wang, a thirty-three-year-old Chinese man working and living in Kuala Lumpur, said for example:

> "I think the internet played a huge role in the political awakening of many Malaysians. The press here is one narrative, the government narrative. But publications like *Malaysiakini* and *Malaysian Insider*, Raja Petra's blogs back then exposed people to alternative modes of thinking.... thinking like ....Why does it need to be this way? Why is the government basically behaving like a big parent telling us what to do when we have developed our own beliefs, our own perspective on things..."[97]

About his mother, he added:

> "My mum is indicative of a generation of Chinese parents that likes to play it safe and that doesn't really have an interest in politics. But until a point... she got on the Internet recently and now she is now sharing me all these things like 'Oh my god, what is Najib doing'. 'Look at this, what is the government doing'".[98]

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95   Interview with Steven Gan, 3 March 2016, Kuala Lumpur, Interview with Jahabar Sadiq, 1 March 2016, Kuala Lumpur.

96   More information on these interviews and interviewees can be found in Chapters one and six.

97   Interview with Wang (#2), 10 February 2016, Kuala Lumpur.

98   Interview with Wang (#2), 10 February 2016, Kuala Lumpur.

Li Jing, a thirty-one-year-old Chinese woman working at a university, stated:

> "The Internet has created awareness. We can know now exactly what is happening. People have access to real information. Our newspapers are controlled by political parties, so we can't get transparent access to the information through newspapers".[99]

Jin, a Chinese filmmaker (36), furthermore remarked:

> "In this country the media is heavily controlled, it's all propaganda. It's only one side of the story. The good side of the government. That's it. So for people like my parents and me...it's very hard to get to know the other side as well.....My mom and dad are on FB now...and on social media, on alternative media, where they could read about the other side of the story. And that's very important. That's the power of online media. The crowd getting larger from each protest to the next is also because of Facebook and social media".[100]

Ibrahim, a 38-year-old Malay guy who used to work for the government, said to me in an interview:

> "The internet has helped in manufacturing and disseminating a sense of frustration, a collective anger".[101]

Many of the other interviewees made similar claims: the asymmetry in information controls gave people access to alternative information not covered in the traditional media, creating more political awareness and hence more anti-regime sentiment and sympathy for an anti-government protest movement like Bersih. Importantly, the internet's impact is not purely limited to the people that access the web themselves. People's political ideas and preferences are formed in social interaction with others, not in social isolation. Hence, the people that are influenced by online information are likely to affect their peers as well. Some scholars, as well as interviewed activists, claim that through social contacts online information even travels easily to remote rural areas of Malaysia that are largely unconnected to the internet (Yangyue 2014b; Ufen 2009).[102] As a result, rural unconnected Malaysians are likely to be similarly affected as their wired, urban counterparts.

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99   Interview with Li Jing (#3), 12 February 2016, Kuala Lumpur.

100   Interview with Jin (#5), 17 February 2016, Kuala Lumpur.

101   Interview with Ibrahim (#7) 20 February 2016, Kuala Lumpur.

102   Interview with Tian Chua, 23 November 2016, Kuala Lumpur; Interview with Nurul Izzah Anwar, 22 February 2016, Kuala Lumpur.

Without completely neglecting this, I am cautious in overestimating the internet's effects. The quantitative evidence also shows urbanisation is still a very important explanatory factor, suggesting a limited travelling of online information to rural Malaysians. In line with this, blogger Toni Pua, currently an MP for an opposition party, remarked: "You have educated people within town centres, being more aware and being able to access these alternative media, and alternative media being more of a competitor to the traditional media with the government stronghold. But in terms of the rest of the country, the rural population, people in Sabah, people in remote areas in Sarawak, people in Kelantan, Terengganu for example, no way" (as quoted in Tan and Ibrahim 2008). Maria Chin Abdullah, chair of Bersih, also remarked that the movement actually has a hard time reaching the rural poor.[103] The problem is not only a lack of internet connections here. Sometimes the quality of the internet (slow connections) hampers its impact,[104] sometimes rural people are either unable or uninterested in using the internet, and perhaps most importantly, there is generally speaking less political interest in the rural areas to begin with, irrespective of whether there is an asymmetry of information controls.[105]

Why Could the Asymmetry in Information Controls Increase Anti-Regime Sentiment and Sympathy for Anti-Government Protest Movements?

Bearing in mind the criticisms of the notion of the internet as an alternative public sphere, one might still wonder why an asymmetry in information controls could have such an effect, and why the internet –free or not free- did not depoliticize Malaysians with its endless entertainment (Morozov 2011) or left everything unchanged due to citizens' confirmation bias in the selection and processing of information (Robertson 2015). Two additional factors are important to consider when explaining the 'success' asymmetry in information controls in Malaysia. These two factors, the endurance of the asymmetry in information controls and the use of social media, also possibly explain the counterintuitive finding in the quantitative analysis that the internet's effect was stronger in more recent times, despite increased online repression.

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103   Interview with Maria China Abdullah, 25 February 2016, Kuala Lumpur.

104   Interview with Mandeep Singh, 10 February 2016, Petaling Jaya.

105   Interview with Ahmed Farouk Musa, 24 November 2016, Kuala Lumpur.

The Endurance of the Asymmetry in Information Controls

The impact of the relative freedom online is first of all increased as a result of the endurance of the asymmetry in information controls. For a period of several decades now, online critical voices have been able to function in relative freedom, which has over time led to an increased professionalization and maturing of the online oppositional platforms. While during the late 1990s a lot of the oppositional websites were still covering ungrounded rumours from anonymous sources (Brown 2004),[106] in more recent times it is primarily the more professional online journalistic agencies with high journalistic standards that remain. The rumour-mongering platforms were not viable in the long run, also due to the maturing of Malaysians demanding credible and trustworthy information (Ooi 2004).

The endurance of a relatively free internet has thus made it possible that the internet is not just used to bash the government for the sake of it, but to build highly professional online news outlets that, over the years, many Malaysians have begun to put trust in. Many Malaysians now know that if news comes from *Malaysiakini* it is not just a rumour, but that it comes from a professional online platform with high journalistic standards (Steele 2009). The online Malaysian media have begun to function as credible 'watchdogs' for the Malaysian polity, a task that has traditionally been fulfilled by other media in liberal democracies. And as the credibility of the messenger has increased, so has its impact on Malaysian's political ideas.

Social Media

Another factor that possibly explains the 'success' of the asymmetry in information controls in increasing anti-regime sentiment and sympathy for protest movements lies in the growing use of social media. Roughly starting to gain ground in the years after 2005, many Malaysian started to use social media, and especially Facebook and Twitter. Out of a population of 29 million, around 10 million Malaysians were on Facebook in 2011, more than two-thirds of the online Malaysian population.[107] Nowadays this number is believed to be around 19 million.[108]

Whereas on the pre-social media internet Malaysians still had to actively search for information themselves, in the age of social media online information is pushed to you, whether you want to be exposed to it or not. This has increased the chances that someone who is not politically inclined sees political information

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106   Interview with Chin Huat Wong, 21 February 2016, Kuala Lumpur.

107   Greyreview Website. http://www.greyreview.com/2011/12/20/facebook-in-malaysia-hits-12-million-users-70-penetration-rate/ (Accessed 4 January 2017).

108   Internet World Stats. https://www.internetworldstats.com/stats3.htm (20 February 2018).

nevertheless, including information that is critical towards the authorities. On this issue, Jin, the earlier-quoted Bersih sympathiser, said to me:

> "FB played a big role in making me politically aware. Before Facebook, information was not easily acquired. And you know how the media here is, it is heavily controlled. And I wasn't actively seeking for any kind of information. It was only with Facebook, and this whole social media trend, that I become politically aware".[109]

Also the popularity of WhatsApp as a news medium in Malaysia is noteworthy in this regard. No less than 51% of news consumers in Malaysia use WhatsApp to find, share or discuss news in a given week. With this 51%, Malaysia is believed to top WhatsApp news usage worldwide.[110] Like Facebook, WhatsApp usage is thereby also likely to expose Malaysians to alternative political information that they would not look for themselves. On this, activist and journalist Anil Netto remarked:

> "Over the last two year, online social media has accelerated the awareness among the public, you know. What really makes the difference is social messaging, like WhatsApp. Because, you see, many Malaysians don't really read websites, including my relatives and friends, they don't really go to look for independent news website unless they're really politically inclined or interested in what's happening, you know. But with this, with WhatsApp its different. Everybody is on WhatsApp. So it makes it really easy to share stuff like short messages, a link or an infographic. So there's a lot of that going around now".[111]

Additionally, the use of social media, combined with the mass usage of smartphones with cameras and an increase in mobile broadband, has led to a situation where for the Malaysian regime it is increasingly difficult "to escape the "little brother" surveillant gaze of citizen-reporters" (Chadwick and Howard 2009, 5). An anecdote from the second Bersih rally in 2011 illustrates this best. During this rally, protesters sought refuge from the police and fled into a nearby hospital. Subsequently, the police fired teargas into the building but later denied it had done so, saying it was the wind that had blown the teargas inside. Whereas in the pre-social media days, the incident probably would have ended without any dramatic audience costs for the government, this time multiple online amateur videos clearly showed that the police had intentionally shot teargas into the hospital building, making the government's statement look ridiculous.[112]

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109   Interview with Jin (#5), 17 February 2016, Kuala Lumpur.

110   "M'sia leads in WhatsApp news consumption," The Star Online, 11 September, 2017.

111   Interview with Anil Netto, 15 February 2016, Penang.

112   Interview with Jin (#5), 17 February 2016, Kuala Lumpur.

Also the interviews with the sympathisers revealed that social media content capturing the security forces' harsh response to the Bersih protestors strongly affected their approval of the government. A 27-year-old Chinese woman Ama, for instance, remarked about the police repression during Bersih two (2011) and three (2012):

> "I remember following the live feeds and updates on Twitter and Facebook from my dorm room at night. It was very chilling and made me wish I could be there too. I felt amazed and horrified, mostly disbelief because I had never heard of or seen Malaysian police act in such an aggressive manner before".[113]

A survey done by the Merdeka Research Center just after the third Bersih rally in 2012 -which also saw a lot of government repression- gives further proof of the damage citizen journalism has inflicted on the government's legitimacy. In this survey respondents were asked 'How far are you satisfied or dissatisfied with the way the police handled the situation during the recent BERSIH 3.0 rally?' Another question that was asked to the respondents was 'There were some scenes of chaos during the BERSIH rally, some people say that the demonstrators were out to cause trouble; others say that situation became bad after the police fired tear gas into the crowd. Who do you think is to blame for the situation?' Table four shows clearly that Malaysians that used the internet to follow the political affairs in the country were less satisfied with the police during Bersih 3 and were more convinced that the police was responsible for the chaos during the rally.[114] These findings also hold when controlling for a set of other factors in logit regression models (with a CI of 99%, see Appendix B5 and B6 for a list of variables and the full model). In other words, the anecdote and the survey evidence show how citizen journalism, partly enabled by the use of social media, further exposed Malaysians to content that proved the government's story to be –at best- only one side of the story.

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113   Interview with Ama (#12), 1 March 2016, Kuala Lumpur

114   This is the same independent variable as used in Table two.

Table 3: Internet use and perception of Bersih three

Internet most important source for political news?	Dissatisfied with Police during Bersih 3	Satisfied with Police during Bersih 3
No	67.13%	79.84%
Yes	32.87%	20.16%
Absolute Number	508	382

Pears. chi2=17.71 Pr = 0.000

Internet most important source for political news?	Police did not instigate chaos during Bersih 3	Police did instigate chaos during Bersih 3
No	77.59%	63.02%
Yes	22.41%	36.98%
Absolute Number	540	265

Pears. chi2=19.06 Pr = 0.000

Thus, the endurance of the asymmetry in information controls, plus the rise of social media, could possibly explain why the effects of the asymmetry in information controls were not mitigated by political apathy among citizens (Morozov 2011) or citizens' confirmation bias (Robertson 2015). It is also likely that these two factors explain the counterintuitive finding of the quantitative analysis that internet use's effect was strongest in most recent times, when online repression was increasing, as it was only in more recent times that both factors started to become relevant.

Conclusion

This chapter has presented both qualitative as well as quantitative evidence that Malaysia's asymmetry in information controls has allowed the internet to function as an alternative public sphere, thereby decreasing the information scarcity in Malaysian society. I have argued that the asymmetry in information controls was initially a deliberate choice by the authorities as they hoped that a free internet would attract foreign investment and thereby contribute to economic development. After the government became convinced that Malaysians' internet use contributed to its loss of votes in the 2008 elections, however, it decided that the political costs of leaving cyberspace unregulated had become too high. Since then, the government has tried various measures to symmetrize information controls, yet international and domestic constraints, the high political costs of shutting down Facebook and

Twitter, as well as a lack of effectiveness of online interventions, have made it impossible for the government to do this thus far.

As a consequence of the asymmetry in information controls, Malaysian internet users got increasingly exposed to alternative political information -often highly critical of the authorities- and their perception of political reality changed as a result. Finding out online what was happening behind the scenes in the country, Malaysians became more and more dissatisfied with the BN government whose rule turned out to be much more flawed than previously assumed. The chapter has furthermore explained the 'success' of the Malaysian internet in affecting Malaysians' sympathy for protest movements and their anti-regime sentiment, by pointing towards two factors. Firstly, the longevity of the asymmetry in controls has allowed critical news websites to develop into professional journalistic organizations that many Malaysians have begun to trust. From rumour-mongering machines, the oppositional online media have become credible 'watchdogs' of the Malaysian polity, thereby increasing their impact on Malaysians' political ideas. Second, the rise of social media has greatly increased the number of Malaysians exposed to alternative political content, as it also pushes information towards those that are not actively looking for it, and moreover has stimulated citizen journalism that has further exposed government malpractices. These two factors possibly also explain why internet use was found to have a stronger effect on anti-regime sentiment in more recent times when the government's online repression was highest.

It is important to emphasize that although the Malaysian government has been unable to curb the internet's effect on anti-regime sentiment and sympathy for protest movements, it is still in power. Through a mix of electoral manipulation, co-option, selective repression, information campaigns, and perhaps as a result of relatively good governance and policies, the BN government has been able to continue its rule despite a limited control over cyberspace. Hence, it is important not to overestimate the importance of the internet's effects in causing democratization, institutional change, or even in causing anti-government protesting, as it is only in the first step of the mobilisation chain that internet use has shown to be important in Malaysia.

Finally, the extent to which the Malaysian findings in this chapter can travel to other authoritarian contexts is still an open question. Malaysia is one of the mildly repressive authoritarian regimes that were shown to be more vulnerable for internet-enabled protesting in Chapter three, but it is still too soon to tell whether we can generalize the Malaysian story in the first step of the chain to all mildly repressive regimes. The next two chapters will first examine the internet's role in the second and third steps of the mobilisation chain in Malaysia. Chapter five will look into whether and how internet use changes the informing of protest sympathisers about

an upcoming rally. Chapter six studies whether and how internet use affects the motivation of people that sympathize with a protest movement and know about an announced demonstration. After the three steps have been explored in the Malaysian context, I further explore the generalizability of the Malaysian findings of this chapter (step one). Chapter seven will thus revisit the internet's role in the first step of the chain, examining the importance of an asymmetry in information controls in affecting sympathy for protest movements and anti-regime sentiment under authoritarian regimes.

Chapter 5

Internet Use and Informing Protest Sympathisers About an Anti-Government Protest

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Chapter four moved from the first to the second step in the mobilisation chain and analyzed how internet use has changed the extent to which Malaysian protest sympathisers can be informed about an upcoming anti-government demonstration the moment a protest is decided on. Being informed is understood here as knowing about the 'what, where, when and how' of a protest. Similar to the internet's role in affecting the sympathy for protest movements (step one), the internet's impact is likely to lie in its challenge to authoritarian regime's information scarcity: By facilitating the rapid diffusion of information, internet use might allow many more sympathisers to know about a planned protest.

This chapter argues that more than internet use as such, it was the use of social media that facilitated the informing of protest sympathisers in Malaysia. Through social media, information about an upcoming rally travelled easily across society and beyond the group of activist-minded 'usual suspects'. In trying to explain why Malaysia's state repression was unable to prevent social media's facilitative role, the chapter identifies four factors: The harsh government repression in the streets, government blunders in cyberspace, socio-technical obstacles for online repression, and mild offline repression.

The chapter starts with a short literature review of the two literatures the chapter speaks to, namely resource mobilisation theory and the importance of weak ties for the travelling of information. Thereafter, the research design sets the stage for a study into the internet's role in four waves of Malaysian anti-government protest: the Reformasi protests (1998-99), Bersih one (2007), Bersih two and three (2011 and 2012), and Bersih four (2015). The four waves, occurring at different time periods, show stark variations in terms of internet use, social media use, as well as the government's on- and offline repression, allowing for a thorough investigation into the internet's role in the informing process, as well as into the impact of social media and state repression. Interviews with 22 Malaysian activists provide, in triangulation with quantitative survey data, other interviews, and secondary literature, the necessary empirical information to analyze the internet's role in the second step of the chain.

Internet Use: Affecting the Informing of Protest Sympathisers?

Chapter five speaks to two literatures. On the one hand, it engages with the resource mobilisation literature that explains contentious collective action by focusing on the resources social movements have at their disposal. Resource mobilisation theorists argue that the existence of grievances is not sufficient for a social movement to arise. Instead, aggrieved people also need to have resources (moral, cultural, human, material, or social-organizational) at their disposal (McCarthy and Zald 1973; Edwards and McCarthy 2004). Money, human time, and effort are among the most widely appreciated kinds of resources that are (more or less) available to collective actors but there is also broad scholarly consensus that the internet has expanded the instruments available in the toolbox of social movements (Breuer, Landman and Farquhar 2015).

Van Laer and van Aelst (2010) claim that the internet has expanded and complemented today's social movement 'repertoire of collective action'. New virtual collective actions range from online petitions and email bombings to virtual sit-ins and hacking websites (idem, 231). However, the internet can also support and facilitate (traditional) offline collective action like public protests in terms of organization, mobilisation and transnationalisation (idem). Most important for this chapter –where the informing of sympathisers is central- is that the internet has possibly helped to overcome spatial and temporal barriers that could impede participation in protests. Or, to put it in simple words: People that in the pre-internet days would not know about a protest because they lived too far away or would find out about a protest too late, can now be informed in time.

The resource mobilisation literature –as most works on social movements- was and still is very focused on Western, democratic societies (Clark 2001). Without explicitly engaging with this literature, however, various authors have argued that the internet has been beneficial to social movement's mobilisation in authoritarian contexts as well. Evidence from Tufekci and Wilson (2012) showed that in Egypt almost one third of the protesters on Tahrir Square heard about the protests through Facebook. Earlier, the Kefaya and the 6th April movement had already used the internet and especially Facebook effectively to inform Egyptians about anti-government protests (Herrera 2014, 19-22). Similarly, in Tunisia Facebook enabled a political connection between the activists of Central Tunisia and middle-class young people across the nation, and facilitated the organization of the protests in Tunis just prior to the departure of Ben Ali (International Crisis Group 2011, 7; Howard and Hussain 2011). In Russia, after the Duma elections of 2011, the internet also played a pivotal role in advertising a demonstration that attracted thousands to

Bolotnaya Square (White and McAllister 2014). In Libya, many used social media to spread the word about the 17th February 2011 "Day of Rage" (Rajabany and Ben Shitrit 2014, 92). Also in Azerbaijan and Armenia, the internet played an important role in the organization and mobilisation of anti-government protestors (Kerr 2013, 38-40).

The second strand of literature that this chapter speaks to, which for convenience I call the 'weak-links literature', suggests that the use of the internet and especially social media has changed the very structure of society's social networks. Arguably, the internet's many-to-many communication has facilitated the growth and sustainment of weak ties across different social groupings, which potentially enables news about a rally to travel much easier throughout society (Van Laer 2007, 7; Centola and Macy 2007). This could possibly make the direct informing of sympathisers by a social movement largely unnecessary, because of the snowball effect when informed sympathisers themselves start informing each other over the internet's weak links. Closely connected to the idea of weak links is the notion that contemporary internet-enabled collective action is often completely leaderless, meaning that the masses themselves organize and coordinate using social media platforms, or –even stronger- that "the platform is considered having the metaphysical ability to rid the masses of such organizational and coordination tasks" (Spier 2017, 79) (Bennet and Segerberg 2012).

Yet, in contrast to the facilitative role of the internet that the resource mobilisation theorists and weak-links literature foresee, other authors have stressed the motivation as well as the capacity of authoritarian elites to prevent the online informing of sympathisers through censorship and other control measures. King, Roberts and Pan (2013) have shown that China's online censorship focuses in particular on preventing internet-enabled collective action as opposed to criticism of the government. Deibert et al. (2010; 2012; and Deibert 2015) have collected a great amount of evidence and analysis on what states can do to control cyberspace. Regarding the prevention of informing potential protestors online, their work demonstrates that states censor webpages, do 'just-in-time' blockings at politically sensitive moments, and employ legal controls and surveillance to create a chilling effect "which is to ensure that those publishing online know that they are being watched and that the state is capable of shutting them down or putting them in jail" (Deibert et al. 2012, 11).

Authoritarian states can furthermore not only deny citizens access to information, but also start counter-information campaigns online themselves to frustrate the campaign of a protest movement (Gunitsky 2015). Regimes can employ all sorts of tactics here, from hacking into a protest movement's website and taking over its communications, to besmirching the reputation of the movement's leaders or

symbols online, as was for instance done with the Khaled Said movement in Egypt (Herrera 2014; Ghonim), or in Bahrain where not long after the protests began, "pro-government bloggers, Facebook activists, and Twitter users popped up like mushrooms after a rainstorm, posting news and "evidence" that the protestors were Shiite terrorists in league with Iran, and blaming them for the bloodshed" (MacKinnon 2012, 62-63). Such campaigns are believed to be especially important in regimes that prefer not to engage in the direct blocking of websites, but aim to successfully compete with protest movements "through effective counter information campaigns that overwhelm, discredit, or demoralize opponents" (Gunitsky 2015, 45). While these responses cannot be strictly separated from intervening in the mobilisation processes in the first step of the chain, they potentially also thwart the travelling of information from a protest movement.

Also the notion that information will easily cross social boundaries over weak links is contested. Rather than a space where information is exchanged between social groupings with opposing ideas, the current internet is described by some as a 'filter bubble' (Pariser 2011) where internet users comfortably reside in a completely personalized environment that is "tailored to the individual's own opinions, designed to be free of disturbance, and primarily filled with easy to consume information" (Spier 2017, 22). For the travelling of protest movement's information about a rally this would be bad news, as the 'what, where, when and how' is unlikely to reach the less politically oriented members of society, but only be sent back and forth by the usual suspects in the same activist-minded filter bubble (idem, 150).

Finally, Spier also describes how the ease of the dissemination of information on social media might also overwhelm citizens with a movement's information, thereby ultimately causing plain disinterest. In this way, the ease of sharing information is believed to become a curse rather than a blessing for protest movements (idem, 151).

In short, the outlined debate shows us that the facilitative role in informing sympathisers cannot be assumed a priori. Instead, what needs to be taken into account in an empirical study into the issue is what the authoritarian state is doing, both to prevent the informing of sympathisers, as well as to create confusion with counter-information campaigns. Additionally, the role of social media, rather than merely internet use, again comes forward in the literature as important in understating the internet's role.

Studying the Process of Informing Sympathisers in Four Time Periods

Anti-government protests are much older than the web and in order to understand how the internet has affected the second step of the chain, one has to look at what

the baseline is, i.e. one needs to know what the situation was like in the pre-internet days. Hence, this chapter studies the informing of sympathisers in anti-government protests over time, and separates roughly four time periods: A time when there was barely any internet use; when internet use became very widespread; when social media became very popular; and when more than half of the Malaysian population used social media. Although multiple anti-government protests took place in these four periods, especially the latter periods, the chapter focuses on the Reformasi protests at the end of the '90s, as well as the wave of Bersih protests from 2007 onwards, as these were among the largest and most important anti-government protests in the country since independence, and because the demands of these protests show many similarities.

The Reformasi Protests (1998-1999)

The Reformasi protests at the end of the '90s took place at a time when the internet had just become available to the general public and penetration rates were around 3% (Brown 2004). Before these protests erupted, large anti-government protests were very uncommon in the country. The movement, inspired by the Indonesian Reformasi protests, was therefore a drastic rupture in Malaysian politics. It took off with the sacking of the popular deputy Prime Minister and former student leader Anwar Ibrahim. When Anwar was sacked, hundreds of his followers immediately went to his house to gather there and to show their support. In the eighteen days after his removal from power, Anwar himself toured the country giving extremely well-attended public lectures (Weiss 2006, 129). After Anwar led an enormous rally in Kuala Lumpur drawing around two hundred thousand at the National Mosque (Chin and Chin Huat 2009), he was taken into custody, together with a number of his followers (Weiss 2006, 130). After Anwar's detention, street rallies demanding political, economic and social reforms became core of the movement and took place, with intervals, over a period of months. Concurrent to the Reformasi protests in Kuala Lumpur, *ceramah* (public lectures) were organized in support of Anwar Ibrahim in many other parts of Malaysia.[115] Participating in a protest or listening to a *ceramah* was considered to be very dangerous.[116] In fact, under the repressive regime of Mahatir, fear was omnipresent and openly speaking out against the government was something few people dared to do.

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115   Interview with Ahmed Farouk Musa, 24 November 2016, Kuala Lumpur; Interview with Tian Chua, 23 November 2016, Kuala Lumpur.

116   Interview with Sabri Zain, 10 November 2016, on Skype.

Bersih One (2007)

In 2007, when the first Bersih protest took place, internet penetration rates had risen to over 55% of the population, but social media use was still negligible (ITU statistics 2018). Although with Mahatir's successor Badawi political control of the regime had become less tight, mass protests against the government erupted when the Bersih movement, a joint communication network for the political opposition parties, civil society organizations, and NGOs, called people onto the streets to demand clean and fair elections in the wake of the 2008 general elections (Lim 2016). The political opposition parties, the Chinese-dominated DAP, Anwar's PKR, and the Islamist party PAS had a leading role in the network. Estimations of the crowd, which was mainly Malay due to the mobilisation of loyal PAS members, varied from 30,000 to 40,000 people (Khoo 2016). Unprepared for such a large turnout, the police was unable to stop the protest, despite its use of repression against protestors.[117]

Bersih Two and Three (2011 and 2012)

Bersih two and three took place at a time when not only was internet use very high (above 60% - ITU Statistics 2018), but also when social media was embraced by a third of the Malaysian population. In 2010, the political opposition parties had officially withdrawn and had handed over power to civil society after continuing accusations that Bersih was merely a vehicle for the opposition to take down the government by illegal means. Yet despite this official handover of power, Bersih was still very dependent on the opposition parties.[118] Over time this dependency decreased however, partly because Bersih's own organizational capacity and reputation increased.[119] Despite many repressive measures and heavy police presence during Bersih two (more on which later), an estimated crowd of around 50,000 appeared on the streets (Weiss 2012). Compared to Bersih one, the crowd was larger, more multi-ethnic (more Chinese and Indians), younger, and less aligned to political parties (Radue 2012).

Bersih three came less than a year after Bersih two, and was organized after Bersih's steering committee was dissatisfied with the work of the Parliamentary Select Committee on electoral reforms. The committee had been installed in direct response to the protests the previous year. More than 200,000 protesters gathered in Kuala Lumpur this time, around four times as many as for the Bersih protest the

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117   Interview with Medaline Chang, 24 February 2016, Kuala Lumpur; Interview with Tian Chua, 13 February 2016, Kuala Lumpur.

118   Interview with Anil Netto, 15 February 2016, Penang; Interview with Mandeep Singh, 10 February 2016, Petaling Jaya.

119   Interview with Mandeep Singh, 10 February 2016, Petaling Jaya. Interview with Hilman Idham, 6 February, 2016, Kuala Lumpur.

previous year, though still similarly multi-ethnic and even more non-partisan (Lim 2016). Simultaneously, rallies were held in various other cities throughout Malaysia. Although Bersih three started peaceful, it ended with fierce state repression after a group of Bersih protestors broke the barricades that the police had erected.

Bersih Four (2015)

Lastly, Bersih four was an overnight rally of 34 hours in Kuala Lumpur on 29-30 August 2015 and with simultaneous rallies taking place on Borneo, Malaysia. It was organized in response to the corruption scandal involving Prime Minister Najib Razak. In addition to all initial demands about clean and fair elections, Bersih explicitly called for Razak's resignation. The estimated attendance was between 80,000 and 100,000 at its peak, with a noticeable overrepresentation of the Chinese Malaysians in the Bersih four crowd.[120] Among the opposition parties, who despite handing over power were still important for mobilizing their members, the Islamist PAS party had withdrawn its support from Bersih, which was reflected in the lack of Muslim Malays at the demonstration site. It was the first major anti-government protest that occurred without state repression in the streets.

Research Design

The four protest waves thus contain variation in terms of internet use, social media use, as well as in how the state responded to protestors in the street, providing an interesting starting point to investigate how the use of internet has affected the informing of protest sympathisers. For a visualization of the described variation over time, I refer back to Chapter one where I explained my choice for Malaysia by pointing towards the variation over time in the key variables of interest.

To study the informing of protest sympathisers in the anti-government rallies I make use of four different sources of empirical material. First and foremost, I have tried to come as close as possible to those people that were actively informing sympathisers in the respective rallies. Although some resource mobilisation theorists investigate what social movements can do with the internet in authoritarian contexts (White and McCallister 2014; Kerr 2013), few scholars actually speak *with* the people that make use of the technology for instant mobilisation, let alone with those who tried to communicate the 'what, where, when and how' of a protest in the pre-internet days. Getting access to activists that were, either directly or indirectly, involved in the process of informing sympathisers is therefore a crucial aspect of this

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120 "So How Many People Were in Kuala Lumpur For Bersih 4?" The Malay Mail Online, http://www.themalaymailonline.com/malaysia/article/so-how-many-people-were-in-kuala-lumpur-for-bersih-4 (22 February 2018).

research. Noteworthy here is that I do not consider someone an activist if he or she was merely involved in the informing process by passing the 'what, where, when and how' of a rally through to others. Instead, in order to be called an activist, a person must have had a more coordinating, organizational role, either formal or informal, in the protest movement, and who in that function informed sympathisers.   I conducted semi-structured, in-depth interviews with 22 Malaysian activists, some of which were interviewed twice. Three of the interviewees were only actively involved in the Reformasi movement (1998-1999), 16 work or have worked for Bersih (in the period 2005-2015), and four were involved in both. In the Appendix (C1) a full list of interviewees with additional information can be found.

Second, empirical source are interviews with Malaysians that were not actively involved in the informing of sympathisers themselves, but give valuable insights into the process nevertheless. For instance, an important source here is the interview I held with Sabri Zain, a journalist who closely followed the Reformasi protests at the end of the 1990s. Third, the chapter makes use of the 2011 Merdeka Research Center survey (see Appendix C2 for variables), as well as the 2016 survey that was used in the previous chapter (see Appendix B4 for the variables of this survey). Fourth and last, the chapter uses secondary literature for the analysis, both academic and non-academic in nature.

The analysis will be structured as follows: At first I will show evidence that, at face value, demonstrates that internet use has facilitated the informing of protest sympathisers in Malaysia. Subsequently, I will reveal that upon further scrutiny it turns out that, much more than the internet per se, it was social media that was responsible for the internet's facilitative role. Lastly, I will explain why Malaysian state repression has been unable to prevent social media's facilitative role in informing sympathisers.

Internet Use and Informing Protest Sympathisers

Has internet use facilitated the informing of protest sympathisers about anti-government rallies? Based on the Malaysian case, the short answer to this question is 'yes, a lot'. The interviews clearly showed that Malaysian activists have increasingly made use of the internet compared to other communication channels. In addition, with near unanimity, the activists stated that informing sympathisers has become much easier thanks to the technology.[121] Hishamuddin Rais, for instance, who has

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121   Among others: Interview with Hilman Idham, 6 February 2016, Kuala Lumpur; Interview with Masjalizah Hamzah, 24 January 2016, Kuala Lumpur; Interview with Toh Kin Woon, 14 February 2016, Penang; Interview with Andrew Khoo, 17 February 2016, Kuala Lumpur; Interview with Tian Chian., 13 February 2016, Kuala Lumpur; Interview with Hishammudin Rais, 28 November 2016, Kuala Lumpur.

been involved in activism in Malaysia since the 1970s, and who was involved in both the Reformasi as the Bersih protests, remarked:

> "Compared to Reformasi, or even further back in time, it is much easier now to organize a protest. The internet has helped tremendously to communicate the why, where, and when of a protest".[122]

Likewise, Andrew Khoo, ex-legal advisor for Bersih, stated:

> "I think that nobody can deny that internet is an extremely useful tool to publicize the activities, publicize information, to get people to understand what is being organized. It was not just publicity of the rally's it was also publicity about any forums, public forums, public discussions, debates, and also articles written about what it was we were trying to do. So it was an extremely important tool in that sense, to spread information".[123]

Lastly, current chair of Bersih, Maria Chin Abdullah, remarked in the interview that while 'on the ground' work was important in making Malaysians believe in Bersih's cause, the internet was the best option the movement has to inform sympathisers. [124]

The survey data also confirms this idea. The Merdeka Research Company survey, held just after Bersih two in 2011, asked respondents 'how much do you know or understand about the demands of Bersih?' Although not purely about whether someone was informed, the extent to which internet users know and understand the demands of Bersih does give a good indication of Bersih's online reach. Table one shows the results. As one can clearly see, internet use is positively correlated with knowing about and understanding the demands of Bersih. Out of the people that did not or barely used the internet in 2011, around 40% knew and understood Bersih's demands, while among the frequent internet users this was almost 63%. Also when one controls for a set of other factors like income, education, urbanisation, age or ethnicity in a logit regression model, internet use turns out to be a significant predictor (at the 99% level) of knowing and understanding the demands of Bersih (see full model in Appendix C3). [125]

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122   Interview with Hishammudin Rais, 28 November 2016, Kuala Lumpur.

123   Interview with Andrew Khoo, 17 February 2016, Kuala Lumpur.

124   Interview with Maria China Abdullah, 25 February 2016, Kuala Lumpur.

125   Pears. chi2= 52.54 Pr. = 0.000.

Table 1: Knowing and Understanding Bersih's Demands and Internet Use

Knowing/Understanding Bersih's Demands?	Low/no internet use	Medium internet use	High internet use
NO	60.64%	51.56%	37.34%
YES	39.36%	48.44%	62.66%
Total absolute number	653	128	383

Bersih five, which took place after most interviews were held, and which is therefore not discussed extensively in this chapter (though is in Chapter six), also provided survey evidence indicating that internet use played an important role in the informing of sympathisers. In Merdeka Research Center's 2016 survey, respondents were asked just after Bersih five how they had heard about the demands of Bersih. [126] Figure one below shows what respondents mentioned as the most important source for this information. As can be seen, at nearly 38%, internet was by far the primary source of information.
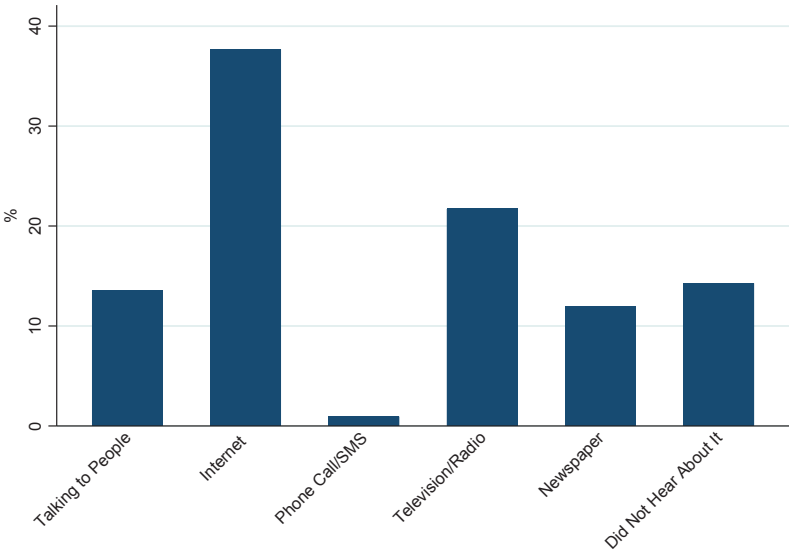

Figure 1: Most important source in hearing about demands of Bersih

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[126]   See research design Chapter four and appendix B4 for information on this survey.

However, to thus conclude that 'internet use facilitates the informing of protest sympathisers under authoritarian rule' would be an oversimplification of what has taken place. By closely examining the informing processes in all the respective rallies, I will show in the following sections that it was social media use rather than internet use that was important in the successful informing of sympathisers.

How Did the Informing of Sympathisers Take Place and What Role Did the Internet Play Therein?

1st Reformasi Period (Sept-Oct 1998): Leaderless 'Shopping'

The Reformasi protests can, in the light of the analysis, be split into two periods. The first period started with Anwar's detention on 20 September 1998 when protests spontaneously erupted and continued for a few weeks. Tian Chua, now vice-president of opposition party PKR, and Hishamuddin Rais, a well-known, life-long Malaysian activist, eventually became important faces of the Reformasi movement (Weiss 2006). Yet both claim that the protests in the first weeks after Anwar's jailing were essentially leaderless; there were no organizers behind them.[127] People were infuriated by the injustice inflicted upon the popular deputy prime minister Anwar and took to the streets without an explicit call by any leader or organization.

How, then, did aggrieved Malaysians know about when and where a Reformasi protest would take place in the first weeks of the Reformasi? This coordination problem was spontaneously overcome by holding the rallies every weekend, mostly on Saturdays, in the same location. Most protests took place in central Kuala Lumpur in the busy shopping street Jalan Tunku Abdel Rahman, near the shopping complex of Sogo. After a while most people simply knew where to go 'shopping' during the weekend.[128] Sharaat Kuttan, a civil society activist during the Reformasi, recalled:

> "It wasn't difficult to let people know where and where the protest would be. There were regular schedules. It was like every Saturday in that and that street".[129]

Holding the protests in a shopping area enabled people to pretend to go shopping, and only once the crowd was large enough, or when enough other people were shouting Reformasi slogans, to reveal oneself as a protestor. Hence many people, both Reformasi protestors and curious onlookers, just went there during the weekends

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127   Interview with Tian Chua, 23 November 2016, Kuala Lumpur; Interview with Hishammudin Rais, 28 November 2016, Kuala Lumpur.

128   Interview with Masjalizah Hamzah, 24 January 2016.

129   Interview with Sharaat Kutan, 7 February 2016, Kuala Lumpur.

to see whether something was going to happen.[130] One of these people was Sabri Zain, who kept an online 'Reformasi Diary', in which he wrote down his first-hand experiences of Reformasi events. In my internet interview with Zain, he claimed most people knew about the rallies, especially in Kuala Lumpur and surroundings. The magnitude of the events –tens of thousands, sometimes hundreds of thousands of people participated (Funston 2000)- made them hard not to notice.

2nd Reformasi Period (November 1998-1999): Leaders stand up, Handbills and Pamphlets are Key

After the first four weeks of leaderless protests, people started to know each other and to form groups. This was the moment organizational structures emerged.[131] A group of around 20 people with very different backgrounds started to hold frequent secret meetings to discuss Reformasi issues and protest strategies. Among this group was Tian Chua, who was influential in the NGO circles, Hishammudin Rais, who was leading the Bangsar Utama University collective, and Saari Sungib, who led the Islamic NGO JIM, one of the largest Islamic organizations in the country.[132] In these group meetings, they would discuss when to disperse, how to cope with police charges, or where to head to with a protest march.

Tian Chua emphasized that their group was not unique but that various Reformasi groups emerged at that time. Nevertheless, without directly commanding the masses, their group was pretty influential within different communities. To coordinate a protest in the manner the group agreed upon, however, was mainly a matter of convincing people on the spot. Through megaphones, protest leaders would instruct the protestors; another frequently-used tactic was to slowly drive a car through the crowds with a large banner communicating instructions.[133]

Due to increased repression from the authorities, the weekend protests came to an end in November/December 1998. This was not the end of the Reformasi movement, however. In the following months protests still occurred, yet now they were more planned and more organized. Especially around important dates of Anwar's court case people took to the streets (Weiss 2006), this time after explicit calls by the group of Reformasi people that by then had taken a leading role in the movement. On 14 April 1999, for example, when Anwar was sentenced to six years in prison, a mass Reformasi protest took place in Kuala Lumpur with people like Tian Chua, Hishammudin Rais,

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130 Interview with Sabri Zain, 10 November, Skype conversation.

131 Interview with Hishammudin Rais, 28 November 2016, Kuala Lumpur.

132 Interview with Tian Chua, 23 November 2016, Kuala Lumpur; Interview with Hishammudin Rais, 28 November 2016, Kuala Lumpur; Interview with Saari Sungib, 29 November 2016, Kuala Lumpur.

133 Interview with Tian Chua, 23 November 2016, Kuala Lumpur; Interview with Hishammudin Rais, 28 November 2016, Kuala Lumpur.

and Malik Hussain, an aide and close contact of Anwar, speaking to the crowds and instructing them (Zain 1999).

As it was no longer obvious – in contrast to the regular weekend protests- where and when a protest would take place, the Reformasi group had to communicate this to the masses. Although penetration rates were still relatively low –somewhere between 3% and 6% (Brown 2004)- the internet was used as a medium to inform people about upcoming protests and other Reformasi events.[134] The uncontrolled nature of the internet gave the Reformasi activists new options (Khoo 2010; Ooi 2010), yet the low number of users made the internet insufficient to reach a critical mass of people. Also the static nature of the Web 1.0 did not help here, as people interested in Reformasi content not only had to have internet access, but also had to actively search for content, for instance by enlisting themselves as a member on an email list or as a member in a Yahoo! group.[135]

The most important mobilisation strategy, therefore, besides information travelling 'naturally' by word of mouth, was the distribution of pamphlets and handbills.[136] These handbills were often distributed in and around mosques, as these were natural gathering points where hundreds or even thousands of people would come together. In addition, mosques provided activists a strategic advantage over the authorities, as intervening in a religious procession or entering a mosque would cause great public anger and greatly damage the reputation of the police and the state apparatus.[137]

Using handbills and pamphlets was not only an alternative but also sometimes a complement to spreading information online. Frequently, messages and information were distributed online and then printed and photocopied by Reformasi activists who had access to the internet and a photocopier.[138] For example, Masjalizah Hamzah, a journalist, Reformasi activist, and ex-treasurer of Bersih was actively involved in many Reformasi events and together with some friends took up the glove of actively distributing information about Reformasi events and protests. She said:

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134 Interview with Tian Chua, 23 November 2016, Kuala Lumpur; Interview with Hishammudin Rais, 28 November 2016, Kuala Lumpur; Interview with Anil Netto, 15 February 2016, Penang; Interview with Dr. Dzulkefly, 2 March 2016, Kuala Lumpur.

135 Yahoo groups were free forums, which could be initiated by anyone with a Yahoo email address. The initiator gave the group a title and a brief description of the proposed content. He/she could moreover control whether the group has open or closed membership and whether the message archive is public or private (Brown 2004).

136 Interview with Tian Chua, 23 November 2016, Kuala Lumpur; Interview with Hishammudin Rais, 28 November 2016, Kuala Lumpur; Interview with Saari Sungib, 29 November 2016, Kuala Lumpur. The word 'handbills' rather than the more common term 'flyers' is used as all my interviewees spoke about 'handbills'.

137 Interview with Tian Chua, 23 November 2016, Kuala Lumpur.

138 Interview with Tian Chua, 23 November 2016, Kuala Lumpur; Interview with Masjalizah Hamzah, 24 January 2016, Kuala Lumpur.

"So what you do is that you actually make a photocopy of the content. I used my office facilities to make hundreds of copies. The people that came to the Reformasi meetings, they were normal people. They had no email, they probably didn't even have Internet access. So if you want to tell that something was happening next week, you have to physically do it, which was what I did with some friends. We told them what's gonna happen".[139]

Although the epicentre of the Reformasi was clearly in Kuala Lumpur and very few people had access to online information, the internet contributed to making the heat of the Reformasi felt in other parts of Malaysia as well. During the Reformasi period, Ahmed Farouk Musa, later a steering committee member of Bersih, lived in Kelantan, a province in the north-east of the Malaysian Peninsula. He remembered how he was one of the few with internet access in the place where he lived, but also that much of the online news easily travelled further through word of mouth.[140]

In summary, whereas in the first phase of the Reformasi the protests were spontaneous and leaderless, taking place every weekend at the same location, in the second phase a group of leaders emerged. This group started to make use of the internet to inform sympathisers, but the low level of internet users made it a sub-optimal medium to inform the masses.

Bersih One (2007): Opposition Parties Inform Through Traditional Methods

Bersih one did not happen overnight; preparations took about a year.[141] Faisal Mustapha and Medaline Chang were the two people that ran Bersih on a daily basis, in close contact and cooperation with the opposition parties and the endorsing civil society and NGOs. As a new organization, Bersih still lacked the organizational capacity for extensive offline mobilisation such as the nationwide distribution handbills or the organization of *ceramah*. Hence, for this work it greatly relied on the political opposition parties. Rather than mobilizing themselves, Bersih thus essentially functioned as a coordinator and facilitator. It tried to keep all parties on board, to come to a consensus if decisions had to be made, and designed and delivered the promotional materials for Bersih events taking place throughout the country. Bersih itself only communicated with the headquarters of the respective opposition parties in the thirteen Malaysian states. Dissemination of information to lower levels, as well as the concrete implementation of activities, was primarily

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139   Interview with Masjalizah Hamzah, 24 January 2016, Kuala Lumpur.

140   Interview with Ahmed Farouk Musa, 24 November 2016, Kuala Lumpur.

141   Interview with Medaline Chang, 24 February 2016, Kuala Lumpur.

in the hands of the parties themselves, as they were the ones with the local branches and the organizational capacity.[142]

Ceramah were very important for the mobilisation of Bersih one. These public lectures, given by politicians from the opposition, NGO activists, or other people supporting the cause of Bersih had the goal of creating awareness and ultimately mobilizing a crowd. In the run up to the rally on 10th November, *ceramah* were held in all thirteen Malaysian states. Organizing one was not easy, however. It was hard to attract people as many people were not really interested in attending and moreover fear played a big role. People were scared to come as the police were always present at the events, observing who attended the *ceramah*, and sometimes violently breaking up the gatherings.[143]

Whereas internet penetration rates during the Reformasi were between 3 and 6%, at the time of Bersih one in 2007 this was 55%. Yet, despite the fact that more than half of the Malaysian population had internet access, the internet was not extensively used for informing protest sympathisers during Bersih one. Information about *ceramah*, as well as for the big rally in November, was mainly distributed through opposition party networks by word of mouth, handbills and leaflets.[144] Communication between Bersih and the headquarters of the parties in the respective states mostly took place over the phone. Where the internet was quite important, though, was in the distribution of Bersih's customized promotional materials for the various opposition headquarters. Mustapha explained:

> "We taught various branches of political opposition parties how to set up an email account….. They oftentimes didn't have one. Then we could design a flyer and customize it to their local area. The handbill would for instance communicate the name of the event, the time, the date and place….We designed it, emailed it to them….and they would print it…. Internet made communications with the heads of the political opposition parties in the states easier, less costly and much faster than writing letters".[145]

The question is why internet use was -despite high internet penetration rates- only important for internal coordination and not for informing sympathisers. The answer can be found in the type of internet that was available in 2007. In the years prior to Bersih one, blogs had become increasingly popular in Malaysia. For Bersih, too, its

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142   Interview with Faisal Mohammed, 22 November 2016, Kuala Lumpur.

143   Interview with Faisal Mohammed, 22 November 2016, Kuala Lumpur.

144   idem.

145   idem.

blog had become an important communication channel to inform people online.[146] Also the major online news portals and other opposition blogs distributed Bersih's information in cyberspace (Ufen 2009, 616).[147] However, it was the non-availability of social media that still limited the extent to which Malaysian activists could inform sympathisers beyond the usual suspects. As Lim (2016) and Weiss (2012) have argued, blogs and websites are primarily important in the nurturing of relationships *within* existing social circles. It is hard for information to travel beyond these circles, however, and to build larger networks. Medaline Chang recalled:

> "At the time, information wasn't pushed to you. You didn't get a message on your phone or anything. You had to actively look for information yourself. This was a major difference between Bersih 1 and the latter rallies. At the first one people had to make a concerted effort to look for information online".[148]

For Bersih one this meant that in the period 2005-2007 information about the upcoming rally and other events was primarily seen by those Malaysians that were already very susceptible to Bersih's message, in this case mainly the loyal members of the political opposition parties. The less politically inclined Malaysians that also sympathized with the cause of Bersih remained largely uninformed as they did not visit the oppositional blogs or websites. Illustrating in this regard is that out of the group of 17 Bersih sympathisers that I interviewed, six said they did not know about the first Bersih rally before it took place.[149] Also the turnout during Bersih one exemplifies this point. Of the 50,000 attendees, Chang estimated that only 20% was non-aligned to political parties. Wong Chin Huat, another (ex-)member of the Bersih steering committee, even estimated it at 10% (Radue 2012).[150] The other 80 to 90% of the turnout came from political opposition parties that primarily used *ceramah*, leaflets, handbills and word of mouth to inform people. [151]

Social media was already used in Malaysia in 2007, yet not by many -around 1% of Malaysians used Facebook- and according to activist Mustapha the platforms

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146   Interview with Medaline Chang, 20 November 2016, Kuala Lumpur.

147   Interview with Medaline Chang, 20 November 2016, Kuala Lumpur; Interview with Faisal Mohammed, 22 November 2016, Kuala Lumpur.

148   Interview with Medaline Chang, 20 November 2016, Kuala Lumpur.

149   These were #3, #4, #9, #12, #13, #15, see Table one chapter six for more information on these interviewees.

150   Interview with Medaline Chang, 24 February 2016, Kuala Lumpur; Interview with Chin Huat Wong, 21 February 2016, Kuala Lumpur.

151   Interview with Anonymous (#23), 12 February 2016, Kuala Lumpur; Interview with Anil Netto, 15 February 2016, Penang.

were mainly used to play games.[152] Bersih nevertheless tried to use Facebook for informing Malaysians about Bersih one. Mustapha even argued that Facebook was important in politicizing young, urban Malaysians (step one of the chain), as well as in informing them about the rally. Without completely refuting this claim, the 80 to 90% of the Berish protestors that were mobilized by political parties, together with the low level of social media users in Malaysia at the time, point towards a very limited role of the internet and social media in particular.

Finally, internet use was also unimportant in the coordination of the protests. The Bersih crowd gathered at four different locations that day and each spot had an assigned Bersih protest leader who had to take the lead over that group. The Bersih leaders used mobile phones to contact each other, as well as the Bersih headquarters that was staffed by Chang. From the headquarters, Chang also communicated with individual protestors over the phone. As the public transport system did not function properly on the day, many people needed practical information regarding transport.[153]

Thus, in conclusion, the internet provided Bersih a handy tool for the distribution of opposition materials, yet the opposition parties themselves generally relied on more traditional methods than the internet for informing people, like *ceramah*, handbills and leaflets. An important reason why the internet was unimportant in informing sympathisers –despite high penetration rates- was the non-availability of social media. The then-internet's static, non-interactive nature hampered the travelling of Bersih's information beyond the circle of usual suspects.

Bersih Two (2011) and Three (2012): The Importance of Social Media
In the years after Bersih one, social media came to full fruition in Malaysia. Especially Facebook and Twitter became immensely popular. Out of a population of 29 million, around 10 million Malaysians were on Facebook in 2011. This was more than two thirds of the online Malaysian population (Greyreview Website 2017). Whereas during Bersih one in 2007 Bersih relied primarily on blogs and websites for informing online, thereby reaching out to only a selective group of usual suspects, during Bersih two and three social media became fundamental to Bersih's communication and mobilisation strategy. As Maria Chin Abdullah, Bersih's chair, recalled:

> "During the second Bersih, we relied more on the social media and were far more strategic in their use. Our information went up in three languages all the time: Bahasa, English and Chinese".[154]

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152   Interview with Faisal Mohammed, 22 November 2016, Kuala Lumpur.

153   Interview with Medaline Chang, 20 November 2016, Kuala Lumpur.

154   Interview with Maria China Abdullah, 25 February 2016, Kuala Lumpur.

Crucially, the use of social media enabled Bersih to reach out to people that were not regular visitors of online opposition platforms. The effortless sharing, joining and interacting on social media essentially facilitated the diffusion of Bersih's message into multiple networks and across very diverse publics (Weiss 2012). No longer was it necessary to make an effort to look for information, as was the case during Bersih one; this time information was pushed to you. Hence, the crowd Bersih could reach out to online during Bersih two and three was greatly enlarged, which was greatly felt on the streets: The crowd became larger and people were less aligned to the political opposition parties. Weak social media ties are often sceptically understood as having little political impact (See for instance Gladwell 2010). In the case of Bersih, however, they allowed the movement to reach out to many more people compared to Bersih one.

Interestingly, Bersih itself had only a limited role in the successful informing of sympathisers online. By no means did the interviews with the Bersih activists point towards a very tech-savvy group of people with highly sophisticated internet communication or a social media plan. Instead, the activists just used 'whatever was available to them' at the time. Other than having an updated Facebook page and Twitter account, pre-planning some hashtags, actively retweeting on the day itself,[155] and designing a standardized Bersih picture to use for a profile picture,[156] Bersih did not do that much.

Bersih two and three were also the first Malaysian rallies in which the internet became important for coordinating sympathisers during a protest. Whereas for Bersih one coordination primarily took place through different protest leaders instructing the masses on the spot (and communicating with each other over mobile phones), this time social media and especially Twitter were heavily used. As the government clamped down on the protests, information was widely exchanged on these media platforms about where to go and where not to go (Lim 2016).[157] Unlike in the Arab Spring, where the majority of the tweets came from the Western world, the data shows the majority of tweets (around 67% for Bersih three) came from Malaysia, primarily from the places where the protesting took place (Lim 2016).

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155 Interview with Nathaniel Tan, 29 February 2016, Kuala Lumpur.

156 Interview with Mandeep Singh, 10 February 2016, Petaling Jaya.

157 Interview with Nathaniel Tan, 29 February 2016, Kuala Lumpur.

Bersih Four (2015): Continuing Reliance on Social Media, but also 'Back' to One-to-Many Channels

In many aspects Bersih four in August 2015 was similar to the previous two Bersihs. Malaysian Facebook users went up from 10 million in 2011 to 18 million in 2015 (PoliTweet 2015), which made informing sympathisers even easier. Next to Facebook and Twitter, Bersih also started to send messages and images over Whatsapp, as this medium had become increasingly popular among the public.[158] Like Bersih two and three, there was not a carefully devised strategy to reach out to people online. Many Malaysians felt extremely aggrieved by the corruption scandal, and because Bersih had become so well-known by that point, it did not worry about the protestor turnout. It relied on its good name and the workings of social media. Communication officer Ismail, who started working for Bersih just prior to Bersih three, explained:

> "When we say we are doing a rally, it's just as simple as, putting Maria Chin on the Malaysians Insider and *Malaysiakini* saying we are doing Bersih 4 on these days. That's it".[159]

> "In the urban areas we just simply send out one message. And this time around we have a lot more independent portals, news portals. They cover it and this message easily travels to Facebook and Twitter. So we just say, oh we're doing this.. People can then just read it and they'll know and they'll share".[160]

On the weekend of Bersih four, around 3.2 million unique visitors visited Bersih's Facebook page, a number that Ismail thinks was much higher than during the previous two Bersihs. Remarks from New Sin Ye, a member of Bersih's steering committee during Bersih four, also clearly show how the protest and the informing of sympathisers relied extensively on social media and did not require a lot of investment in time or money from Bersih itself:

> "Bersih 4 took a life of its own. Even though we had a Facebook page on what to do and showing announcements, a lot of individuals started to create their own pages and started to approach and mobilize friends. They also started making info graphics telling what you should watch out for during a protest. And this was....without any control by us. In a sense, it took a will on its own, the protest. And you just let that happen in the name of Bersih".[161]

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158   Interview with Mandeep Singh, 10 February 2016, Petaling Jaya.

159   Interview with Izmil Amri Ismail, 24 February 2016, Kuala Lumpur.

160   idem.

161   Interview with New Sin Ye, 29 February 2016, Kuala Lumpur.

According to Bersih, informing the urban crowd was no longer an issue during its fourth rally; reaching out to and mobilizing the rural population -the main support base of the government- was the real challenge.[162]

However, to say that Bersih was just sitting back and letting it all happen online would not be the complete story. As Bersih was concerned with the distribution of misinformation online, it deliberately chose its Facebook page and Twitter account to be the only official channels for communication and clearly communicated this.[163] It had strategically chosen those two websites as they had to be taken down completely if the authorities wanted to prevent Bersih from communicating with the masses, as Chapter four revealed.

In addition, to be able to effectively coordinate the protest on the day itself without the risk of opponents spreading misinformation, Bersih advised people to download Prime, an app developed by Bersih's former communication officer Nathaniel Tan in cooperation with *Malaysiakini*.[164] Prime allowed the Bersih organization to send push messages, i.e. notifications that appear on your display while the app is not actively in use. Around 30,000 people downloaded the app in the week of Bersih four, and during the rally push messages were sent by Bersih through Prime.[165]

What is interesting about choosing its Facebook page and Twitter account, as well as Prime, as official channels for communication, was the need for Bersih to have a 'one-to-many' medium that only the organization could use. During Bersih two and three the sharing over social media was very beneficial for the diffusion of its information, yet the many-to-many communication also enabled the spread of misinformation by others, urging Bersih to come up with a 'one-to-many' communication channel that only Bersih could use and that the crowd knew it could trust.

In short, the analysis of the informing processes in the four waves has shown the following: The first Reformasi protests (1998/1999) took place at regular time and places, making the informing of protest sympathisers less important. At a later stage, the protests occurred less regularly, making it imperative to inform protest sympathisers about the 'what, where, when, and how' of a protest through handbills, leaflets, and *ceramah*. The internet was also used, but the low levels of internet use made it a suboptimal medium to inform the masses. The subsequent analysis of the first Bersih rally (2007) revealed that high internet penetration is not a sufficient

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162   Interview with Maria China Abdullah, 25 February 2016, Kuala Lumpur; Interview with Mandeep Singh, 10 February 2016, Petaling Jaya.

163   idem.

164   Interview with Nathaniel Tan, 29 February 2016, Kuala Lumpur.

165   idem.

condition for successfully informing protest sympathisers: the internet was used for within-movement communication, but reaching out to sympathisers still occurred through the opposition parties that used traditional methods. The analysis of Bersih two, three and four showed that more than internet use as such, it was social media that facilitated the informing of sympathisers. Helped by Bersih's growing reputation, Twitter and especially Facebook made Bersih's information travel easily beyond the usual suspects, without much strategic or communicative effort from the movement itself. Together with intensified many-to-many communications, however, came the risk of misinformation being spread. Consequently, Malaysian activists have increasingly fallen back on 'one-to-many' communication for reaching out to sympathisers, as was shown in the analysis of Bersih four.

Yet one might wonder, also on the basis of the literature stressing state repression and the ever-growing capacities of the authoritarian state, why the Malaysian authorities have not been able to maintain information scarcity in their society, thereby frustrating Bersih's online informing of sympathisers? Haven't they tried to do so? Or were they simply unable to? In the next section I propose four factors that help to explain why state repression from the authorities, both online and offline, has been unable to nullify social media's facilitative role.

Why Did State Repression Not Hamper Social Media's Success in Informing Protest Sympathisers?

The Damaging Effect of Repression in the Age of Social Media

Part of the reason that social media's weak links were so effective for the diffusion of Bersih's information can be found in the sort of information that the Bersih rallies produced. In contrast to 2007, in 2011 and 2012 many people had smartphones and expanded mobile broadband enabled direct reporting of a protest. As a result, the state repression during Bersih two and three was captured in hundreds of images and videos that was ideal material to travel over social networks. This was hard-to-deny evidence that the government responded outright aggressively to (mostly) peaceful rally goers. In line with research that shows that content evoking strong positive ("awe") and negative (anger or anxiety) emotions has the biggest chance of going viral (Berger and Milkman 2012), Malaysians eagerly shared this 'hot' content with each other.[166] Obviously, being exposed to such content impacted Malaysians' sympathy for Bersih, as was shown in the previous chapter, but it also facilitated the enthusiasm with which Malaysians shared information about the next Bersih rally.

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166   Shariff, Amir and Nurshafenath Shaharuddin, "From Malaysia: An Eyewitness Account of Bersih Protests" http://asiafoundation.org/2012/05/02/from-malaysia-an-eyewitness-account-of-bersih-protests/ (4 January 2017)

Hence, social media's success in informing sympathisers was partly the result of the government's harsh response to protestors on the streets.

Moreover, the absence of repression on the streets during Bersih four possibly shows that the Malaysian government had become aware of the damaging effect of overt repression in the age of social media. Rather than openly repressing, with huge risks of a repression backlash effect, the government this time took action weeks later by charging Maria Chin Abdullah and other Bersih leaders for organizing the rally.[167] Many interviewed activists said in the interviews that with their non-violent response to Bersih four, the government had shown it had learned from previous mistakes in its response to street protests.[168]

Government Blunders in Cyberspace

The Malaysian government, again unintentionally, also enabled social media's facilitative role by making some blunders in cyberspace.[169] For instance, the government blocked the Bersih website two days before the Bersih four rally. However, expecting this government move, Bersih had already communicated that all official communication would take place through Facebook and Twitter. Therefore, the blockage of the website did not really hamper Bersih's communication and the news about the blocking only gained attention for Bersih four.[170] In addition, before Bersih four the government tried to flood Twitter with misinformation using the Bersih four hashtag. Unintentionally, this government action made #Bersih4 a trending topic, thereby only creating more attention for the rally, while the government's misinformation according to Ismail did not cause any confusion as people already knew that Bersih's official information would come via Bersih's Facebook and Twitter accounts.[171]

Socio-Technical Obstacles for Online Repression

Whereas with the previous two points the Malaysian government unintentionally boosted social media's facilitative role themselves, the third factor highlights – similar to a point made in the previous chapter- that effectively repressing activists in cyberspace comes with a very high price for the government. Prior to and during

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167   Interview with Maria China Abdullah, 25 February 2016, Kuala Lumpur; Interview with Andrew Khoo, 17 February 2016, Kuala Lumpur.

168   Interview with Toh Kin Woon, 14 February 2016; Interview with Andrew Khoo, 17 February 2016, Kuala Lumpur; Interview with New Sin Ye, 29 February 2016, Kuala Lumpur; Interview with Hilman Idham, 6 February 2016, Kuala Lumpur.

169   Interview with Izmil Amri Ismail, 24 February 2016, Kuala Lumpur.

170   idem.

171   idem.

all Bersih protests, the authorities did try to hamper Bersih's online informing in cyberspace by hacking into Bersih's blog and announcing the rally was cancelled,[172] and by carrying out DDOS attacks on Bersih's and *Malaysiakini*'s websites,[173] making the sites temporarily inaccessible for readers (Weiss 2013, 603),[174] as well as by jamming the internet signal at the protest sites in an attempt to frustrate live coverage.[175] Yet, although these repressive measures did frustrate Bersih's online informing somewhat, Facebook and Twitter were Bersih's most important communication channels, as well as the platforms on which its information travelled easily over weak links throughout society.

As earlier explained, the Malaysian authorities cannot block one specific Facebook page or Twitter account. They have only two options: Either take the whole platform down or do nothing. Choosing the former runs the risk of infuriating many more Malaysians than now support Bersih, something which the authorities so far fear more than the function these platforms now can have in Malaysian society, namely ideal spaces to challenge information scarcity, both by exposing citizens to alternative political information that is critical of the government (step one), as well as by informing Malaysians about an upcoming rally (step two).

Remarkably, the activists also seem to have found an answer to the jamming of the internet signal at the protest site. In response to Bersih three, where unknown white vans at the protest site had allegedly jammed the internet signal, the movement recommended Malaysians to download the app Firechat, in preparation for Bersih four.[176] This app was used during the umbrella protests in Hong Kong and would allow communication and coordination over Bluetooth in case the authorities slowed down or completely shut off the internet. Although the internet was functioning all day during Bersih four, making the use of Firechat unimportant during the rally, the example once again shows the resilience of the protest movements in the face of online repression.

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172   Interview with Medaline Chang, 20 November 2016, Kuala Lumpur.

173   A DDoS attack attempts to make a website unavailable by flooding the targeted machine with superfluous requests. By doing so, it tries to overload the system and to prevent some or all legitimate requests from being fulfilled.

174   "Press statement regarding DDOS attack on BERSIH 2.0 website," Bersih Website. http://www.bersih.org/press-statement-regarding-ddos-attack-on-bersih-2-0-website-18-april-2012/ (22 February 2018).

175   Interview with Masjalizah Hamzah, 24 January 2016, Kuala Lumpur; Interview with Izmil Amri Ismail, 24 February 2016, Kuala Lumpur.

176   "Bersih 4 adopts HK-style communication as last resort," Malaysiakini, https://www.malaysiakini.com/news/310308 (25 February 2018).

Mild Offline Repression

Next to the three previously mentioned factors, the informing of protest sympathisers over social media is also a result of the relatively mild offline repression in Malaysia. The Malaysian authorities have definitely repressed and intimidated Bersih activists: Activists have frequently been sued on dubious grounds, have ended up in jail for a couple of days, have been fined, or have received threatening phone calls in the middle of the night.[177] So far however, Bersih activists have not been detained for very long periods of time, or had worse things happen to them. This means that Bersih as an organization has been able to do most of their work in relative freedom and openness, allowing the movement to build a name and good reputation over a period of years. As we have seen in the previous analyses, this fame and reputation brought Bersih to a point where its information travelled to millions over social media without any serious effort from the movement itself. Of course, this fact cannot be seen separately from the relative space Bersih enjoys in the mildly repressive climate in Malaysia.

Explaining why the Malaysian authorities have not used harsher repression against activists is outside the scope of this research. What is very clear though, is that the explanation does not lie in the affordances of the internet. It is not that the internet enabled Malaysian activists to stay anonymous, or to work underground and meet in secret virtual spaces. The activists that informed the Malaysian sympathisers over social media about a protest worked right under the nose of the authorities who knew who they were and what they were doing.

Conclusion

Through an analysis of four waves of mass anti-government protests in Malaysia, with varying degrees of both internet use and social media use, this chapter has investigated the internet's role in informing protest sympathisers about an upcoming protest. The analysis began in the Reformasi period (1998/1999) where internet use was already used for informing sympathisers, but where the low levels of internet use made activists rely on other communication methods. Subsequently, the chapter demonstrated with the analysis of the Bersih rallies that more than internet use as such, it was social media that facilitated the informing of protest sympathisers about the 'what, where, when and how' of a protest. Also due to Bersih's growing reputation, social media platforms facilitated the travelling of Bersih's information

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177   Interview with Maria China Abdullah, 25 February 2016, Kuala Lumpur; Interview with Mandeep Singh, 10 February 2016, Petaling Jaya. Interview with Tian Chua, 13 February 2016, Kuala Lumpur; Interview with Adam Adli, 28 February 2016, Kuala Lumpur, Interview with Hishammudin Rais, 28 November 2016, Kuala Lumpur.

throughout Malaysian society in Bersih two, three and four, which did not happen in the absence of social media at the time of the first Bersih rally (2007). Interestingly, the chapter also showed that Malaysian protest movements on the one hand benefited from social media because it amplified the diffusion of its information, but that at the same time it opened the risk that misinformation was spread by opposing forces, thereby frustrating the movement's mobilisation campaign. In response to this risk, Bersih increasingly returned to one-to-many communication channels for their communications in Bersih four.

The chapter proposed four reasons why the Malaysian authorities have been unable to prevent social media's facilitative role informing sympathisers. Firstly, the Malaysian government unintentionally fostered social media's facilitative role by harshly repressing protestors in the streets, thereby 'making' viral social media content themselves. Secondly, the government made strategic blunders in cyberspace. Thirdly, the high costs of blocking Facebook and Twitter -the most important communication channels for Bersih- has put the authorities in a catch-22 situation that so far has kept the activists relatively protected from online repression. Finally, the successful online informing of Bersih sympathisers is also possible because of the mild offline repression in Malaysia. Due to the mild repression, Bersih has been able to gain a lot of trust and credibility among Malaysians over the years, which has also facilitated the extent to which Malaysians have been willing to share Bersih's content on social media.

Importantly, the chapter's findings derive from studying a very organized, mostly urban-based, highly inclusive, non-sectarian movement, which is strongly supported by the Malaysian opposition parties. These movement characteristics all affected, one way or the other, the mobilisation processes described in this chapter. Some are likely to have been conducive to social media's facilitative role. Bersih's inclusive, non-sectarian nature, for instance, is likely to have helped Bersih's information to cross ethnic boundaries. Moreover, Bersih's urban support base, having a high level of social media usage, is also likely to have stimulated the movement's informing over platforms like Facebook and Twitter. Other characteristics, however, like Bersih's institutionalized, formal nature with its links to the opposition parties has made the sharing of Bersih's information perhaps less attractive for Malaysian youth, who might want stronger action against the government and who cannot identify with Bersih's slightly boring image.

Chapter 6

Internet Use and Being Motivated to Join an Anti-Government Protest

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The mobilisation chain outlined in Chapter two assumes that even if a person is sympathetic towards a protest movement and knows about an upcoming rally, he or she still has to decide whether the benefits of joining outweigh the costs. This holds in democracies, but especially in authoritarian societies where the risks involved in street protesting can be very high. This chapter examines the role of the internet in the third step of the mobilisation chain and looks into whether and how internet use affects the motivation of informed protest sympathisers to join an anti-government protest. Again, it is the internet's challenge to the information scarcity in society that possibly changes people's motivation to protest: By providing them with information that in the pre-internet age would never have been available, internet use might help people to defy their fears.

Various accounts on the Arab Spring have stressed the importance of internet use in explaining why a repressed population suddenly overcame their fear and collectively went onto the streets. Based on these accounts, this chapter investigates whether internet use was similarly important in the Malaysian context. The examination shows stark differences with the Arab Spring events, however, underlining once again the importance of looking further than these well-known cases for a profound understanding of the internet's impact on mobilisation. The mechanisms that were important in the Arab Spring all turn out to be largely irrelevant in the Malaysian case. Only conducive social media networks have some explanatory value: By increasing their online visibility, conducive social media networks make informed sympathisers more susceptible to peer pressure to take to the streets.

The chapter starts with a brief discussion of social movement studies on high-risk activism. Subsequently, on the basis of the existing literature that bases its findings on the Arab Spring, the chapter proposes three sets of ideas through which internet use might affect the motivation to join a high-risk protest: By affecting the perceived costs of protesting, by making people susceptible towards online peer pressure through social media, and by exposing them to dramatic (audio-)visual information. After the research design consisting of 17 in-depth interviews and a nationwide survey is introduced, the results will be presented, followed by a conclusion.

What Explains High-Risk Activism?

McAdam (1986) was among the first to plead for a distinction between low- and high-risk activism, arguing that very different dynamics and processes explain participation in the two activities. Without explicitly engaging with the mobilisation chain, the literature building on McAdam's study sees –similar to this chapter- sympathy for a protest movement (step one), as well as someone's awareness of an upcoming protest (step two), as necessary but insufficient conditions to explain high-risk activism. It tries to explain who among the like-minded individuals that know about an upcoming event are motivated to participate.

Some of these studies imply that those taking high risks have different personality traits: They might be so courageous and/or altruistic that they are willing to take extreme risks (Lawrence 2016). Others claim that rather than ideological commitment, it is a person's microstructural position vis-à-vis the protest which determines motivation, such as the ties someone has to others that participate, embeddedness in activist networks, or prior experience with high-risk activism (McAdam 1986; Wiltfang and McAdam 1991; Nepstad and Smith 1999; Lawrence 2016). Also biographical availability, meaning the "absence of personal constraints that may increase the costs and risks of movement participation, such as full-time employment, marriage, and family responsibilities" (McAdam 1986, 70), has been discussed as an explanatory factor, with varying levels of importance attributed to it (Wiltfang and McAdam 1991; Nepstad and Smith 1999; Beyerlein and Hipp 2006; Pichardo, Almanzar and Herring 2004). Closely related to biographical availability, gender too has been brought up as an explanatory factor (McAdam 1992).

Internet Use and the Motivation to Join a Highly Risky Anti-Government Protest

In contrast to these factors, the high-risk activism literature has so far been silent on the internet's role in affecting the motivation to participate. Nevertheless, without entering this debate explicitly, various authors analyzing internet use during the Arab Spring have tried to theorize about whether and how internet use might have had an impact on informed sympathisers' motivation to take to the streets (see for instance: Lynch 2011; Weyland 2011; Little 2015). Building on these works, the following sections discuss various ideas on why internet use might affect informed sympathisers' motivation to join a protest. On the basis of these discussions, hypotheses will be formulated that can be empirically explored in the context of the Bersih rallies.

Internet Use and the Perceived Risks of Protesting

The first set of mechanisms builds upon rationalist theory and hypothesizes that the perceived risks of protesting might decrease thanks to online information. Rationalist theory postulates that individuals "maximize their utility by pursuing their goals in the best possible fashion despite facing environmental uncertainty and imperfect information (Weyland 2009, 398)." According to this strand of theory, individuals make "decisions from fairly systematic, unbiased, cost-benefit calculations for which they search relevant information (idem)." Whereas unimportant decisions may not justify costly information-gathering, high-stake decisions stimulate the collection of information (idem). Since participation in protest in an authoritarian regime is a high-risk activity par excellence, informed sympathisers are likely to try to "acquire a reasonable grasp of the situation with all its uncertainties and dangers (idem, 399)."

Safety in numbers

The perceived risk of participation is partly determined by the magnitude of the crowd. If the crowd is large, the perceived risk is much lower because the chances of getting arrested or beaten up by the police are lower (Rule 1989; Kuran 1995). However, a fundamental issue -as outlined by Klandermans (1984, 585)- is that people have to decide whether to participate at a point when they do not know whether others will come out as well. Klandermans (idem) claims people 'solve' this problem by basing their decision on the expectations they have. Yet in an authoritarian regime there is scant information to base your expectation on. Information flows have traditionally been strictly controlled by the regime and even in mildly authoritarian regimes individuals have incentives to conceal their true preferences to avoid punishment (Kuran 1991).

Building on the work of Granovetter (1978), Kuran (1991) distinguishes private and public preferences towards a regime and claims that the former is always known to the individual him- or herself (and is given), but that the latter is what he/she chooses to reveal to others. When the two are dissimilar, the individual is involved in 'preference falsification'. According to Kuran, "the external benefits and costs associated with a public-preference choice generally depend on the choices of others. If only a few people are demonstrating against the regime, the possible external costs of participation is likely to be much higher, and the expected benefit much lower, than if the streets are packed with demonstrators (Kuran 1995b, 1532)." Every individual has a (unknown) 'revolutionary threshold', which determines the number of individuals that must protest before he or she wants to participate in the protests.

In Kuran's argument, individuals must *observe* a certain amount of protesters on the streets to judge whether their own revolutionary threshold has been reached. Although public protests can indeed provide information to potential protesters

(as Kuran and also Lohmann 1994 argue), it is unclear how individuals gather this information and can subsequently draw inferences out of it. In Kuran's theory, people need to make a decision (sometimes one of life or death) based on information they seem to have collected by solely staring out of their own windows. Observing 'safety in numbers' is then still a possibility, as for instance Zhao's research (1998) teaches us. He has shown that the successful mobilisation of the Beijing student movement in 1989 was contingent upon students *seeing the ongoing protests from their dormitories.* However, many people –in Zhao's case all Chinese people not living on the university campus- will not see how large the turnout is. As a consequence, these people will not have the guarantee that their revolutionary threshold is reached, i.e. whether it is safe enough to join the protest.

Likewise, in Chapter four it was described how Malaysians interested in joining a Reformasi protest pretended to go shopping in the street where the protests frequently occurred, and only exposed themselves as a protestor when they saw that there were enough others shouting Reformasi slogans. The informed Reformasi sympathisers that were not present in the shopping street, however, would never know whether there were enough other people to come into action themselves. One would expect that without such a guarantee most people would tend to be 'better safe than sorry' and stay at home. In other words, if people are unsure whether the crowd will be large enough due to no or incomplete information, they are unlikely to come into action.

Lynch (2011) suggests that the internet could help to overcome this informational problem. His proposition is that internet use has caused a breakthrough in the information monopoly of the state, which has enabled people to gather crucial information on the level of dissatisfaction in society. In Lynch's (2011) view, by getting a sense of this it becomes possible to make a better estimation about whether the crowd will be large enough to go out. More concrete even than the gauging of societal discontent are social media platforms providing precise information on the expected protestor turnout or following protests in real-time. Facebook allows users to create an event that others can virtually join. This essentially means that guesswork is no longer necessary because one knows how many others plan to protest (Little 2015).

Prior to the mass protest on the 25 January 2011 in Egypt, 100,000 confirmed their attendance on Facebook (Ghonim 2012, 160). Gunning and Zvi Baron (2013, 289) explicitly say on this: "people had a much better insight into what others were thinking, and what they were planning to do, lowering the (perceived) risk of joining the protest" (289). Breuer, Landman and Farquhar (2015) provide quite similar evidence from the Tunisian protests, yet slightly more indirectly. In a conducted survey among the digital elite of Tunisia, the authors found that 73.8% of their respondents "learned through the internet that a large number of people had signed up for a demonstration in their town, city, or municipality (idem, 779)." In fact, 80.4% of their sample stated that based on

what they saw on the internet, they came to believe that the protests would achieve their goal of toppling Ben Ali (idem, 16). Or, as one Tunisian cyber activist strikingly put it: "Facebook allowed us to overcome our fear of the regime. With Facebook, I knew before going to a protest that I would not be alone" (International Crisis Group 2011, 8).

Internet use might not only provide a rough indication of how many others plan to take to the streets, but even reveal in real-time how many others have already done so. Livestreams and live blogs are arguably the ideal media to follow protests second by second, providing informed sympathisers with precise information on whether there is already safety in numbers on the streets. A quote from a BBC correspondent during the Egyptian protests in 2011 nicely illustrates this. The correspondent remarked: "If you follow second by second some of the accounts coming from Cairo's Tahrir Square, you can almost see when activists realized they had broken through, that it wasn't just a few hundred people turning up, but tens of thousands" (Else 2012, in Little 2015).[178]

Based on this idea, the first hypothesis to be explored in the context of the Bersih protests is:

H1.1a: Internet use increases the motivation of informed sympathisers to join a protest because it guarantees that there will be safety in numbers.

The hypothesis above assumes no information (uncertainty) leads to inaction and that online information (about safety in numbers) leads to action. A society with internet is compared to a society without it and it is hypothesized that the presence of internet in society will push more people towards action. Little (2015) is not concerned with the situation of online information versus no online information in his research but is interested in what sort of information triggers what kind of behaviour. According to him, people will indeed decide to protest if they find out the protest is larger than they expect (as H1.1a supposes), but he claims they will refrain from doing so if online information reveals that the protest is actually rather small. People are likely to respond similarly to information about the responses from the authorities: They will stay at home if the regime represses more harshly than expected, but are likely to join the protest if it turns out to be relatively safe on the streets. So, whereas H1.1a assumes people who are uncertain will do nothing, Little does not speculate about this but simply suggests the effect of online information is conditional upon the message it conveys. It can tell people that it is safe, but also that it is dangerous. The second hypothesis is therefore formulated as:

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178   Else, Liz. "The Revolution will be Tweeted," 6 February 2012, New Scientist.

H1.1b: The effect of internet use on informed sympathisers' motivation to join a protest is conditional upon whether it communicates that the risks of protesting are higher or lower than expected.

The World is Watching

Internet use could also affect the perceived costs of protesting because demonstrators know that the 'world is watching' them during a protest. Thanks to widespread access to smartphones and social media almost every protestor can now essentially act as a journalist, capturing incidents that take place at a protest site, and distributing them to a wider audience. Authoritarian governments are probably well aware of this and know that overt state repression on the streets can no longer easily be covered up. Hence, this increased transparency is likely to put constraints on what regimes can do against protestors, especially those regimes with a democratic façade that care a lot about their international reputation and image in the Western world (Ritter 2015). Most likely, these are the regimes that Levitsky and Way (2010) define as the 'high leverage and high linkage' cases, referring to authoritarian states that are very vulnerable towards pressure from the West and having strong linkages to it.

Chapter five already showed that the high audience costs of state repression in the age of social media is likely to have played an important role in the Malaysian authorities' decision not to clamp down on the Bersih protests any longer. Referring to this logic in the Arab Spring, Lynch (2011, 305) proclaims that internet use has raised "the costs to authoritarian regimes of repression...by documenting atrocities and increasing international attention". Eaton (2012, 8) too argues that the widespread use of social media has greatly constrained the "the ability of the regime to crush dissent in its traditional manner". Likewise, Gunning and Zvi Baron (2013, 212) suggest that "in Egypt, activists and newcomers alike used Facebook, Twitter and YouTube to keep the media informed and used the media to protect them".

Taken together, it means that if informed sympathisers know that due to internet use and especially social media the authoritarian regime's hands are tied behind its back, the perceived risk of protesting is likely to be lower. Hence, my second hypothesis is:

H1.2: Internet use increases informed sympathisers' motivation to join a protest because it decreases the perceived risk of falling prey to government repression.

Conducive Social Media Networks

In contrast to the rationalist individualist accounts described above, and as explained earlier, many authors stress the importance of the social embeddedness and micro-structural position of the informed sympathiser protestor to explain

protest motivation. According to these thinkers, people do not decide to protest in isolation but are instead socialized into high-risk activism.[179]

Centola and Macy (2007) have stressed the importance of strong social ties for high-risk activism. According to them –and later also Gladwell (2010)- weak ties can be very efficient for some information to travel and diffuse, as was also demonstrated in the previous chapter. For people to take high-risk action, however, the mere presence of a tie is not enough. Instead, it is the sort of tie that matters. According to thinkers like Gladwell, people are not so much influenced by a protest leader or a distant contact, but primarily by people close them, like friends and family. As Hedstrom suggests (1994, 1163), "the closer that two actors are to one another, the more likely they are to be aware of and influence each other's behavior".

Zhao's account of the Beijing demonstrations in 1989 on the university campuses illustrates the importance of strong ties for high-risk activism. Most students lived together in dormitories facilitating the growth of extremely strong ties among them. Speaking about the protests, Zhao (1998, p. 1506) notes that "once participation was regarded by most students as a moral action, avoiding participation became very difficult for those who actually did not intend to do so in the beginning". Students in the same or nearby dormitories were constantly checking each other's behaviour and those that did not go to the demonstrations felt very isolated and hated.

Now, in the age of the internet, and especially social media, one could argue that we are all living in a large dormitory. Uploading your daily activities on social media has become a natural habit to many, as well as checking what your peers are up to. Staying in touch with what friends are doing is listed as the top reason for using social media.[180] It needs no explanation that to be connected always and everywhere is essentially equal to being exposed to the constant influence of your peers. Kramer et al. (2014, 8789) have shown that "emotions expressed by friends, over social networks, influence our own moods", a process the authors termed 'emotional contagion'. Although peer pressure and emotional contagion is obviously nothing new, the intensive use of social media has arguably made it even more paramount in our behaviour.

Chang and Bae (2012) have demonstrated that in order to get approval from their peers many young South Koreans posted photo evidence of their own voting on Twitter. According to the authors, the desire to get (online) approval of peers

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179   Whereas the earlier described individualist theories and hypotheses neatly fitted only into the third step of the mobilisation chain –and not in the first and the second- the ideas on social embeddedness are likely to matter in all three steps. Here however, the focus lies only on the third step.

180   Wersm website. "The 10 Top Reasons Why We Use Social Networks," http://wersm.com/the-10-top-reasons why-we-use-social-networks/#prettyPhoto (26 February 2018)

brought many young South Korean voters to the polls. Proving the impact of online peer pressure on risky behaviour, Huang et al. (2014) showed that adolescents who are exposed to friends' risky online displays are more likely to get involved in such activities themselves.

Now if none of your friends support a protest movement, social media is unlikely to do anything of course. But if your peers start to support a protest, announce they will join a rally, or show proof of their participation, social media can essentially function as a virtual dormitory. Especially in a personalized web environment where next to the increased online visibility people mostly get confronted with what they already believe in (Spier 2017), social media is likely to make protest sympathisers more susceptible to peer pressure from like-minded individuals, pushing them in the direction that their peers want them to go. I therefore hypothesize that social media use, and specifically peer pressure on social media, could push informed sympathisers into action both out of fear of social sanctions -as was the case in the Chinese universities- as well as because of a 'fear of missing out':

H2: Conducive social media networks increase the informed sympathisers' motivation to join a protest.

Internet Use and Dramatic (Audio-)Visual Material

Lastly, "cognitive psychology finds that people systematically deviate from rational assessments and have a problematic grasp on reality" (Weyland 2009, 400). Because of pervasive uncertainty, and often overwhelmed by an abundance of complex information, "humans commonly rely on inferential shortcuts to cope with the demands of decision making, yet at the risk of distortions and mistakes" (idem). Particularly "under conditions of profound uncertainty, when established norms and institutions lose their guiding force", and people face unexpected novelty, they rely on cognitive shortcuts (Weyland 2012, 921). One inferential shortcut, the heuristic of availability, is likely to be important in regard to the decision to go out and protest. As Weyland (2009, 401) explains, the "heuristic shapes attention and memory recall", and is "affected disproportionately by "drastic, striking, vivid, directly witnessed events". Consequently, "equally relevant information that is less stunning is neglected" (idem). For example, car drivers tend to slow their speed after seeing an accident despite the fact that "a single accident should not alter their cost-benefit calculations about the risks of speeding (idem)."

In recent years, images and videos (in comparison to articles, news items, or blogs) carrying content that is dramatic, striking, and vivid have increasingly been distributed online. Whereas in the past authoritarian regimes had a near monopoly on the dissemination of (audio)visual material, it can now be distributed by every single

person with internet access. Such dramatic information could play an important role in affecting informed sympathisers' motivation prior to a protest. For instance –in line with Weyland's ideas- videos and photos of chanting crowds on the streets could unleash feelings of euphoria and overwhelm the careful assessment of risks. Similarly, visuals of officials being caught red-handed committing crimes of corruption, or human rights violations by the state, can incite reactive emotions such as anger and moral outrage, thereby also increasing the motivation to join a protest (Jasper and Poulsen 1995; Jasper 1998; Risley 2011; Aytac, Erdem and Schiumerini 2017).

In their book on the Egyptian revolution, Gunning and Zvi Baron (2013, 290) stress the importance of visually captivating images. Many of their Egyptian interviewees, for instance, "vividly recalled seeing Said's picture, before and after his death, on the internet". And most importantly, a number of their interviewees even "specifically mentioned seeing video footage as a key factor in their being moved to go out and investigate" (idem, 290). Similar evidence comes from Tunisia, where online videos and images capturing state repression also had a mobilizing effect (Breuer 2012). In Malaysia too, such examples can be found. In the same year as the first Bersih protest (2007), an online video showing a prominent lawyer brokering Supreme Court appointments went viral and led to the 'Walk of Justice' in Kuala Lumpur (Chin and Chin Huat 2009). Just a few months later, a video showing the demolition of Hindu temples and immigrant squatter communities with screaming and crying children in the background was released, catalyzing the HINDRAF protests of the marginalized Indian Malaysian community (Steele 2009). In short, the hypothesis to explore in the context of the Malaysian Bersih protests is that:

H3a: Internet use increases informed sympathisers' motivation to join a protest by exposing them to dramatic (audio-)visual information.

Arguably, rather than only exposing informed sympathisers to dramatic (audio-)visual content that increases their motivation, the internet might also confront them with content that has the opposite effect. Images and videos of state repression could cause anger and moral outrage as described above, but could also instigate fear or a rejection of politics in general, thereby decreasing the motivation to protest. Supporting this idea, Pearce and Kendzior (2012) found that, in Azerbaijan, publicity of the state's repression of two critical bloggers dissuaded rather than incited protest motivation among their online peers.

Importantly, moreover, just like the state's opponents, regimes themselves can distribute dramatic images and videos in cyberspace to affect the motivation of informed sympathisers (Gunitsky 2015). Prior to Bersih one, for instance, the Malaysian government distributed clips of violent demonstrations in various parts of

the world with the warning "Demonstrations will only bring violence".[181] Additionally, between Bersih two and three, a video was spread on Facebook entitled "Illegal Rally Bersih 2.0: A police perspective" documenting misbehaviour by protestors during previous Bersih rallies (Postill 2013). The sub-hypothesis of the third theoretical hunch is therefore:

H3b: The effect of internet use on protest sympathisers' motivation to join a protest is conditional upon the sort of dramatic (audio-)visual content they are exposed to.

Research Design

To examine the proposed hypotheses in the Bersih protests I make use of 17 semi-structured interviews and a survey on the Malaysian population that I commissioned and supervised myself.

Semi-structured interviews

Seventeen semi-structured interviews were conducted with informed sympathisers about their motivation to go to a Bersih protest. Some of the interviewees' motivation was high enough to go to one of the Bersih rallies; others refrained from taking action, mostly because the perceived risks were deemed too high. To make sure the individual I spoke to fitted the category of informed sympathizers in at least one Bersih rally, I asked the respondent whether he/she supported the demands of Bersih now or in the past, and whether he/she knew about the rallies before they took place. With these 17 Malaysians I spoke about whether and how internet use played a role in their motivation to go to a Bersih rally.

What is important to stress is that getting people to remember something that happened a long time ago, in the case of Bersih one (2007) around ten years ago, is difficult. People have a selective memory, and sometimes don't remember that much. Another issue is that people are sometimes not able to distinguish the different rallies from each other. Sometimes they start talking about Bersih two and then realize that it was Bersih three, or do not know how many Bersihs there have been so far. However, since these protests are far from ordinary days, especially for the people who attended the rally, most people remember quite a lot. If people did not immediately remember a particular Bersih rally, I helped them by mentioning particular cues such as the year, the month, the immediate trigger for the protest, the response by the authorities, or the location of the protest.

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181   "Government tells media not to report rally calling for free and fair elections," Bersih website, http://www. bersih.org/government-tells-media-not-to-report-rally-calling-for-free-and-fair-elections/   (26   February 2018).

The interviews took place in my first fieldwork period in January-March 2016, which was after the fourth Bersih rally but before the fifth rally, which took place in November 2016. As explained in Chapter one, the sample is based on snowballing and can therefore not be considered as representative of the population of informed Bersih sympathisers, but the interviews do give an insight into the variety of ways in which the internet may play a role in individual decision-making about whether to join rallies. As can be seen in Table two below, all my interviewees were between 25 and 44 years old, had internet access, spoke English, and lived in and around Kuala Lumpur. Nine of my interviewees were Chinese, six Malay, one Indian, and one Indian/Chinese.

Table 1: Interviewed informed Bersih sympathisers

Name	No.	Sex	Race	Age	Attended Bersih
Jo	I#1	Female	Chinese/Indian	33	1, 3, 4
Wang	I#2	Male	Chinese	33	2
Li Jing	I#3	Female	Chinese	31	None
Miau	I#4	Female	Chinese	38	4
Jin	I#5	Male	Chinese	36	1, 2, 3, 4
Cathlyn	I#6	Female	Malay	31	4
Ibrahim	I#7	Male	Malay	38	4
Ahmad	I#8	Male	Malay	25	4
Julius	I#9	Male	Chinese	36	4
Fred	I#10	Male	Chinese	30	None
Urdu	I#11	Male	Malay	28	None
Ama	I#12	Female	Chinese	27	4
Akdir	I#13	Male	Malay	30	4
Zikri	I#14	Male	Malay	33	None
Mei	I#15	Female	Chinese	44	4
Gopta	I#16	Male	Indian	33	4
Adli	I#17	Male	Chinese	33	None

The earlier-mentioned 2015 survey from the Merdeka Research Center (see Chapter four) –held just after Bersih four- shows that the convenience sample is likely to have observations that may be pertinent for other informed Bersih sympathisers. The survey showed that urbanites tend to appreciate Bersih more than their rural counterparts and that among the different age groups, the age group of 31-40 supports Bersih most. This is the category most of my respondents fell under. Lastly, the Chinese, a majority in the population of Bersih sympathisers, is also overrepresented in the group of interviewees.

Table 2: Descriptive information on Bersih sympathisers

Living Area	Urban	Rural			
% Sympathetic towards Bersih	51%	31%			
Ethnicity	**Chinese**	**Malay**	**Indian**		
% Sympathetic towards Bersih	81%	23%	51%		
Age	**21-30**	**31-40**	**41-50**	**51-60**	**>60**
% Sympathetic towards Bersih	41%	49%	47%	38%	35%

Source: Merdeka Research Company, 2015.

Survey

Next to the interviews, I commissioned and supervised a nationwide survey among informed Bersih sympathisers just after the fifth Bersih rally, conducted by the Merdeka Research Center in November 2016. Because of its timing, Bersih five fell out of the scope of the semi-structured interviews as well as most of Chapter five's analysis. Specificities on the survey, as well as why I believe a survey instrument is a valid and reliable instrument to gather data on possibly politically sensitive topics in Malaysia, were discussed in Chapter four. In some aspects Bersih five was similar to Bersih four. There was for instance no government repression in the streets, and the resignation of PM Najib Razak was an important demand once again. However, whereas Bersih four was an overnight rally in Kuala Lumpur, Bersih five was a series of protests throughout the whole country in the timespan of a few weeks. According to the organization itself the Bersih convoy travelled to 246 cities, giving many—including rural—Malaysians the chance to attend a protest. Although state repression was absent, the convoy events were marked by incidents between the yellow Bersih shirts and a pro-Malay, nationalist movement named after their red shirts. This Red Shirts movement -fiercely anti-Bersih and allegedly linked to

the ruling party-[182] disturbed many Bersih events by organizing counter-rallies. In some instances it even led to clashes where some Bersih supporters were physically harassed by Red Shirts.[183] The leader of the Red Shirts movement moreover publicly declared war on Bersih prior to the large rally in Kuala Lumpur on 19 November 2016.[184] Despite increased tensions in the run-up to the 19th, there were no clashes in Kuala Lumpur on the day itself. The Bersih crowd in Kuala Lumpur –estimated to be around 30,000- was much lower compared to the 200,000 that attended Bersih four.[185]

As the research is specifically interested in the motivation of (informed) Bersih sympathisers, this group had to be differentiated from the non-sympathisers in the survey. This was done by asking respondents whether they were favourable towards Bersih. Of 1211 respondents, 419 responded they were 'somewhat' or 'very' favourable towards the movement. These two categories were taken together as the sample of Bersih sympathisers and were asked further questions about their motivation. Figure one below shows that 11.31% of the Malaysian population is very favourable towards Bersih, and 23.29% somewhat favourable.

The survey data moreover shows that out of the 419 Bersih sympathisers only 28 people ultimately attended a Bersih five event.[186] This once again underlines the point that sympathizing with an anti-government protest movement is by no means the same as participating in an anti-government protest.

To enable a regression analysis with the survey data, a dummy variable was made that reported whether the respondent attended a Bersih five event (0=no, 1=yes). Next to the independent variables of interest –that I will discuss in the specific sections- a set of control variables was added to all models. Informed by the works discussed in the literature review, my own intuition, as well as by the Malaysian context, the following variables were included: Ethnicity, gender, age, urbanisation,

182 "In The Open - UMNO Are Mobilising Red Shirt Thugs," Sarawak Report, http://www.sarawakreport. org/2016/11/in-the-open-umno-are-mobilising-red-shirt-thugs/ (26 February 2018).

183 "Bersih claims red-shirts could have killed Bersih supporter," The Malay Mail Online, http://www. themalaymailonline.com/malaysia/article/bersih-claims-red-shirts-could-have-killed-bersih-supporter (26 February 2018).

184 "Red shirts leader declares war on Bersih 5 after release," The Malay Mail Online, http://www.themalaymailonline. com/malaysia/article/red-shirts-leader-declares-war-on-bersih-5-after-release (26 February 2018).

185 "Minister: Poor Bersih 5 turnout shows rejection of PPBM," The Malay Mail Online, http://www. themalaymailonline.com/malaysia/article/minister-poor-bersih-5-turnout-shows-rejection-of-ppbm (10 February 2017).

186 This was done by asking respondents: "Have you joined any of the official BERSIH 5.0 convoy events between the start of the BERSIH 5.0 campaign on the 1st of October and the end of the campaign on the 19th of November?" Possible answers: No, No but I would I have done had I had the chance, Yes one, Yes more than one, N/A, Refuse. Out of these categories, a dichotomous variable was made by collapsing the first two categories (No), and the third and the fourth (Yes), while reporting the last two categories as missing.

education, attendance of previous Bersih rallies, sympathy for Bersih, working for the government or a government-linked company, unemployment, and lastly whether the internet is the most or second-most important source for political news. In the Appendix (B4) a complete list of the variables can be found.

In the next sections I discuss the empirical evidence. For each hypothesis I will first elaborate on the seventeen qualitative interviews, and then present the findings from the survey.
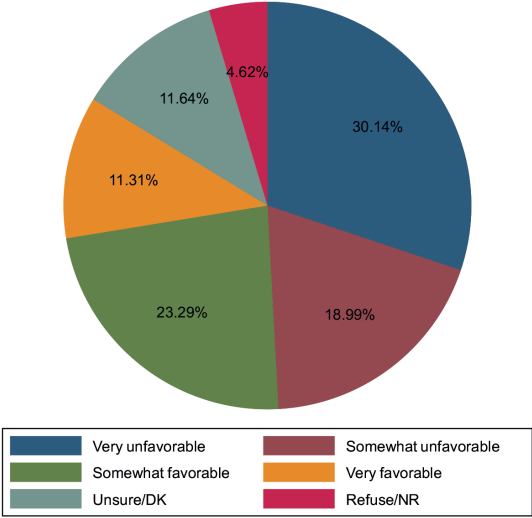
Figure 1: Sympathy for Bersih

Internet and the Perceived Risks of Protesting

An investigation into the internet's effect on the perceived risks for protest makes it imperative to first consider what the perceived risks for going to a Bersih rally actually are. What became apparent in the interviews is that participating in a Bersih rally is considered as risky, but also that when comparing Bersih one in 2007 to Bersih four in 2015, the perceived risks seem to have decreased over time. On this, Jin -a Chinese filmmaker in his late thirties- remarked:

> "The mentality has changed over the years. You see a lot of changes in society, from fearing the authority 100% to 50% now, which is really a big change".[187]

Nevertheless, even during Bersih four, which was described by some participants and organizers as 'a carnival' and that took place without interference from the authorities, there were a few interviewees (#3, #10, #11, and #17) who didn't go because the perceived risks were too high.

The first and most obvious risk is the legal and/or physical risk of getting arrested, or getting beaten up by the police or other state agents (especially the FRU, a riot control force). During the first three Bersih protests, the authorities harshly clamped down on the demonstrators. It is no surprise therefore that various interviewees said they did not attend a Bersih rally out of fear for this. Mei, a 44-year-old Chinese woman who only attended Bersih four, said:

> "I didn't go to the second and third Bersih out of fear. You would read all this stuff about torture, arrests, and police beating up protestors".[188]

The second reason why participating in a Bersih protest can be considered high risk is because there is a strong fear, especially among older generations, that a street demonstration will lead to a race riot. As already briefly touched upon in Chapter four, the 13th May 1969 incident still plays a strong role in Malaysia's collective memory,[189] meaning that some Malaysians are supportive of Bersih's demands but disprove of the street protests they organize. On this issue, Jin remarked:

> "When you talk about protest, even though it is peaceful, there will always be talks about May 13, the riot, people getting killed, just to stop people from coming out. And especially my parents' generation, that was a generation that went through that period, and they don't want to be reminded of that. And that makes them not wanting to participate".[190]

Thirdly, participation in a Bersih rally can be considered as high risk because people are afraid to lose certain privileges granted by the government, or feel the government can hurt them economically in other ways. This connects to Levitsky

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187   As explained in chapter three, these names are pseudonyms. Interview Jin (#5), 17 February 2016, Kuala Lumpur.

188   Interview with Mei (#15), 5 March 2016, Kuala Lumpur.

189   On that day, a Chinese victory march to celebrate their electoral gains was met by the Malay groups with a counter protest, which ultimately led to ethnic clashes resulting in hundreds of deaths.

190   Interview with Jin (#5), 17 February 2016, Kuala Lumpur.

and Way's (2010, 58) 'low intensity coercion'.[191] Prior to the Bersih rallies, for instance, civil servants were threatened with salary cuts or a termination of their contract if they participated,[192] and employees of companies that bid for government contracts were told by their own bosses that they should not attend Bersih.[193] One interviewee (I#3) had to sign a contract saying she would not participate in any kind of political demonstration in order to receive a government grant to pursue her academic programme.

The fourth and last reason why participation can be risky is because of various social risks involved. A few interviewees faced social pressure from older generations not to go to the rally, especially from their own parents. There is a strong sense of obedience among older generations, especially among the Chinese—you should keep your head down, work hard, and not cause any trouble. Some young Malay sympathisers moreover faced pressure from older family members who still felt very loyal to UMNO, the largest Malay party in the alliance of government parties (BN), and who see joining a Bersih protest as an act of betrayal. Zikri, a Malay male in his early thirties, said:

> "My grandmother has a lot of respect for UMNO. She has very sentimental ideas about how they freed us and brought social stability. These ideas are quite consistent in a lot of older folks. My grandmother is very involved with small UMNO run activities. She is still very engaged, although not directly for the political stuff. And in her circle, she is someone with respect or status I suppose. So she banned all of us to take part in Bersih. She said 'don't you dare go out'… It would embarrass her".[194]

The survey confirms the idea that, even in the more recent Bersih rallies, participation was considered risky. In the survey, the Bersih sympathisers (n=419) were asked what they were concerned about *before* they decided whether to attend Bersih five or not. Figure two below shows the respondents' most important worries. Around 50% of the group remarked they were worried about something. More than a fifth of them listed state/police violence as their most important worry. 15% listed racial violence or the presence of nationalist red-shirts as their primary concern. Around 5% was

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191 Low-intensity coercive acts do not "involve high-profile targets and thus rarely make headlines or trigger international condemnation", but include among other things "denial of employment, scholarships, or university entrance to opposition activists; denial of public services – such as heat and electricity – to individuals and communities with ties to the opposition; and use of tax, regulatory, or other state agencies to investigate and prosecute opposition politicians, entrepreneurs, and media owners" (Levitsky and Way 2010, 58).

192 "Action will be taken against civil servants involved in Bersih 5 rally, warns Ali," The Malay Mail Online, http://www.themalaymailonline.com/malaysia/article/action-will-be-taken-against-civil-servants-involved-in-bersih-5-rally-warn#YI9QmAz6KqYpQ1cd.97 (25 February 2018).

193 Interview with Akdir (#13), 1 March 2016, Kuala Lumpur.

194 Interview with Zikri (#14), 2 March 2016, Kuala Lumpur.

afraid of problems at work or university if attending Bersih. Only two respondents listed 'social pressure' as their main concern; this category is therefore part of 'other worries' in the pie chart.[195]
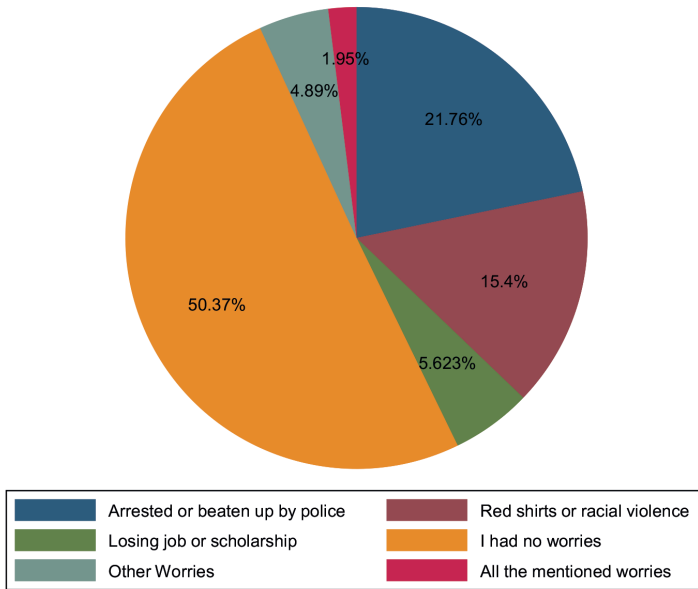
Figure 2: Most important worry before Bersih five

To cut a long story short, informed Bersih sympathisers were concerned about various issues prior to the rally, making participating in Bersih a risky expedition. As we saw in accounts on the Arab Spring, internet use has the potential to decrease the perceived risks of protesting. Can similar dynamics be found in the Bersih rallies?

H1.1.a: Internet use increases the motivation of informed sympathisers to join a protest because it guarantees that there will be safety in numbers.

The first hypothesis proposed that online information increases the motivation of informed sympathisers because it guarantees that there will be safety in numbers. Many of the seventeen interviewees agreed that a large crowd provides a sense of safety. Ama, a 27-year-old journalist, for instance remarked:

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195   Doing additional analyses into the worries that were mentioned secondly or thirdly gives similar results: Respondents are primarily concerned with their physical wellbeing, are most afraid of the state, but also scared of ethnic clashes.

"I wasn't afraid to wear a yellow t-shirt because you are not the only one. If the government wanted to arrest anyone wearing a yellow t-shirt, they have to arrest hundreds of thousands of people. Which is not possible. Our jails are not that big".[196]

Other interviewees gave similar comments (#1, #5, #9, #13, #15). However, although high numbers were apparently important for the perceived costs, I found no evidence that the informed sympathisers' motivation increased because they had an online guarantee that the crowd would be large, as H1.1a suggests. None of my interviewees reported this.

The survey shows similar results. The (informed) sympathisers were asked the following question: "Before you decided whether to attend a BERSIH 5.0 event or not, did you have an idea about how many people would attend the event you considered going to?" 98 out of 419 sympathisers answered 'yes' to this question. However, having an idea of the expected turnout is not a predictor of attendance at Bersih five. Table one below presents a logit regression model. 'Having an idea about the turnout' is not significant. Being male (at CI: 90%) and coming from a rural area (at CI:90%) does increase the chances of attending Bersih five. The strongest and most significant effect (CI: 99%) comes from the variable 'previous protest attendance': Sympathisers that have participated in a Bersih rally before are much more likely to participate in Bersih five. Interestingly, stronger sympathy for Bersih does not predict protest attendance.

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196   Interview with Ama (#12), 1 March 2016, Kuala Lumpur.

Table 1: Idea about the expected turnout and attending Bersih five

	Attending Bersih Five
Idea about the exp. turnout?	0.232
	(0.519
Sympathy for Bersih	0.376
	(0.508)
Internet important pol. news source	-0.250
	(0.614)
Chinese (ref: Malay)	0.873
	(0.652)
Indian (ref: Malay)	0.186
	(0.994)
Gender	-1.004*
	(0.514)
Age	-0.0255
	(0.115)
Urban	-0.920*
	(0.532)
Education	-0.233
	(0.218)
Previous Bersihs	1.391***
	(0.241)
Working for Gov.	1.626
	-1.148
Unemployment	-0.0341
	-2.067
Constant	-1.280
	-1.587
Observations	377

***p<0.01, **p<0.05, *p<0.1.

Additional analyses into how the 28 attendants made their decision to attend Bersih five confirms the non-finding. [197] Three of the 28 reported they got an idea of the expected turnout through the internet, yet none of them said that they found out online that the turnout was 'higher than expected so they joined the protest'.

How do we make sense of the fact that many interviewees do believe in safety of numbers, but that neither the qualitative interviews nor the surveys show that (informed) sympathisers checked online whether the protest was large enough to go out? Without being able to demonstrate it with the survey data, my qualitative interviews suggest that sympathisers were not interested in finding information about the expected turnout because with the later Bersih rallies they were already fairly sure that a Bersih protest would attract tens of thousands of people.

I only spoke to one person (I#1) who was present at the first Bersih rally in 2007. At that time, Bersih was not well-known, mass street protests were uncommon, and it was hard to estimate the protestor turnout. My interviewee agreed that this uncertainty created anxiety for participating. She said:

> "Before Bersih 1, I was afraid of getting arrested. And I knew... In a big protest, the odds of getting arrested are small. In a small protest the odds are higher that you will get arrested. So I didn't know what the odds would be. And when I got there I saw the odds were very small".[198]

However, this uncertainty did not make her search for information online, as the hypothesis above would predict. When asked why not, she mentioned that there wasn't as much happening online as there was during the last Bersihs, and that she didn't bother finding out.

All of my other interviewees attended a later Bersih protest, if they participated at all. Out of the twelve people that participated in a Bersih rally, eight only went to Bersih four. During Bersih four the uncertainty about the turnout was much lower compared to Bersih one. By then, people had seen how many protestors joined the first Bersih rallies, and could on the basis of that infer that the next Bersih would also be big. Bersih had become such as strong 'brand' by then that large numbers were guaranteed. On this, Julius, a Chinese guy in his mid-thirties, remarked:

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197   To the sympathisers who said they had an idea of the turnout, two follow-up questions were asked. 1) How did you get this idea about the turnout (internet, newspapers, talking to people in person, radio & television, or other)? and 2) How did information about the expected turnout affect your own decision to participate in the protest? Here the respondent had the following options: 'the expected was lower than I expected so I went', 'the expected turnout was lower than I expected so I did not go', 'the expected turnout was higher than I expected so I went', 'the expected turnout was higher than expected so I did not go', and 'this information did not affect my decision'.

198   Interview with Jo (#1), 8 February 2016, Kuala Lumpur.

"I didn't bother finding out how many people would be going there, I think uhmm.. maybe because I knew how big the turnouts were in the past Bersih three. I mean it was huge, I knew that uhm yeah. The streets will be flocked. If I get caught I would be one of the unlucky few".[199]

The repeated occurrence of Bersih, with a constant high turnout, thus convinced Bersih sympathisers in later Bersihs that the crowd would also be big this time. Because I interviewed only one person who went to the first Bersih when there was much more uncertainty about the turnout, it is hard to completely refute the theory and hypothesis, especially because many interviewees indicated that a large crowd does provide a sense of safety. The results suggest that in contrast to what the theories of Kuran (1991; 1995) and Lohman (1994) assume, protests under authoritarian rule do not necessarily take place in a context where no one knows anything about the true preferences of others. Sympathisers not only draw conclusions on the basis of new information that is revealed with the ongoing protest, but also take previous protests into account when making a decision.

H1.1b: The effect of internet use on informed sympathisers' motivation to join a protest is conditional upon whether it communicates that the risks of protesting are higher or lower than expected.

Although no proof was found for H1.1a, it could still be the case that the internet's effect on informed sympathisers' motivation is conditional on the message it conveys. In line with Little's (2015) argument, I did indeed find evidence for this idea. As earlier mentioned, Bersih four was, unlike the previous three Bersihs, a 34-hour overnight sit in. The previous three rallies had all seen police repression with teargas, water cannons and arrests of protestors. People were therefore far from certain that Bersih four would be peaceful. Concerned with their safety, some people therefore stayed at home during the first hours of the protest. Through closely following events online, however, people learned that the authorities were responding leniently to the protest and did not intend to clamp down. The online coverage of the protests, and finding out that it was safe, thereby pushed some protest sympathisers into action. Five interviewees reported that they themselves or friends of theirs initially stayed at home, and only went out once they saw online it was safe. Ibrahim, a 38-year-old Malay male who used to work for the government, said:

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199   Interview with Julius (#9), 24 February 2016, Kuala Lumpur.

> "I know for a fact, that for Bersih 4, the most recent one…. because pictures were circulating online of how lenient authorities were and how peaceful it was that I know friends that made the decision that afternoon, to say I wanna go down this evening. Because it is safe".[200]

A Chinese female respondent remarked:

> "I only went the second day but if something would have happened on the first day, I think it surely would have affected my decision to go".[201]

Interestingly, the survey results from Bersih five showed that it could also work the other way around: People found out online that it was not safe, and thus refrained from going onto the streets. Due to the series of incidents and threatening language of the Red Shirts, 70 out of the 419 sympathisers worried about their presence at a Bersih five event.[202] Out of these 70 worrying sympathisers, 57 reported they had had an idea about whether the Red-shirts would be present at the event they considered going to. More than half of them, 31 people (54%), said the internet was their most important source to get this information. Did this online information also affect their motivation? The following question was asked to these sympathisers: "How did information about the presence or absence of the red shirts movement affect your own decision to attend the BERSIH 5.0 event?" Twelve of the thirty-one people that said the internet was their source to find out about the presence of the red-shirts said "information about their presence worried me, and was a reason for me not to go". In other words, out of the 70 people that worried about the presence of red-shirts, around 17% could make a more informed decision on the basis of online information and acted accordingly.

In short, there is some considerable evidence for H1.1b. The internet matters, and it can have an impact on the perceived costs and thereby on the informed sympathiser's motivation, but the direction of the effect (negative or positive) is dependent on the message it communicates.

H1.2: Internet use increases informed sympathisers' motivation to join a protest because it decreases the perceived risk of falling prey to government repression.

A few interviewees indicated that widespread use of smartphones and the omnipresence of the internet in urban Malaysia indeed puts restraints on the government in terms of how much repression they can use. For instance, some

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200   Interview with Ibrahim (#7) 20 February 2016, Kuala Lumpur

201   Interview with Mei (#15), 5 March 2016, Kuala Lumpur.

202   Respondents could mention multiple worries, and were then asked to rank them in order of importance.

interviewees suggested a fear for bad international press was one of the reasons why the authorities decided not to clamp down on the protestors during Bersih 4. On this, the 33-year-old Chinese-Indian Jo said:

> "They knew the world was watching and they couldn't do the crap they did during Reformasi. Everyone is with their phones now right…? Again, you know because of technology and Internet they can't just do what they like….if you kick someone who gets arrested…. It is going to be widespread. So I think knowing that makes them more conscious of how they do things".[203]

On that same line, Wang remarked:

> During the first Bersih, there were people on the ground who were sharing it. Even some of my friends did it, and this content was shared among Malaysians who lived overseas. So I remember talking about it with a couple of friends that were studying and working in London. 'Did you see this rally?'…It showed some real Malaysians out there as well. So combined with the….. international network coverage, it gave us a sense of…that people were watching".[204]

However, none of the interviewees said that because of this logic they themselves saw protesting as safer. They described themselves more as observers of Malaysian politics, rather than as people who doubted whether it was safe enough to go out. The logic seems to be too indirect to have a direct impact on the perceived costs of sympathisers. Yet it also needs to be stressed that most of the interviewees had quite a lot of knowledge and/or experience with anti-government protests in Malaysia and hence were probably a little less scared than informed sympathisers who were less familiar with them. For those people, the idea that 'the world is watching' might have a stronger impact on their motivation. Another explanation for the lack of evidence might lie in the social desirability of saying that you were not scared. Due to the lack of evidence in the interviews and a limit in the number of questions that could be asked in the questionnaires, this theoretical hunch was not further examined in the survey.

Conducive Social Media Networks

H2: A conducive online social network increases the informed sympathisers' motivation to join a protest.

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203   Interview with Jo (#1), 8 February 2016, Kuala Lumpur.

204   Interview with Wang (#2), 10 February 2016, Kuala Lumpur.

Perhaps the strongest finding in the seventeen interviews was that people do not decide to protest in isolation, but that it is a social process. Except for Akdir (#13), who went alone, all interviewees that went to a Bersih protest did so together with friends, colleagues or family. The three quotes below are only an illustration of something that came forward in nearly every interview, which is that joining a protest is not an individual decision:

> "And you felt like a sense of solidarity, going in with a group of friends and colleagues. People in the office were like, 'are you going?, are you going?' Even my boss was going. People were like 'lets go together'. It didn't feel like peer pressure, more like a badge of honour. Like you went...O wow. How was it? People thought it was really brave if you would go".[205]

> "I really felt peer pressure, especially because all my friends were going. Then they would say, as a historian, you should go and witness this historical moment in Malaysia. That kind of peer pressure was over me".[206]

> "What your immediate peers do is important. If you have your friends talking at the water cooler that they are gonna go, you will go too. Especially, because a lot of events that Malaysians do, are organized in numbers. There are few things that Malaysians do solitarily. The people that do are a bit more outliers. We act upon peer pressure....I think it is also an Asian thing. I don't know".[207]

Obviously, the importance of the social embeddedness manifests itself both online and offline. People physically meet and talk face to face, yet a lot of communication takes place through technologies that require internet access. As mentioned earlier, especially WhatsApp and Facebook are extremely popular in Malaysia. Most of the interviewees stated that within their networks a lot of communication about Bersih took place through online media. Miau, for instance – a Chinese woman in her late thirties- stated:

> "Through the internet, and especially Facebook, we happen to mobilize a lot of friends to go together. We would encourage each other to go. And sometimes it is not even encouraging. Those who are very aggressive would say, those that do not go are the running dogs of the government".[208]

205   Interview with Wang (#2), 10 February 2016, Kuala Lumpur.

206   Interview with Miau (#4), 12 February 2016, Kuala Lumpur.

207   Interview with Cathlyn (#6), 20 February 2016, Kuala Lumpur.

208   Interview with Miau (#4), 12 February 2016, Kuala Lumpur.

On this same issue, Jin said:

> "On the internet we send each other messages, on WhatsApp as, we share on Facebook information. (later).....It is about a personal touch. Get friends around.... and talk to them. That is what some of us did".[209]

Talking about the protestors attending Bersih four (2015), where the atmosphere in the absence of state repression was described as 'carnivalesque', Bersih's communication officer Ismail said:

> "They go to demonstrations to take selfies and that is all, that is all they do. They go and take pictures. That is the biggest influence of social media, people just want to be seen and they want to put it on Twitter and Facebook. They don't care for the demands, they don't care for the message".[210]

The proposition in the hypothesis is not that the online social embeddedness matters -it surely does- but that it adds to already existing offline networks. The hypothesis is that an online conducive social network– primarily through increased peer pressure- reinforces existing ties and thereby increases the motivation of informed sympathisers.

To further examine this, respondents were asked in the survey "How did you communicate with friends or family about going to a Bersih event?" The respondents could mention multiple communication channels and were asked to rank them in importance.[211] Around 28% of the sympathisers said to have communicated about going to Bersih using the internet. Were these people more likely to attend Bersih five?

To test this I made a dichotomous variable capturing whether sympathisers communicated online with family and friends about going to a Bersih event and regressed this on attending Bersih five.[212] As demonstrated in Table two below, the variable is not significant. Further analysis confirms the non-finding with regard to talking online. Of the twenty-eight people that attended Bersih five, 29% used the internet to communicate about going, and for the people that did not attend Bersih five this was around 27%. So for this variable there is barely a difference between the

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209   Interview with Jin (#5), 17 February 2016, Kuala Lumpur..

210   Interview with Izmil Amri Ismail., 24 February 2016, Kuala Lumpur

211   The respondents had the following options: (1) I did not talk to them about going to a Bersih event, (2) Talked to them in person, (3) Online (including WhatsApp, email, Facebook, etc.), (4) Phone calls, SMS, (5) Other, (6) Refuse.

212   Irrespective of how important it was. So all respondents that mentioned internet have a '1' here if they talked online with friends and family about going to Bersih.

sympathisers that went to Bersih five and the people that did not. In other words, there is no evidence that communicating online about the protest increased the motivation of informed sympathisers.

Table 2: Talking with friends and family and attending Bersih five

	Attending Bersih five
Talking with f & f online about going to Bersih	0.404
	(0.548)
Sympathy for Bersih	0.339
	(0.508)
Internet important pol. news source	-0.294
	(0.644)
Chinese (ref: Malay)	1.008
	(0.649)
Indian (ref: Malay)	0.203
	(0.993)
Gender	-1.078**
	(0.541)
Age	-0.0217
	(0.112)
Urban	-0.940*
	(0.538)
Education	-0.255
	(0.220)
Work for gov.	1.610
	-1.175
Previous Bersih	1.422***
	(0.223)
Unemployment	-0.138
	-2.017
Constant	-1.223
	-1.594
Observations	375

***p<0.01, **p<0.05, *p<0.1.

Perhaps a better test of the hypothesis, however, is to directly ask the informed sympathisers whether seeing online support for Bersih pushed them into action. The interviews made very clear that prior to and during the rallies, there was a tendency among Bersih sympathisers to intensively post photos of themselves at the site of the demonstration, to change the colour of their profile picture to yellow, and to announce support for Bersih online. In many social circles, there seemed to be an element of coolness in going to the rally and openly supporting Bersih. One wanted to be seen there, and a picture of yourself at the Bersih rally was something to take pride in, as was also mentioned earlier by Bersih's communication officer, in Chapter five. The interviewees said about this:

> "And a lot were going just to brag about it. This selfie culture around Bersih, made me wonder whether the intentions of many were really authentic".[213]

> "Because I think, social media also… It serves a peer pressure, sort of way, so people who are on the fence/defence, I could see how they'd be persuaded, yeah, to go. And to, you know, show that you know, even if you had no doubts of going at the beginning, you would wanna post on social media that you did go for the rally. You were there, you are part of a historic moment".[214]

However, according to the interviewees, more significant than reputational concerns was the fact that seeing intensive Bersih postings in virtual networks created an atmosphere that was very conducive to going to the rally. It built momentum and instigated a sense of excitement. People got the feeling that something special was going to happen that one did not want to miss. There was a 'fear of missing out'. Many interviewees remarked that they were very touched by their yellow social media accounts:

> "Seeing on Facebook that other people and friends went created momentum".[215]

> "And I could see that a lot people on my feed were saying, we are going, I am getting my yellow shirt. And obviously then you feel you gotta go, hey, this is a real movement".[216]

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213   Interview with Cathlyn (#6), 20 February 2016, Kuala Lumpur.

214   Interview with Ama (#12), 1 March 2016, Kuala Lumpur.

215   Interview with Mei (#15), 5 March 2016, Kuala Lumpur.

216   Interview with Ibrahim (#7) 20 February 2016, Kuala Lumpur.

"Before I was heading out to the rally I remember seeing tons of Facebook friends sharing photos of themselves heading there and talking about it on social media. My feed was very yellow. It made me excited to get there and participate too".[217]

To test whether a conducive social network affected informed sympathisers' motivation to join the rally, respondents in the survey were asked the following question: "Before and during the Bersih 5.0 events, did you see friends and/or family show their support for Bersih on social media?" The respondents could answer "Yes, many", "Yes, some" or "No". Around 28% saw some support for Bersih on their social media accounts, and 38% saw a lot of support. When comparing the non-attendants with the attendants it becomes clear that 82% of the people attending Bersih saw social media support. This is higher than among the sympathisers that did not go for Bersih 5, where the number is 65%—a difference of 17%. Table three below shows the results of a logit regression model. The variable of interest 'Saw social media support' is a dichotomous variable where 'yes, many' and 'yes, some' are taken together.[218] In a binary regression model (not presented in the table) the independent variable significantly predicts protest attendance (at CI: 90% level). However, when adding the set of controls, as presented in Table three, the significance disappears. Doing some additional analysis shows that adding 'previous Bersih attendance' makes the influence of seeing social media support disappear. The other variables behave similarly to in Table two.

Thus, whereas the interviews gave strong evidence for the proposed hypothesis, the survey results barely showed any results. Although I cannot rule out that the hypothesis just does not hold and that the findings in the qualitative interviews are not representative for the larger population of sympathisers, another explanation is also plausible.

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217   Interview with Ama (#12), 1 March 2016, Kuala Lumpur.

218   Additional test without a conversion of the variable into a dummy does not change the presented results.

Table 3: Seeing social media support for Bersih and attending Bersih

	Attending Bersih five
Saw social media support	0.716
	(0.564)
Sympathy for Bersih	0.320
	(0.514)
Internet important pol. news source	-0.355
	(0.634)
Chinese (ref: Malay)	0.860
	(0.684)
Indian (ref: Malay)	0.257
	(0.996)
Gender	-1.087**
	(0.542)
Age	-0.0351
	(0.116)
Urban	-1.052*
	(0.551)
Education	-0.231
	(0.211)
Work for gov.	1.593
	-1.151
Previous Bersih	1.410***
	(0.224)
Unemployment	-0.104
	-2.459
Constant	-1.426
	-1.572
Observations	378

***p<0.01, **p<0.05, *p<0.1.

In the interviews I held with both activists and informed sympathisers, the notion of a 'protest fatigue' among Malaysians came up quite often. After multiple Bersih protests over the last 10 years not everyone is still as excited as before about a new Bersih protest, also because the movement's success in terms of achieved institutional changes has been quite minimal. On this issue, Ama said:

> "Especially by the third Bersih maybe... Yeah it became less of a novelty for me. So it was less, 'oh my gosh, Malaysians are going out to protest', it's become more regular. So I think I saw it becoming a norm and not to say that it didn't warrant the kind of discussion like it did for the first one, but you know, some things that happen for the first time always leave the biggest impression".[219]

This lower level of excitement manifested itself in the Bersih five turnout, and is likely to have been equally felt in sympathisers' social media networks. As Malaysians were less thrilled about another Bersih rally, social media lost its significance for pushing Bersih sympathisers onto the streets.

Next to the protest fatigue, another reason for the reduced excitement for Bersih five might lie in the lack of a specific new trigger. Whereas Bersih four was triggered by the corruption scandal around the PM, this time a similar direct cause was missing. I was personally present as an observer at the Bersih five rally on 19 November in Kuala Lumpur and what struck me was the routine with which people sang their slogans and posed in their yellow Bersih shirts. Rather than raw anger or frustration, I sensed a sort of resignation among the protestors, a feeling that it was their duty to show their dissatisfaction with the government without having true belief that something could be changed. In sum, the interviews showed strong support for conducive online networks positively affecting informed sympathisers' motivation to protest, but possibly due to the decreased excitement at the time of Bersih five, the survey did not support this finding.

Internet Use and Dramatic (Audio-)Visual Content

H3a: Internet use increases informed sympathisers' motivation to join a protest by exposing them to dramatic (audio-)visual information.

H3b: The effect of internet use on protest sympathisers' motivation to join a protest is conditional upon the sort of dramatic (audio-)visual content they are exposed to.

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219   Interview with Ama (#12), 1 March 2016, Kuala Lumpur.

According to the interviewees, prior to the Bersih demonstrations there was plenty of visual content being distributed online that intended to provoke anger. As explained in the previous chapters, images and videos of state forces harshly clamping down on Bersih protestors were broadly shared, especially after the Bersih two and three rallies. This content also served as material to increase informed sympathisers' motivation for new rallies. As Jin remarked:

> "Making people who didn't decide to come out, that day.... and watch what happened that day on Internet, they got emotional too, they got super angry. These people got converted, and came out for Bersih 3".[220]

Two respondents said that seeing the online imagery of the extraordinary opulence and lifestyle of Prime Minister Najib Razak and his wife Rosmah had a direct impact on their decision to go to Bersih four:

> "I felt disgusted seeing the images of the wedding of the daughter of Najib.... Disgusted in the sense of the 1 percent.... One side of society..... small..... have access to all that money. Flaunting it. And then, at the same time.....you have on the other end of the spectrum... or not even at the end....but in the middle, people are.....struggling to make ends meet. So obviously it triggers a lot of anger....".[221]

> "If there were any images that went viral... It were the images of Najib's and Rosmah's wealth. Buying all these private jets...The ridiculously expensive wedding.... All her bags...So to me... Those kind of imagery had an impact on me going...".[222]

However, although many interviewees remember seeing dramatic online content before, during, or after a Bersih rally, most respondents said they were not so strongly affected by any particular piece of information. The explanation for the non-relevance of (audio-)visual content in the Bersih rallies might be due to various factors. The literature this hypothesis builds on assumes that a very unusual, unexpected event provides dramatic information that subsequently affects informed sympathisers' motivation. Yet, due to the relative freedom of online media in Malaysia, people are exposed to government wrongdoings and other scandals on quite a regular basis. A government failure going viral is therefore far from unique. As Cathlyn remarked:

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220   Interview with Jin (#5), 17 February 2016, Kuala Lumpur.

221   Interview with Zikri (#14), 2 March 2016, Kuala Lumpur.

222   Interview with Akdir (#13), 1 March 2016, Kuala Lumpur.

> "I wasn't convinced by any content distributed online. It is personal I guess. At a certain level, you have been exposed to the system long enough to make your decisions".[223]

In other words, rather than impacting informed sympathisers' motivation instantly, dramatic images and images change Malaysians' political ideas more gradually, as Chapter four described.

Yet, as earlier mentioned, (audio-)visual content did affect the motivation of informed sympathisers in Malaysia too, despite the almost permanent exposure to government scandals and wrongdoings online. Both in the 'Walk of Justice' as well as in the HINDRAF protests, dramatic YouTube videos were the immediate triggers to come into action. What makes these rallies different from most Bersih rallies, however, is that these were caused by an instant exposure of injustice that all of a sudden galvanized Malaysians to come into action. By contrast, the Bersih rallies were mostly planned weeks or months in advance, always trying to raise awareness on the -more or less- same institutional fallacies in the Malaysian political system. Only the Bersih four rally was a direct response to an uncovered injustice -the alleged corruption of Razak- and it is also for Bersih four that some interviewees mentioned how dramatic images had impacted on their motivation. Thus, it seems likely that the mechanism has most explanatory value in the more spontaneous protests where people directly respond to an instant exposure of injustice. The Bersih rallies were mostly too pre-planned and organized for the mechanism to be relevant.

A final explanation for the non-finding might lie in the difficulty of tracing the role of emotions in interviews, as people tend to emphasize substantial reasons for going to a protest and to downplay emotions as an important factor. Social desirability makes people want to present themselves as smart, analytic, and rational, rather than as someone who makes political decisions on the basis of emotions.

As the mechanism did not come out of the interviews as being important and because I noticed that prior to and during Bersih five there was also very little dramatic (audio-)visual content that had the potential to affect the motivation of informed sympathisers, I decided not to further empirically explore the mechanism in the survey.

Thus, the interviews indicated that anger-provoking visual online material did affect the motivation of some informed sympathisers, but more on a gradual and slow basis, rather than instantly with one picture or video. Only in the case of Bersih four was there an instant exposure of injustice that triggered a protest, which was not coincidently also the Bersih rally where most evidence was found for the suggested mechanism. In other words, the dramatic audio-visual content mechanism seems to

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223   Interview with Cathlyn (#6), 20 February 2016, Kuala Lumpur.

have most explanatory value in more spontaneous protests, where people instantly respond to an (dramatic) uncovered injustice.

Conclusion

The chapter has delved deeper into whether and how internet use affects informed sympathisers' motivation to join an anti-government rally. Through 17 in-depth interviews with Malaysian protest sympathisers and a self-commissioned nationwide survey, the chapter examined various mechanisms that were important in explaining why repressed Arab populations quite suddenly overcame their fear to join the Arab Spring protests. The chapter found little evidence that the internet's challenge to information scarcity was also important in affecting Malaysians' motivation to protest, thereby stressing once again the need for studies into the role of the internet that look beyond the Arab Spring.

Only conducive social media networks came out of the interviews as an important factor in increasing motivation to join a rally: Social media use made informed sympathisers more visible for their friends and family and hence more susceptible to peer pressure to take to the streets. The survey did not support this idea, however, possibly due to decreased excitement and enthusiasm surrounding Bersih five when the survey was held.

No evidence was found that informed sympathisers used the internet to check whether there were enough people on the streets. The chapter suggested that, in the case of the later Bersih rallies, this might be explained by the fact that informed sympathisers already had quite a good idea of the expected turnout based on earlier Bersih rallies. In addition, rather than presenting evidence that supported the facilitative role of internet use, the chapter revealed that the effect of internet use on informed sympathisers' motivation depends on the message online information conveys: If people learn online that it is safer than expected, they are likely to go out, but if the perceived risks are higher than expected their motivation to protest is likely to decrease.

The mechanism proposing that internet use emboldens sympathisers because they know 'the world is watching them' turned out to be too indirect to have much explanatory value. Although many interviewees agreed that the government's hands were indeed more tied thanks to smartphones and social media use, this did not seem to affect their own motivation to join a rally.

Lastly, also for the idea that dramatic (audio-)visual information affects informed sympathisers' motivation, little evidence was found. Rather than instantly affecting Malaysians' motivation, the chapter argued that the almost permanent exposure to alternative political information has gradually changed Malaysians' political ideas,

as Chapter four described. Another explanation for the minimal relevance of the mechanism in the Bersih rallies might lie in the organized, pre-planned nature of these protests, since the mechanism has probably most explanatory value in spontaneous rallies where an instant exposure of injustice is shown to people in an (audio-)visually attractive way. Here one sees again that movement characteristics, in Bersih's case its formal and organized nature, affect the manner in which internet use matters in the mobilisation process.

Chapter 7
Scaling up the Malaysian Findings

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By breaking up the mobilisation chain into three analytically distinct steps, the three previous chapters provided a deep, nuanced and contextualised understanding of how the internet's challenge to information scarcity mattered in Malaysian anti-government protests. It revealed that, rather than in the motivation of informed protest sympathisers (step three, Chapter six), the use of the internet played an important role in both making Malaysians more sympathetic towards anti-government protest movements (step one, Chapter four), and informing protest sympathisers the moment a protest was decided on (step two, Chapter five). What became further apparent is that, throughout all three steps, the use of social media, more than internet use as such, was important in facilitating anti-government protest, and also that, especially in steps one and two, Malaysia's particular configurations of on- and offline state repression were important in explaining the internet's facilitative role. A common thread in particular was the authorities' inability to intervene effectively in the internet-enabled mobilisation process.

Chapter seven further explores the external validity of the Malaysian findings. Compared with the chain's last two steps, the scale-up of the findings from step one (Chapter four) will receive most attention. For this step, survey data will be used to empirically test the Malaysian findings in other authoritarian regimes, whereas for the other two steps the external validity will be explored on the basis of theoretical reflections and secondary literature. The motivation for focusing on the internet's role in the chain's first step is fourfold:

First, as well as facilitating the informing of sympathisers (step two), internet use was found to be crucial in facilitating anti-government protest by increasing anti-regime sentiment among Malaysians (step one). Second, as explained earlier, the internet's role in step one is often overlooked. Third, when comparing the internet's role in steps one and two in terms of its impact on the sustainability of the Malaysian regime, internet use is most threatening to the BN government in its effect on Malaysians' political ideas, rather than in informing Malaysians about an upcoming rally. This is also because of Malaysia's competitive authoritarian nature, where the political opposition – despite a playing field that is heavily skewed in favour of the BN government – contests seriously for power in the elections (Levitsky and Way 2010, 5). Winning the 'hearts and minds' of Malaysians is therefore crucial for the regime

to survive. Fourth, as this chapter will reveal, there is good empirical data available that enables the Malaysian findings in step one to be tested in other authoritarian settings. This chapter follows the order of the previous chapters, starting with an exploration of the applicability of the Malaysian findings from step one to other authoritarian settings, followed by steps two and three. Prior to investigating the wider applicability of the Malaysian findings for each step, a short recap will be given on what has been found in the respective chapter on Malaysia.

Scaling Up the Malaysian Findings on Becoming a Protest Sympathiser

To quickly recap Chapter four's main findings: because of the Malaysian asymmetry in information controls, i.e. a relatively free internet compared with traditional media, many Malaysians accessing the internet were exposed to flows of alternative political information that increased their anti-regime sentiment and sympathy for anti-government protest movements. The chapter found that, initially, the Malaysian government did not want to control cyberspace for economic reasons, but that in more recent years the government tried, but was unable, to make information controls more symmetric. Interestingly, the chapter even showed that the internet's effect has been strongest in more recent times, when the Malaysian government did most to control cyberspace, which it explained by pointing towards the long endurance of the asymmetry in information controls as well as the presence of social media.

Due to restricted data availability, this chapter studies only the external validity of the internet's effects on anti-regime sentiment and not the closely related sympathy for anti-government protest movements.[224] For 25 authoritarian regimes, I investigate 1) whether internet use has increased anti-regime sentiment in recent years (2010–2015), thereby exploring (indirectly) whether the internet's effect has decreased due to a surge in online repression or, alternatively, that its effect has increased because of social media's rise, 2) I moreover test directly whether the internet's effect on anti-regime sentiment is moderated by the level of online repression in society, and 3) I test whether the asymmetry in the level of information controls explains different effects of internet use in different authoritarian regimes.

I start by providing a short overview of what has already been researched and subsequently introduce and explain the research design with multilevel regression models. The results that follow show that internet use is likely to increase anti-regime sentiment under authoritarian rule and that there is very little evidence that

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224   See Chapter four for a discussion on how the two concepts are related.

authoritarian regimes are able to prevent that. Neither high online repression, nor more symmetric information controls are sufficient to make the internet's effect on anti-regime sentiment negligible. The chapter thus reveals that an asymmetry in information controls, which was key in explaining the effect in the Malaysian case, is not a necessary condition for internet use to increase anti-regime sentiment. Subsequently, I explore why this is so by looking at China, an authoritarian regime with very high online repression and symmetric information controls. This examination provides tentative explanations for why internet use can still foster anti-regime sentiment in the face of high online repression.

Internet Use and Anti-Regime Sentiment under Authoritarian Regimes

A handful of scholars before me (Bailard 2012, 2012b, 2014; Nisbet, Stoycheff and Pearce 2012; Stoycheff and Nisbet 2014) have investigated how internet use affects political attitudes in authoritarian regimes. This research all departs from the notion that internet use challenges the information scarcity under authoritarian regimes, exposing citizens to more alternative political information, resulting in a lower appreciation of the democratic state of the country (Bailard 2012, 2012b, 2014; Stoycheff and Nisbet 2014), and increasing demands for democracy (Nisbet, Stoycheff and Pearce 2012; Stoycheff and Nisbet 2014).[225]

Albeit important, satisfaction with the perceived supply of democracy as well as citizens' demand for democracy are just two concepts out of many that can capture people's anti-regime sentiment. Arguably, internet use could also show that government officials are corrupt, that the policies of the government are not well implemented, or that human rights abuses are widespread. Thus, if the goal is to deepen our understanding of the internet's impact on anti-regime sentiment, it is fruitful to look broader than the perceived supply and demand of democracy.

An assumption of the existing literature (Bailard 2012; Nisbet, Stoycheff and Pearce 2012; Stoycheff and Nisbet 2014) is moreover that, when citizens of different authoritarian countries look through the 'window' of the internet, they see the same thing: citizens from China are expected to read and watch similar things about government corruption as citizens from Togo, and Jordanians are believed to learn comparable stuff about electoral fraud as Singaporeans. The underlying reality that the internet reveals is supposed to be similar. This is unlikely to be the case. Instead, citizens in various authoritarian societies are likely to be exposed to very different realities once they go online. In one country corruption might turn out to be extremely bad, and in another case the government officials might actually not

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225   Stoycheff and Nisbet (2014) find individual internet use only leads to more demands for democracy, rather than a changing perceived supply of democracy in countries with high broadband internet.

be corrupt at all. Hence, rather than assuming a priori that all online citizens in authoritarian countries will be exposed to similar online information, it is important to take contextual differences into account and thereby what looking through the internet's window can teach citizens about their own society.

My study can also make a contribution to the existing literature by broadening the temporal and spatial coverage of the analysis. Bailard's (2012, 2014) analysis covers only Europe and Latin America for the period 2004–2008, while Nisbet, Stoycheff and Pearce (2012) include only Asian and African countries for the period 2006–2008. Stoycheff and Nisbet (2014) are an exception in having a variety of authoritarian countries from different regions in their sample, but their analysis only covers the year 2007.

Rather than conducting an updated analysis with broader coverage for its own sake, there are also substantial reasons to believe the internet's effect could be different in more recent times. As explained in both Chapters two and four, authoritarian states have over the last decade become much more active in trying to control cyberspace, and supposedly also have become much better at it (Morozov 2011). Based on this increased capacity, Deibert (2015, 64) claims that "authoritarian systems of rule are showing not only resilience, but a capacity for *resurgence*" (italics in original). Alternatively, also explained in Chapters two and four, the growing use of social media might have exactly the opposite effect and actually increase the internet's impact on anti-regime sentiment over time.

The first hypothesis to be tested in this chapter is therefore whether, in more recent times, and for a wide diversity of authoritarian regimes, internet use still increases anti-regime sentiment. The dependent variable in this case should be operationalised in multiple ways, so as to not only capture citizens' satisfaction with or demand for democracy, and country-level controls need to be included to account for variation in the reality that internet use is likely to uncover in varying contexts.

H1: Individual internet use increases anti-regime sentiment in authoritarian regimes

Retesting the internet's effect on anti-regime sentiment in more recent times would already tell us something about whether authoritarian states have indeed grown smarter and more effective. If this is so, one would logically expect the internet's effects on anti-regime sentiment to disappear or at least to be smaller compared with the period 2004–2008 investigated by the previous studies.[226] However, the

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226   Alternatively, it is also possible that the effect remains similar because the effect of online repression is cancelled out by the 'social media effect'.

underlying assumption here is that all authoritarian states can and do control the internet in similar ways. We know this is not true. As explained in the country-level analysis in Chapter three, there is great variation among countries in their levels of online repression, not only when comparing democracies with authoritarian regimes, but also when comparing authoritarian regimes with each other. This variation, combined with the literature emphasising authoritarian states' capacity to learn and improve their control over the internet, makes it imperative to integrate online repression in the analysis. The second hypothesis therefore presumes that the effect of internet use on anti-regime sentiment in authoritarian regimes depends on the extent to which the internet is free. In Malaysia the internet's remarkable effect on anti-regime sentiment was ascribed to the relatively free online environment. If the internet is less free, one would thus logically expect internet use to have a weaker effect.

H2: The effect of individual internet use on anti-regime sentiment in authoritarian regimes depends on the level of online repression

Interestingly, Chapter four showed that in the Malaysian case it was not just the low level of online repression that enabled internet use to have a high impact on anti-regime sentiment. Instead, it was the freedom of the internet *relative* to traditional media. The internet's effect could only be so strong because a lot more political information could be exchanged on the internet compared with television, radio, and newspapers. Thus, rather than just being a condition of the absolute level of internet freedom in society (H2), I hypothesise that the internet's effect depends on the freedom of the internet relative to traditional media. Even more specifically, I expect that, especially in authoritarian states where the internet is freer than traditional media, i.e. where there are asymmetric information controls, internet use will have a stronger effect on anti-regime sentiment.

H3: The effect of internet use on anti-regime sentiment in authoritarian regimes depends on the freedom of the internet relative to the freedom of traditional media

Research Design

Data

Like Chapter three, Freedom House's (FH's) Freedom of the Net data is used to measure online repression, and the necessary individual-level data again comes

from the Barometer data project (Asian, African, Arab) and the World Value Survey (the Post-Soviet region).[227] In terms of selecting my sample, I slightly deviate from Chapter three's selection criterion for authoritarian regimes. As it became clear in Chapter four that controls over traditional media were crucial for internet use to have an effect on anti-regime sentiment, I take this, rather than the overall FH freedom score, as an indicator of information scarcity, i.e. a violation of Schedler's (2013) two democratic conditions: access to alternative information and freedom of speech. While theoretically more precise, in practice this does not makes a lot of difference. When FH's Freedom of the Press data is used to operationalise control over traditional media, out of the 25 countries that have a non-free or partly free press[228], only three were 'free' according to FH.[229] The other 22 were either partly free or non-free and would also fit in the authoritarian category as operationalised in Chapter three. As the level of democracy is furthermore included in this chapter's models as a control, the slightly different selection criterion that is based on new insights from the Malaysia chapters is therefore valuable for theoretical accuracy, but unlikely to change the empirical results much.

As with the other FH data introduced earlier, the Freedom of the Press data (Freedom House 2017c) uses expert surveys to ascribe countries a score between 0 (total freedom) and 100 (no freedom at all) on press freedom.[230] Also here there is obviously no natural cut-off point on a 100-point scale that distinguishes countries with a non-free press from countries without a free press. Hence, for the same reasons as mentioned in Chapter three's research design, a rather broad set of countries is included by incorporating countries with a non-free press, as well as those with a partly free press.

There are 25 authoritarian regimes for which both the required country-level as well as the individual-level data is available. The dataset contains 63,995 respondents covering the period 2010–2015, making the analysis also valuable for its temporal coverage compared with the previous studies. For some countries multiple waves were available, so these countries have observations for more than one year.[231] Table one below displays the countries included, the year in which the survey was held,

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227 All variables had to be recoded to bring them in line with the Barometer data. Moreover, not all tests could be carried out with the WVS data as the same variables were not measured in this data.

228 And that also have the required data on internet controls.

229 These were South Africa (2011, 2015), South Korea (2011) and Indonesia (2011).

230 The score is built from sub-scores on the legal environment of the press, the economic environment, and the political environment. For more information on the Freedom House methodology, see: https://freedomhouse.org/report/freedom-press-2017-methodology

231 Egypt, Thailand, Nigeria, Uganda, Zimbabwe, Kenya, Sudan, Tunisia, Jordan and Morocco.

the status of the internet freedom,[232] and the freedom of the press according to FH. To prevent endogeneity issues, FH data on press and internet freedom is used from one year prior to the year in which the survey was conducted. The FH scores, both for the freedom of the press and the freedom of the internet, range from 0 (complete freedom) to 100 (no freedom at all), which FH subsequently subdivides into three categories: non-free, partly free and free. The table shows that, according to the FH statuses, a number of regimes have a freer internet than press. These countries with 'asymmetric information controls' have a grey background in the table. Noteworthy is Thailand in 2010, which is the only country that had a freer traditional press than internet in the analysis. It is also worth mentioning that, like the analyses in Chapter three, the most repressive authoritarian regimes worldwide, such as Eritrea, North Korea, Turkmenistan, or Uzbekistan under Karimov (Freedom House 2017b), are not included in the analysis due to missing data.

Table 1: Countries included in the analysis

	INTERNET: NOT FREE	INTERNET: PARTLY FREE	INTERNET: FREE
MEDIA: NOT FREE	China (2011) Egypt (2015) Thailand (2014) Vietnam (2010) Sudan (2013 2015) Belarus (2011)	Egypt (2013) Malaysia (2011) Zimbabwe (2012 2014) Azerbaijan (2011) Zambia (2014) Jordan (2010 2013) Libya (2014) Morocco (2013 2015) Kazakhstan (2011) Russia (2011)	
MEDIA: PARTLY FREE	Thailand (2010)	South Korea (2011) Malawi (2014) Indonesia (2011) Uganda (2012 2014) Tunisia (2013 2014) Nigeria (2013 2014)	Philippines (2014) South Africa (2011 2015) Kenya (2012 2014) Georgia (2014)

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232 'Internet freedom' is similar to the online repression measurement as used in Chapter three, where a higher score means less freedom online/higher online repression.

Variables

Dependent variables (individual level)

As mentioned earlier, most studies look only at how the respondent perceives the state of democracy in the country or the extent to which the respondent wants democracy. My analysis also looks at the perceived level of democracy, but uses three more dependent variables to gauge anti-regime sentiment.

Trust in state institutions: This variable is a combined index of various questions where respondents were asked how much trust they have in state institutions (the president or PM, the courts, the national government,[233] the parliament, the civil service, the police, and the local government). For all these ordinal variables respondents had four options, ranging from 'no trust at all', 'not very much trust' and 'quite a lot of trust', to 'a great deal of trust'.[234] A Cronbach alpha of 0.88 demonstrates the internal consistency of the different items and justifies treating the different variables as one concept: trust in state institutions. The newly made index variable is continuous, ranges from -2.05 to 1.55, has a mean of 0, and a standard deviation of 0.74. A high score on this variable indicates high trust in state institutions.

Perceived level of democracy: This dependent variable combines three different questions. The first question asks how satisfied respondents are with the way democracy works in their country (four categories),[235] the second question asks how much of a democracy the respondent's country is (four categories),[236] and the third question asks the respondent to rank his or her country on a scale from 1 to 10 where 1 means completely undemocratic and 10 means completely democratic (ten categories).[237] There is unfortunately no data on the post-Soviet states for these variables. A Cronbach alpha of 0.79 shows the internal consistency of the items and justifies changing the three items into a continuous variable – the perceived level of democracy – that goes from -1.75 to 1.75 with a mean of -0.03 and a standard deviation of 0.90. A high score on this variable indicates a high perceived level of democracy.

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233 For data purposes, the ruling party in Africa is treated as equal to the national government.

234 For the African and Arab data the categories were slightly different, comprising 'not at all', 'just a little', 'somewhat' and 'a lot' for Africa, and 'I absolutely do not trust it', 'I trust it to a limited extent', 'I trust it to a medium extent' and 'I trust it to a great extent' for Arab countries. The WVS data on the post-Soviet countries speaks about confidence instead of trust.

235 Categories comprise 'not at all satisfied', 'not very satisfied', 'fairly satisfied' and 'very satisfied'. The African data has five instead of four categories; here, 'country is not a democracy' and 'not at all satisfied' are collapsed into the category 'not very satisfied'.

236 Categories comprise 'not democratic', 'a democracy with major problems', 'a democracy with minor problems' and 'a full democracy'.

237 For the countries in the Arab Barometer dataset, the scale goes from 0 to 10, instead of from 1 to 10. Here I have added the 0s to the 1s.

Perceived level of corruption: This variable was originally an ordinal variable with four categories measuring whether respondents believe that officials who commit crimes go unpunished in their country ('rarely', 'sometimes', 'most of the time', 'always').[238] To be able to run a logistical regression, the variable is changed into a dummy by combining 'rarely' and 'sometimes' (=0) and 'most of the time' and 'always' (=1). Data on this variable is only available for the Asian and African countries, not for the post-Soviet or Arab/Middle Eastern states.

Perceived fairness of the elections: This variable was also originally ordinal in nature, measuring the extent to which respondents believe the last general elections were free and fair ('not free and fair', 'free and fair, major problems', 'free and fair, minor problems' and 'completely free and fair'). Here too the variable was recoded into a dummy by combining 'not free and fair' and 'free and fair, but with major problems' (=0), and 'free and fair, but with minor problems' and 'completely free and fair' (=1). There is no data available on the post-Soviet states for this variable.

Independent variable (individual level):
Internet use: Ordinal variable measuring the frequency of internet use and ranging from 'never', 'hardly ever/few times a year', 'at least once a month' and 'at least once a week', to 'almost daily'.[239] A high score indicates high internet use.

Interaction variables (individual level*country level):
Internet use*online repression: Here, internet use of the respondent is interacted with the country's online repression (low online freedom) as measured by FH.

Internet use*asymmetric information controls: This variable measures whether a country's internet is freer than traditional media. It is a dummy variable using the FH statuses as data points. The countries in Table one with a grey background score a 1 on this variable; the others a 0. Thailand in 2010 is coded as missing as it is a rather odd case.

Control variables (individual level):
Similar controls as in Chapter three's individual level analysis are included: *age, gender, urbanisation, education, employment, other media use, political interest* and *income*. Other media use and income are not included in the models, but –as in Chapter three – are added as controls in separate models, which are shown in the Appendix.

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238   The categories in the African data are slightly different: 'never', 'rarely', 'often' and 'always'.

239   For Africa the categories comprise 'never', 'less than once a month', 'a few times a month', 'a few times a week' and 'every day'. For the post-Soviet countries the categories comprise 'never', 'less than monthly', 'monthly', 'weekly' and 'daily'.

Control variables (country level):

Again, as in Chapter three, I take into account the political state of affairs that the internet is likely to uncover by controlling for factors that are most likely to determine anti-regime sentiment. Acknowledging that it is impossible to capture every phenomenon that could influence citizens' approval of the government, the model includes the following main ones: the level of *corruption*, *repression*, and *GDP per capita*, the *fairness of the elections*, the *level of democracy*, and the level of *internet penetration rates*. Table D1 in the Appendix shows the descriptive statistics of all variables.

Estimation Technique

The research design looks very similar to the individual-level analyses conducted in Chapter three: a multilevel (hierarchical) regression model is used to test the proposed hypotheses, as it allows an individual-level analysis, while at the same time accounting for important systematic variation at the country level. As two of my dependent variables – the trust in state institutions and the perceived level of democracy – are continuous, a normal multilevel model can be used to test the hypotheses. The results here can be interpreted similarly to a standard OLS with unstandardised coefficients, standard errors, and significance tests of the intercept and the explanatory variable reported. For testing the hypotheses with the other two variables – the perceived level of corruption and the perceived fairness of the elections – I run logistical multilevel regression models. My models contain random effects for internet use, meaning that internet use (at the individual level) is allowed to vary across countries to account for additional variation in the dependent variables. Comparing a model with no random effects for internet use with one that has random effects shows a better model fit for the latter.[240] With the exception of the logistical models where weighting is impossible, respondents are weighted in the models.[241]

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240   Intercept and slope are allowed to vary in the models.

241   African Barometer data uses weights on region, gender, urban–rural distribution, and size of household and enumeration area of the respondent. Arab Barometer: Age and gender. Asian Barometer: Gender, age and education. WVS data: Gender, age and education.

Results

H1: Individual internet use increases anti-regime sentiment in authoritarian regimes

able two below shows whether internet use increases anti-regime sentiment in authoritarian regimes. As becomes clear in all four models, this is indeed the case. Controlling for a variety of factors, both at the individual level and at the country level, internet use decreases trust in state institutions, the perceived level of democracy, and the perceived fairness of the elections, while it increases the perceived level of corruption in the country.

As the first two models have a newly made index as dependent variable, interpreting the coefficient is not very intuitive. Nevertheless, it does provide information if one takes into account what the new dependent variables look like. The variable trust in state institutions is a variable that runs from -2.05 to 1.55 with a mean of 0 and a standard deviation of 0.74. Controlling for all other variables, the model shows that a 1-point increase in internet use only leads to a drop of 0.02 in trust. Hence, the difference between people who never use the internet and people who use the internet almost on a daily basis is rather small, at around 0.08 (there are five categories, so 4 x 0.02).

For the perceived level of democracy, the results look rather similar. Here the difference between people who never use the internet and those who use it on a daily basis is only 0.015 x 4 = 0.06 on a scale of -1.75 to 1.75 (with a mean of -0.03 and a standard deviation of 0.90). Thus, again, one sees that with increasing internet use, the perceived level of democracy decreases, but the effect is quite small.

As the third and fourth models are logistical regression models, the interpretation of those coefficients is different. With regard to the perceived corruption variable, the model shows that with every 1-point increase in internet use the log-odds of thinking officials are corrupt increase by 0.062. Or, in other words, the odds of thinking government officials are corrupt increase by around 6% with a 1-point increase in internet use. Figure one below shows the probability an individual thinks government officials are corrupt at different levels of internet use, while the other variables are held at their mean. As one can see, for someone not using the internet this probability lies at 27%. Among those who use the internet almost daily the probability is 52%, a difference of 25%.

The model on the perceived fairness of the elections shows similar results (See Figure two). With a 1-point increase in internet use, the log-odds of thinking the elections are fair decrease by -0.074. The odds of thinking the last elections were fair decrease by 7% when internet use goes up one point. Here, among the people who never use the internet, the probability that someone thinks the elections were free and fair is 28% higher than someone using the internet daily.

Table 2: Internet use and anti-regime sentiment

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness of Elections
			Logit	*Logit*
Internet use	-0.020***	-0.015**	0.062***	-0.074**
	-0.005	-0.007	-0.017	-0.029
Urbanisation	-0.143***	-0.089***	0.169***	-0.178***
	-0.021	-0.026	-0.023	-0.023
Gender	0.051***	0.052***	-0.075***	0.152***
	-0.013	-0.016	-0.021	-0.021
Age	0.002**	0.000	-0.001	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.042***	-0.034***	0.062***	-0.007
	-0.008	-0.010	-0.012	-0.012
Employment	0.003	0.026**	0.031	0.025
	-0.009	-0.013	-0.022	-0.022
Political interest	0.043***	0.059***	0	0.044***
	-0.011	-0.010	-0.011	-0.011
Elections	-0.02	-0.018	-0.046**	0.038
	-0.034	-0.037	-0.021	-0.029
GDP per capita	0	0.000	0	-0.001***
	0	0	0	0
Level of democracy	0.101	0.246**	-0.283***	-0.811***
	-0.118	-0.103	-0.098	-0.136
Corruption	0.580***	1.005***	-0.489***	2.185***
	-0.217	-0.189	-0.097	-0.101
Repression	-0.122	-0.309**	0.679***	-0.054
	-0.153	-0.157	-0.065	-0.064
Internet pen.	-0.003	-0.005	0.017***	0.027***
	-0.004	-0.004	-0.003	-0.005
Constant	-1.841***	-3.000***	0.216	-0.047
	-0.691	-0.596	-0.574	-1.096
Random Effects Parameters				
Var (Internet Use)	0.010	0.002	0.004	0.014
	0.000	0.000	0.002	0.005
Between-country variance	0.322	0.747	0.737	9.000
	0.115	0.232	0.268	3.700
Covariance	-0.004	-0.008	-0.031	-0.222
	0.004	0.009	0.017	0.105
Between-person variance	0.445	0.661		
	0.024	0.040		
Observations	60,206	56,909	45,206	47,268
Country	24	24	18	19
Av. no. of obs. per country	2508,6	2371.2	2511.4	2487.8

***p<0.01, **p<0.05, *p<0.1.

Although it is impossible to directly compare the OLS models with the logit models in terms of strength of the effects, the effect of internet use on the perceived corruption and fairness of the elections seems to be a lot stronger than in the first two models.
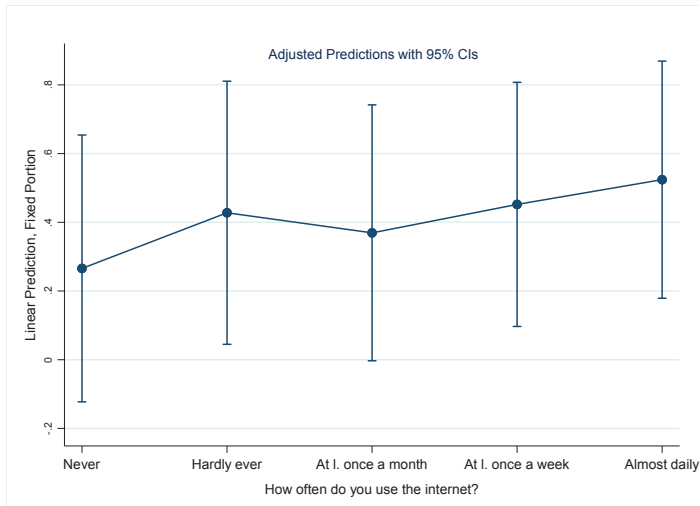

**Figure 1:** Predicted probability of perceived corruption
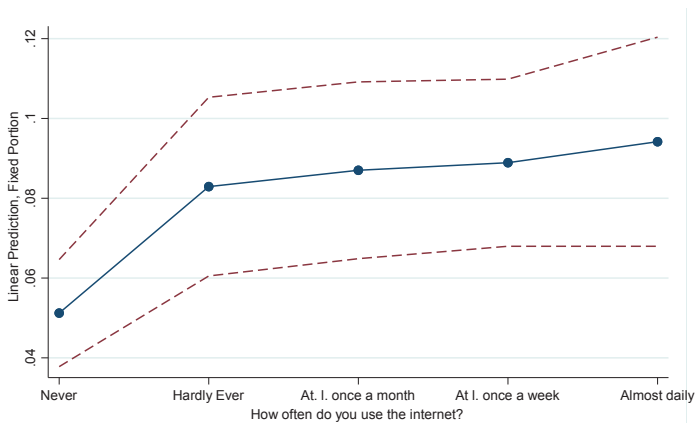
Figure 2: Predicted probability of fairness of elections

When income is included in the models (see Appendix D2), and the sample size shrinks as a result, the effect of internet use remains significant and only increases in terms of strength. However, once the variables measuring other media use are added to the models, and the Asian countries are dropped from the analysis as a consequence, the effect of internet use becomes insignificant in explaining the perceived level of democracy. Additional tests (see Appendices D3–D6) show that the exclusion of the Asian countries, rather than the inclusion of the controls, explains the change in results. When running the same models from Table two, but now interacting internet use with regional dummies, it shows that internet use increases anti-regime sentiment in Asian authoritarian countries in particular. By contrast, compared with the other regions, internet use has a lower effect on anti-regime sentiment in Sub-Saharan Africa and the Middle East

In short, internet use had a positive effect on anti-regime sentiment in authoritarian regimes in the period 2010–2015, but the effect is not equally strong for all dependent variables measuring anti-regime sentiment. Furthermore, the effect is primarily driven by authoritarian countries in Asia.

H2: The effect of individual internet use on anti-regime sentiment in authoritarian regimes depends on the level of online repression

The second hypothesis tests whether the effect of internet use on anti-regime sentiment in authoritarian regimes depends on the level of online repression in society. The models in Table three show that this is indeed the case but, surprisingly, in a different way than expected. Based on the idea that authoritarian regimes grow smarter by the day, one would logically expect that in authoritarian states with the highest online repression, individual internet use has the least effect on anti-regime sentiment. The opposite turns out to be true, however: the higher the online repression, the stronger the negative effect of internet use on the trust in state institutions and on the perceived level of democracy, and the stronger the positive effect of internet use on the perceived level of corruption. There is no significant effect of the interaction term on the perceived fairness of the elections.

Table 3: Internet use, online repression and anti-regime sentiment

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness of Elections
			Logit	*Logit*
Online repression	0.040	0.039	-0.080***	-0.193***
	-0.036	-0.035	-0.021	-0.034
Internet use	0.019	0.043*	-0.052	0.079
	-0.016	-0.023	-0.056	-0.136
Internet use*online repression	-0.001**	-0.001***	0.002**	-0.003
	0.000	0.000	-0.001	-0.003
Urbanisation	-0.143***	-0.089***	0.167***	-0.181***
	-0.021	-0.026	-0.023	-0.023
Gender	0.051***	0.052***	-0.075***	0.154***
	-0.013	-0.016	-0.021	-0.021
Age	0.002**	0.000	-0.001	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.042***	-0.034***	0.062***	-0.008
	-0.008	-0.010	-0.012	-0.012
Employment	0.003	0.025*	0.032	0.028
	-0.009	-0.013	-0.022	-0.022
Political interest	0.043***	0.060***	-0.002	0.042***
	-0.011	-0.010	-0.011	-0.011
Elections	-0.040	-0.038	-0.016	0.215***
	-0.039	-0.043	-0.022	-0.039
GDP per capita	0.000	0.000	0.000**	-0.001***
	0.000	0.000	0.000	0.000
Level of democracy	-0.067	0.096	0.141	-0.401**
	-0.179	-0.150	-0.135	-0.156
Corruption	0.626***	1.044***	-0.608***	2.082***
	-0.223	-0.192	-0.108	-0.102
Repression	-0.019	-0.211	0.494***	-0.566***
	-0.113	-0.137	-0.076	-0.109
Internet pen.	-0.005	-0.007*	0.016***	0.053***
	-0.003	-0.004	-0.003	-0.006
Constant	-3.251**	-4.456***	2.652***	9.707***
	-1.594	-1.539	-0.960	-2.312
Random effects parameters				
Var (Internet use)	0.001	0.002	0.003	0.0119
	0.000	0.000	0.001	0.0048
Between-country variance	0.346	0.751	0.759	38.2774
	0.166	0.162	0.397	14.8067
Covariance	-0.002	-0.003	-0.022	-0.1367
	0.005	0.008	0.019	0.2724
Between-person variance	0.445	0.661		
	0.241	0.040		

Observations	60,206	56,909	45,206	47,268
Country	24	24	18	19
Av. no. of obs. per country	2,508.6	2371.2	2,511.4	2,487.80

***p<0.01, **p<0.05, *p<0.1.

Additional models (see Appendix D7) were run with online repression as a control variable rather than as included in the interaction term. This enabled the direct effect of online repression on anti-regime sentiment to be tested. As one would logically expect, online repression led to lower perceived corruption. However, it does not have a significant effect on either trust in state institutions or on the perceived level of democracy. Counterintuitively, moreover, higher online repression leads to lower perceived fairness of the elections.

Additional analyses (Appendices D8–D11) suggest that Table three's results are primarily driven by the Sub-Saharan African countries. Once these countries are excluded, the effects on the first two dependent variables disappear (see D9). Moreover, once Asian or Middle Eastern countries are excluded, the interaction effect on the perceived fairness of the elections does become significant and negative, leading to the same conclusion: in Sub-Saharan African countries in particular, high online repression leads to unexpected effects of internet use on anti-regime sentiment.[242]

Thus, in contrast to what one would logically expect, higher online repression leads to a stronger effect of internet use on anti-regime sentiment. For three of the four models, this counterintuitive finding is driven primarily by Sub-Saharan African authoritarian regimes. The Asian authoritarian regimes are most responsible for the unexpected result in explaining the perceived level of corruption.

H3: The effect of internet use on anti-regime sentiment in authoritarian regimes depends on the freedom of the internet relative to the freedom of the traditional media

In Malaysia, the asymmetry in information controls was found to be crucial in explaining the internet's effect on anti-regime sentiment. Table four shows the results of the test of hypothesis three, where the impact of the internet on anti-regime sentiment in countries with asymmetric controls is compared with countries

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242   For the perceived level of corruption, the Asian countries, not the Sub-Saharan African countries, seem to be responsible for the counterintuitive result.

having symmetric information controls. Again, the results are different from what one would logically expect on the basis of the Malaysian case. In countries where the information controls are more asymmetric, internet use has a less negative effect on trust in state institutions and on the perceived level of democracy. The interaction effect on the perceived level of corruption and the perceived fairness of the elections is not significant. When only countries with the most stringent information controls are compared with each other (non-free press, non-free internet vs. non-free press, partly free internet), the results remain similar (see Appendix D12).

Table 4: Internet use, asymmetric controls, and anti-regime sentiment

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness of Elections
			Logit	*Logit*
Asymmetric controls	-0.580***	-0.556***	0.892***	0.205
	-0.096	-0.132	-0.115	-0.152
Internet use	-0.033***	-0.036***	0.057***	-0.095***
	-0.006	-0.010	-0.011	-0.033
Asymmetric controls*internet use	0.024***	0.038**	0.014	0.052
	-0.009	-0.016	-0.014	-0.038
Urbanisation	-0.144***	-0.089***	0.162***	-0.172***
	-0.021	-0.026	-0.023	-0.023
Gender	0.048***	0.051***	-0.066***	0.147***
	-0.013	-0.017	-0.021	-0.022
Age	0.002***	0	-0.001	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.041***	-0.033***	0.057***	-0.004
	-0.008	-0.011	-0.012	-0.012
Employment	0	0.025*	0.046**	0.019
	-0.009	-0.013	-0.022	-0.023
Political interest	0.045***	0.061***	-0.007	0.039***
	-0.011	-0.011	-0.011	-0.011
Elections	0.029	0.032	-0.144***	0.291***
	-0.049	-0.076	-0.037	-0.042
GDP per capita	0.000	0.000	0	-0.901***
	0.000	0.000	0.000	-0.127
Level of democracy	0.133	0.267**	-0.415***	-0.000***
	-0.095	-0.110	-0.099	0.000
Corruption	0.306**	0.757***	-0.197*	2.674***
	-0.133	-0.165	-0.106	-0.122
Repression	-0.046	-0.238	0.624***	-0.105
	-0.144	-0.163	-0.064	-0.0680

Table 4: Continued

Internet pen.	-0.006***	-0.007**	0.021***	0.026***
	-0.002	-0.003	-0.0030	-0.004
Constant	-1.199***	-2.482***	0.298	-4.242***
	-0.3540	-0.4900	-0.647	-1.207
Random effects parameters				
Var (Internet use)	0.001	0.002		0.013
	0.000	0.001		0.005
Between-country variance	0.181	0.436	0.661	12.762
	0.064	0.131	0.236	4.409
Covariance	-0.005	-0.007		-0.204
	0.004	0.007		0.117
Between-person variance	0.446	0.667		
	0.024	0.038		
Observations	58,767	55,474	43,935	46,068
Country	24	24	18	19
Av. no. of obs. per country	2,448.6	2,311.4	2,440.8	2,424.6

***$p<0.01$, **$p<0.05$, *$p<0.1$.

Models were also run with asymmetric controls as an independent control variable to test the direct effect of asymmetric information controls instead of only as part of the interaction term (Appendix D12). More than with the direct effects of online repression, an asymmetry in information controls leads – as one would logically expect – to lower trust in state institutions, a lower perceived level of democracy in the country, and a higher perceived level of corruption. By contrast, an asymmetry in information controls leads unexpectedly to a higher perceived fairness of the elections.

In the Appendix a series of robustness checks with various control variables can be found. The findings in Table four turn out to be relatively robust. When other types of media use and income are included as controls, the two interaction terms remain significant. Unlike with the testing of hypotheses one and two, there is less of a clear pattern in terms of regional variation (see Appendices D13–D16).[243] In line with Chapter three's country-level analysis, which showed that authoritarian regimes with milder overall repression were most susceptible to internet-enabled

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243 Whereas the unexpected interaction effects for explaining trust in state institutions and the perceived level of democracy turn out to be primarily driven by countries other than the Asian ones (Sub-Saharan Africa, Middle-East and post-Soviet), additional analyses show that in the Asian authoritarian countries asymmetric information controls with high internet use lead to less perceived corruption and a higher perceived fairness of the elections.

protest, I also interacted internet use with the overall FH freedom score (Appendix D17). This analysis revealed that internet use had a stronger effect in the mildly repressive authoritarian regimes only for the perceived fairness of the elections. For the other three indicators measuring anti-regime sentiment, there was no difference in the internet's effect across varying levels of overall repression.

To conclude, there is – in contrast to the Malaysian findings – relatively robust evidence that the *more* asymmetric the information controls, the weaker the positive effect of internet use on anti-regime sentiment, especially when anti-regime sentiment is operationalised as trust in state institutions or as the perceived level of democracy.

Conclusion

In line with Chapter four, the analyses in this chapter provided further support for the claim that internet use challenges the information scarcity in authoritarian regimes, thereby increasing citizens' anti-regime sentiment. The results thereby underline the importance of the role of the internet in the first step of the mobilisation chain. Furthermore, whereas Chapter four found that in Malaysia low online repression and, in particular, the asymmetry in information controls were important factors in enabling the internet to boost anti-regime sentiment, this chapter showed these are not *necessary* conditions. Moreover, in authoritarian states with high online repression or where the information controls are more symmetric, internet use increases citizens' disapproval of the regime. The findings could be interpreted in two different ways.

Authoritarian States Cannot Control Cyberspace Strictly
The first interpretation is that authoritarian states *cannot* control cyberspace as strictly as they would like to, meaning that, even in regimes such as Vietnam, China, Thailand, Sudan or Belarus, where the internet is supposedly as unfree as the traditional media, the internet still enables the circulation of more alternative information than the traditional media.[244] In particular due to the rise of social media's many-to-many communication, as well as the aforementioned socio-technical obstacles that come with blocking social media platforms, the internet may in recent years have only become more uncontrollable for authoritarian regimes. This is in line with Bailard (2014, 65), who notes that "it is not the Internet as it currently exists compared to a world of perfect and complete information online. Rather, it is the Internet as it exists, limitations and all, compared to the information landscape that existed before the Internet". Thus, despite limitations on internet freedom due

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244   See also for instance Lei's (2011) study on China.

to state interferences, the internet provides citizens with more alternative political information than was previously available.

A closer look at China might illustrate the point. China is known as having one of the most advanced internet control systems worldwide (Freedom of the Net 2017). According to Diamond (2010, 73) "China's policing of the Internet is extraordinary in both scope and sophistication", while King, Roberts and Pan (2013, 1) state that "the Chinese government's program to selectively censor the expressed views of the Chinese people is unprecedented in recorded world history". Yet, because a complete control over cyberspace might be an illusion – even for China – access to the internet can, according to some observers, still decrease Chinese internet users' approval of their government.

Explanations vary on why the Chinese authorities supposedly still fail to prevent the internet from having such an effect on its population. Tang and Huhe (2013), for instance, show how Chinese "web users often interpret sanctioned news information in directions different from or even opposite to the intention of the authoritarian state" (idem, 1). In their analysis, they demonstrate that the "the focus of state control is on limiting the chance of citizens to have access to the news *facts*, especially those deemed harmful for the regime stability" (idem, 6, italics in original), but that the damage is done to political attitudes by the *interpretation* of those facts. Another proposed explanation is the resilience Chinese internet users show in the way they cope with online repression. Yang (2014) describes how Chinese internet users create code words and images to replace censored, sensitive words in political discussions, while Mu, Wu and Atkin (2016) estimate that around 18 million Chinese internet users use web proxies and VPN connections to bypass China's internet censorship system. Lastly, Bamman, O'Connor and Smith (2012) suggest that, despite China's extreme investment in controlling cyberspace, its censorship efforts are still not effective in deleting all sensitive online political content. This is in line with Qiang (2011, 55), who also argues that "despite government censorship efforts, the sheer speed and number of messages and Internet posts are making it even harder, and in some cases impossible, for censors to stay ahead".

Authoritarian States Do Not Want To Control Cyberspace Strictly
The second explanation is that authoritarian states can, but *do not want to*, control cyberspace as strictly as the traditional media. This is in line with MacKinnon's notion of China as a "networked authoritarian state" (2011, 2012). According to MacKinnon (2012, 34), China's 500 million internet users feel freer and less fearful of their government than in the past. However, while a wide range of discussions on the country's problems can occur online and Chinese netizens can even sometimes successfully call attention to social injustices or bring about the resignation of

corrupt officials, at the end of the day the Communist Party still sits comfortably in power. Referring to the Chinese internet, MacKinnon (2012, 42) remarks that "public debate and even some forms of activism are expanding on it, while at the same time, state controls and manipulation tactics have managed to prevent the democracy movement from gaining meaningful traction". Key to the Chinese system's success – according to MacKinnon – is that, while "the regime does not try to control everybody all the time, its controls on political information are nonetheless effective *enough*" (idem, 32).

Multiple explanations could also be given for the idea that regimes intentionally allow some alternative information to circulate in cyberspace – including some criticism of the government (King, Pan and Roberts 2013). On the one hand, it could be seen as collateral damage deliberately undergone by the regime, because a stricter control of cyberspace, while perhaps technically possible, would be politically risky as it would infuriate the majority of citizens who use the internet for apolitical purposes (Zuckerman 2008). Alternatively, a networked authoritarian regime state might also benefit from the open online chatter on social and political issues by "alerting officials to potential unrest and better enabling authorities to address issues and problems before they get out of control" (MacKinnon 2012, 34). By allowing some room for discussion in cyberspace, the regime could, for instance, gain valuable insight into mass preferences that were previously hidden, or keep an eye on the functioning of local bureaucracies that could potentially undermine the legitimacy of the regime as a whole (Qiang 2011; Gunitsky 2015).

While far from complete, looking a little deeper into China – an authoritarian system with one of the strictest internet control systems – already provides tentative explanations for why internet use might still affect political attitudes and deepen anti-regime sentiment. The two explanations touched upon do not necessarily need to be mutually exclusive, but might also work simultaneously, with the same end result: Chinese netizens are exposed to more alternative political information than their fellow citizens who do not access the internet. Further research is encouraged to look further into these two explanations, either on a more general or a country-specific level.

Authoritarian Regimes that the Findings Are Unlikely to Apply to

It is important to point out again that the least free authoritarian regimes,[245] such as Eritrea, North Korea, Turkmenistan or Uzbekistan, were not included in the empirical analysis due to missing data. It is quite plausible that those types of authoritarian

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245   Scoring a '7' in the FH scores, the most negative freedom score a country could get. Other countries that scored a 7 in the year 2013 were Equatorial Guinea, the Central African Republic, Somalia, Sudan, Syria and Saudi Arabia.

regimes face different dynamics. For instance, in Uzbekistan under Karimov (who died in 2016), rather than it being a relatively safe haven for alternative information to circulate, fears of the "all-pervasive, ghostly presence" (Benjamin 1978, 287) of the state were evenly felt in cyberspace. On online platforms, therefore, there was a permanent suspicion that others were not who they said they were, but were in fact security agents (Kendzior 2015, 53), making it close to impossible to verify the validity of alternative information. Perhaps even more detrimental was people's constant fear of what the authorities would do with the digital trail they left behind. There are known incidents where people found a security officer at their door within minutes of merely visiting an oppositional website (Kendzior 2012, 12). Likewise, in Turkmenistan internet users still "mostly refrain from accessing unblocked sites carrying critical content for fear that their Internet access might be cut off or that they might be persecuted" (Annasoltan 2010, 9).

In such a context, where internet users are either too afraid to access alternative political information in cyberspace, or do not have a clue who or what to believe in the online realm, internet use is less likely to cause a lot of anti-regime sentiment. Yet these conditions apply to few internet users living under authoritarian rule. First, because very few modern authoritarian regimes are as unfree and repressive as Uzbekistan or Turkmenistan, and, second, because the few countries that are – for example, Eritrea and North Korea – have very few internet users.

The Counterintuitive Effects of Online Repression and the Asymmetry in Information Controls

Finally, the tests for a possible decreasing effect of online repression did not merely show that the internet's effect persisted in the face of the state's interventions, but further revealed that, counterintuitively, high online repression and symmetric information controls sometimes *increase* the effect of internet use on anti-regime sentiment. In other words, authoritarian states with the highest online repression suffered most from its population using the internet. Multiple explanations are possible for this puzzling finding. First, online citizens in countries with high online repression or more symmetric information controls might have more reason to dislike their government for other reasons than those captured in the country controls, such as, for example, high economic inequality.

Second, the positive effect of internet use on anti-regime sentiment might have already been there prior to the implementation of the high online repression. Possibly, authoritarian governments were responding to a strong effect of internet use on anti-regime sentiment, yet so far unsuccessfully.

Third, it could also be the case that in regimes with online repression the impact of alternative information reaching citizens is higher because these people do not

'suffer' from the information overload that citizens in societies with low-online repression suffer from. The greater the information scarcity, the stronger the effect might be of information that does make it through the state's control systems. To put it simply, one critical news item a week might do more to you than dozens daily. However, this speaks against logic of the endurance of the asymmetry in information controls – as proposed in Chapter four – which suggested that the long period of asymmetry in Malaysia has been responsible for the internet's effects on anti-regime sentiment growing stronger over time.

Fourth and last, the fact that the counterintuitive findings applied especially to Sub-Saharan African regimes might be due to an overestimation of African states' capacity to control cyberspace. Perhaps their online repression is not as sophisticated and effective as the control of authoritarian states in other regions. Future research is encouraged to further explore these explanations empirically.

To conclude, internet use did boost anti-regime sentiment in many other authoritarian regimes, like it did in Malaysia, but the asymmetry in information controls was not shown to explain this effect, meaning that an internet freer than traditional media is not a necessary condition for the internet to have an effect in the first step of the mobilisation chain. Why internet use in authoritarian regimes with high online repression and symmetric information controls can still enhance anti-regime sentiment, and whether this is a matter of a lack of state capacity or a deliberate state strategy, is something future research should look into.

Scaling Up the Malaysian Findings on Informing Protest Sympathisers

Chapter five dealt with whether and how internet use has changed the extent to which protest sympathisers are informed about an upcoming anti-government protest. It argued that, in Malaysia, it was the use of social media, rather than internet use as such, that facilitated the informing of protest sympathisers. Through social media, information about the Bersih protests travelled easily throughout society, reaching the less politically engaged sympathisers. The chapter identified four factors that explained why Malaysia's state repression was unable to impede social media's facilitative role. These were – paradoxically – the harsh government repression in the streets, the government's own blunders in cyberspace, the socio-technical obstacles the Malaysian government faced with its online repression, and the mild offline repression in the country.

To what extent can internet use, and social media use in particular, play a similar role in informing protest sympathisers in other authoritarian regimes? Just as we saw in Malaysia, it seems likely that also in other authoritarian regimes the use

of social media, rather than internet use as such, is conducive to the informing of sympathisers, as with social media the 'what, where, when and how' can truly go viral online. As a matter of fact, to my knowledge the academic literature provides no empirical examples of a call for protest under authoritarian rule travelling smoothly over the internet without social media, although admittedly the internet's role has not been profoundly studied in many protests outside of the Arab Spring cases. Assuming social media is a necessary condition for step two to 'work', however, or at least to make the internet's facilitative role more likely, what then can we expect of social media for informing sympathisers in other authoritarian regimes? I suggest that under higher on- and offline state repression social media is unlikely to enhance the informing of sympathisers for three reasons.

People Do Not Dare to Share

For social media to be facilitative in the informing of sympathisers, a requirement is that people dare to share information about the rally on their own social media accounts. In the more repressive authoritarian regimes, however, openly associating oneself with anti-government forces online could result in fierce government repercussions. As a consequence, it seems likely that in those regimes where the threat of state repression is very real, citizens will mostly refrain from sharing anything online, ultimately resulting in the non-travelling of politically sensitive information in cyberspace.

Moss (2016) for instance describes how after the outbreak of the protests in 2011 even many members of the Syrian diaspora were too afraid to show online their opposition to the Assad regime. One Syrian activist residing in New York remarked: "After I put my first post on Facebook condemning the regime…My finger was trembling and my heart was racing" (idem, p. 492). Similarly, Kendzior (2012) explains how the paranoia and fear in Uzbek society results in voluntary self-censorship in cyberspace. In her words, "Uzbeks avoid political material even when they are not directly instructed to do so" (idem, 12). In Tunisia too, in the early stages of the revolution, Tunisians did not dare to repost or even 'like' the videos of ongoing protests in the country.[246] Although a protest might instigate a snowball effect where more and more people dare to show their true political preferences because others do so (Kuran 1995) – as was eventually the case for Tunisians in 2011 – in many repressive regimes a tipping point where a critical mass of people will start sharing information about a rally is likely never to be reached because people are simply too afraid to share anything sensitive.

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246 Ryan, Yasmine, "How Tunisia's revolution began," Al-Jazeera, http://www.aljazeera.com/indepth/features/2011/01/2011126121815985483.html (16 December 2017).

Are Protest Movements Trustworthy and Credible?

A second, closely related reason is that for people to start the online sharing of information about a rally, the protest movement making the call for a protest needs to enjoy a fair amount of trust and credibility among society members.[247] Arguably, it is only when citizens have sufficient trust in a movement that they become willing to openly align themselves to it by sharing its information. In very repressive contexts, however, there is barely any space for civil society to exist, let alone for an anti-government protest movement to build the name and reputation that is necessary for the successful diffusion of its information once the moment for a rally has arrived.

In April 2011, for example, an unknown Uzbek youth activist group Endi Yetar released an online announcement saying that it was planning to organise a mass demonstration in the capital of Uzbekistan. However, many Uzbeks thought it was a joke, whereas others presumed it to be a government plot (Kendzor 2012, 12). As a result, the call did not get much traction on social media. Likewise, amid the Arab Spring a Facebook page named the Free Youth Coalition called for a nationwide protest against the House of Saud (Lacroix 2014). As very few people knew the group, however, many Saudis were concerned that the call was a possible trap by the secret service (Giglio 2011).[248] In addition, the regime framed the announced 'Day of Anger' as yet another Iranian conspiracy, thereby further delegitimising the relatively unknown youth activists who were behind the call (Samin 2012; Lacroix 2014).

In Egypt, by contrast, the Facebook page Kullena Khaled Said had already existed for months before it made the crucial announcement that a rally would be held on 25 January 2011, allowing the page to gradually build a support base and prove its trustworthiness (Herrera 2014; Ghonim 2012). By organising a series of silent stands prior to the mass rally, for instance, as well as the endorsements it received from presidential candidate El Baradei and the 6 April movement, the Facebook page gained the credibility and influence that later proved to be crucial in the diffusion of its information about the rally. Therefore, as with Malaysia, Egypt's Mubarak could not be called politically lenient, but he left enough space – also thanks to the anonymity that Facebook provided to the administrators of the page (Ghonim 2012) – for the (online) Khaled Said movement to survive.

Some space for civil society is thus a necessary but insufficient condition for social media to facilitate the informing of sympathisers and is unlikely to be met in regimes with suffocating repression.

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247   See for instance Haciyakupoglu and Zhang's (2015) study on the importance of trust during the Gezi Protests in Turkey.

248   "Saudi Arabian Security Forces Quell 'Day of Rage' Protests," The Guardian, https://www.theguardian.com/world/2011/mar/11/saudi-arabia-police-quell-protests (16 December 2017).

Shutting Down of Social Media Platforms or the Entire Internet

Third and last, even when people dare to share a call for a demonstration online, and do trust those who announce the rally, a more repressive authoritarian regime could still hinder the online informing of sympathisers in the wake of a protest by shutting down the most popular social media platforms. Chapter five revealed that the safety Facebook and Twitter provided for Malaysian activists was thanks to the public uproar that a shutdown of the platforms would cause. In societies where there is a well-functioning, national alternative for these platforms, however, shutting down Facebook or Twitter is likely to be less costly for the regime. In Russia, for instance, Facebook is up and running but most Russians use the Russian equivalent VKontakte. Hence, for the Russian government it is, in terms of societal dissatisfaction that it will cause, much easier to block Facebook than it is for the Malaysian government.

The extent to which American social media platforms like Facebook and Twitter are also 'safe havens' for free speech elsewhere is moreover questionable. Facebook and Twitter receive hundreds of requests per year from governments that prefer not to deny citizens access to the entire platform, but do want to see specific content or users removed. Although Facebook has pledged to abide by a set of human rights principles and to respect the freedom of expression, it also adapts its censorship policies to national and local laws. In Turkey, for instance, it has removed numerous posts insulting the prophet and Turkey's founder Kemal Atatürk.[249] Behaving in accordance with both freedom of speech as well as national laws at the same time can be, in Zuckerberg's own words, "a tricky calculus".[250] While Zuckerberg defends Facebook's compliance with national law by saying that "it's better for Facebook to be a part of enabling conversation, even if it's not yet the full conversation",[251] critics state these moral claims should be taken with a pinch of salt. Deibert, for instance, states that "when pressed with content take-down requests, the companies often opt for the cheap and easy solution rather than demanding due process, risking expensive legal battles, or getting expelled from lucrative markets" (2013, 130).

In the case of Malaysia, there are no known incidents where Facebook has removed politically sensitive content at the request of the Malaysian authorities. Yet it seems

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249 "Mark Zuckerberg's Facebook censors images of the Prophet Mohamed in Turkey – two weeks after he declared 'Je Suis Charlie'," The Independent, http://www.independent.co.uk/news/world/asia/mark-zuckerbergs-facebook-censors-images-of-the-prophet-mohamed-in-turkey-two-weeks-after-he-10007929.html (16 March 2018).

250 "Mark Zuckerberg defends Facebook censorship despite Charlie Hebdo support," The Guardian, http://www.independent.co.uk/news/world/asia/mark-zuckerbergs-facebook-censors-images-of-the-prophet-mohamed-in-turkey-two-weeks-after-he-10007929.html (16 March 2018). https://www.theguardian.com/technology/2015/jan/15/mark-zuckerberg-facebook-charlie-hebdo (16 March 2018).

251 "Facebook Said to Create Censorship Tool to Get Back Into China," The New York Times, https://www.nytimes.com/2016/11/22/technology/facebook-censorship-tool-china.html?_r=0 (31 March 2017).

that the higher the bargaining power of a regime over the company (is there a national alternative?) and the more lucrative the market, the more Facebook is willing to make its censorship policies in line with national standards. Illustrating this logic is a recent *New York Times* report which stated that Facebook wants to censor Facebook pages in exchange for access to the Chinese market (Facebook is now blocked in China).[252]

Finally, rather than merely blocking access to social media content or entire platforms, authorities could also opt for a complete shutdown of the internet, a dramatic measure that has been taken more than 100 times in the last two years, according to Access Now data.[253] Although the ultimate effectiveness of a partial or complete shutdown for stopping anti-government mobilisation is disputed (Hassanpour 2014, 2016),[254] it is doubtless a useful measure for authoritarian regimes to stop information travelling over the internet.

In summary, social media is less likely to be conducive to the informing of sympathisers in authoritarian regimes where there is high on- and offline repression, since in those states citizens are likely to be very hesitant to share online political information on social media, because there is little room for protest movements to build a relatively trustworthy reputation, and because the authorities can easily block access to popular social media platforms or the entire internet. The scale-up of Chapter five's findings can be summarised in Table five below. Only in situations with high social media use and low on- and offline repression – as was the case in Malaysia for Bersih 2 (2011) onwards – is internet use likely to facilitate the informing of protest sympathisers.

Contemporary China also falls into the high on- and offline repression category, thereby making it less likely that social media plays a facilitative role in the informing of protest sympathisers there. Although protesting on a small scale on particular issues is permitted (see for instance Goebel forthcoming), thereby also allowing social media to facilitate the diffusion of information, as soon as protests are directed against the ruling party, or are perceived as threatening by the regime itself, harsh on- and offline repression can efficiently bring the further spread of information to a halt, as was shown during the Ürümqi riots in Xinjang in 2009 and the Umbrella protests in Hong Kong in 2014. [255] Future research is encouraged to look further into these two factors in the informing process.

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252   idem.

253   Access Now. https://www.accessnow.org/keepiton/ (15 January 2018).

254   "No Business, No Boozing, No Casual Sex: When Togo Turned Off The Internet," The Guardian, https://www.theguardian.com/global-development/2017/sep/21/no-business-no-boozing-no-casual-sex-when-togo-turned-off-the-internet (14 January 2018).

255   "In Latest Upheaval, China Applies New Strategies to Control Flow of Information," The New York Times, http://www.nytimes.com/2009/07/08/world/asia/08beijing.html?mtrref=en.wikipedia.org&gwh=BF216B0FF3A3D8C9CC7F42F8C83280F4&gwt=pay (18 March 2018).
"Social Media and the Hong Kong Protests," The New Yorker, https://www.newyorker.com/tech/elements/social-media-hong-kong-protests (18 March 2018).

Table 2: Is internet use likely to facilitate the informing of protest sympathisers?

	Low On-/Offline Repression	High On-/Offline Repression
Low Social Media	no	no
High Social Media	yes	no

Scaling Up the Malaysian Findings on Being Motivated to Join a Protest

Chapter six researched whether and how internet use affected the motivation of informed Malaysian sympathisers to attend an anti-government protest. The two sets of mechanisms that were based on the Arab Spring cases, namely that internet use decreases the perceived risk of protest and that dramatic online (audio)visual information makes people defy their fears, turned out to have little explanatory value in the investigated Bersih rallies. Only through the 'conducive social media networks' mechanism was internet use found to increase the motivation to protest: by increasing Malaysians' online visibility, social media made informed sympathisers more susceptible to peer pressure to take to the streets. To what extent can Chapter six's findings be applicable to other contexts?

Internet and the Perceived Risks of Protesting

The 'safety in numbers' mechanism, which suggested that internet use gives informed sympathisers a certainty that there will be enough others attending the protest, turned out to be irrelevant in the later Bersih rallies. Chapter six explained this by pointing out that Bersih sympathisers already had quite a good idea of the expected turnout based on the previous Bersih rallies, making it unnecessary to find out how many others were coming this time. This finding implies that the mechanism is likely to have most explanatory value in contexts where people have the least idea about the expected turnout. Most probably, these are authoritarian regimes with little protest history, high informational scarcity, and mass political preference falsification. Not surprisingly, the theoretical expectation for this mechanism was built on works from the DDR (1989), China (1989) and Egypt and Tunisia (2010–2011), all authoritarian contexts that meet these criteria. Obviously, in these contexts informed sympathisers could still find out online that the expected turnout is actually quite low, yet the point is that if there is a safety in numbers (expected) in the streets the internet can give them a good chance to know, instead of being paralysed by uncertainty.

The 'world is watching' mechanism, which proposed that protest sympathisers will be more confident because they know the regime will be hesitant to openly repress, turned out to be too indirect to have much explanatory value in the Bersih rallies. If the mechanism has explanatory value elsewhere, it is most likely to be in those regimes that are most concerned with their democratic façade towards the West. Most probably, these are regimes that Levitsky and Way (2010) describe as the 'high leverage and high linkage' cases, referring to authoritarian states that are most vulnerable towards pressure from the West (leverage) and having strong linkages to it. The Malaysian authorities, having according to the authors only 'medium' leverage and linkage, are therefore perhaps not worried 'enough' about how the West sees them for the mechanism to work.

Conducive Social Media Networks

The conducive social media networks – the only logic for which some evidence was found that internet use increased informed sympathisers' motivation to protest – is likely to work similarly in other authoritarian settings. In the same way that Chapter five's findings are applicable outside of Malaysia however, a requirement might be that sympathisers dare to share their support for a protest or a protest movement on social media. Hence, besides the existence of social media, a relatively mild on- and offline repression is also likely to be a necessary condition for the mechanism to work. Additionally, Chapter six revealed that social media networks will only push informed sympathisers into action if there is enough excitement in society surrounding a rally. If citizens are a little tired of protesting – as was the case for Bersih 5 – this is likely to be reflected in people's social media accounts, making social media automatically less conducive to mobilisation.

Internet Use and Dramatic (Audio)Visual Content

Lastly, the 'dramatic (audio)visual information' mechanism, which proposed that informed sympathisers will be pushed into the streets because they will be overwhelmed by dramatic online content, did not have much relevance in explaining informed sympathisers' motivation in the investogated Malaysian protests. In its explanation of the non-finding, the chapter suggested that the mechanism is most likely to 'work' when an instant exposure of injustice is shown to people on the internet in an (audio)visually attractive way, a criterion that the pre-planned, non-spontaneous Bersih rallies did not meet. However, the mechanism could in principle occur in any authoritarian state, from Malaysia – as was shown with the Walk of Justice and the HINDRAF protests – to a more repressive state such as Iran, where the dramatic video of the killing of Neda Agha-Soltan during the 2009 protests quickly spread across the internet, causing further anger against the regime (Diamond 2010, 79–80).

In sum, whereas it was hypothesised that the Malaysian findings in the chain's second step were only likely to be applicable to authoritarian states with low repression and high social media use, reflections on the applicability of Chapter six's findings are less coherent. I have suggested that the discussed mechanisms through which internet use can affect informed sympathisers' motivation to protest are likely to be moderated by various factors, such as the extent to which there is informational scarcity in society and the extent to which there is strong linkage and leverage towards the West. Other proposed intervening variables were the extent to which the protest is triggered by an instant exposure of injustice shown in an (audio)visually attractive way, whether there is excitement surrounding a protest, and – for the conducive social media networks - social media use and the level of state repression.

Chapter 8
Conclusions and Reflections

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In nearly every conversation I had over the past years where I had to mention the topic of my research project, I received the same response: 'Ah, you are researching the Arab Spring!' For many, both scholars and interested observers, the relationship between internet use and anti-government demonstrations is intrinsically linked to the breath-taking series of events in the Arab world that commenced with the self-immolation of the Tunisian fruit-seller Mohammed Bouazizi in December 2010. Unsurprisingly, therefore, the journalistic and scholarly interest in the role of the internet and social media in the Arab uprisings is overwhelming (among others, Tufekci and Wilson 2012; Lynch 2011; Howard and Hussain 2011; Breuer, Landman and Farquhar 2015; Gunning and Zvi Baron 2013; Ghonim 2012; Aday et al. 2012; Eltantawy and Wiest 2011; Wolfsfeld, Segev and Sheafer 2013). On the one hand this extensive scholarly attention has led to quite a profound, nuanced understanding of how (un-)important the use of the internet was in facilitating various Arab uprisings in 2011. On the other hand, however, and to my concern, it has led to a very one-sided understanding of when and how internet use affects protest under authoritarian rule, as it is so strongly influenced by one particular episode.

This research has moved beyond the Arab Spring and has investigated whether, when and how the internet's challenge to information scarcity has affected anti-government protest under authoritarian regimes. The project has combined large-n country- and individual-level analyses to understand broader patterns among authoritarian regimes with an in-depth case study of Malaysia – including original interview and survey data – to empirically trace the causal mechanisms in more detail. In contrast to most studies, which examine the relationship (among others, Fielder 2012; Meier 2011), this study's theoretical framework has broken up the causal chain into various steps, enabling a thorough investigation into the internet's role in different stages of the mobilisation process. Rather than looking for a static effect of 'the' internet under authoritarian regimes across time and space, the framework acknowledges that the internet's role is dependent on various factors, paying explicit attention to the level and type of state repression, as well as the rise of social media.

This chapter reiterates the previous chapter's findings and reflects on its implications. Commencing with a short recap of Chapter three, wherein large-n

quantitative analyses were conducted, the mobilisation chain's three steps will be discussed on the basis of Chapters four, five, six and seven. Finally, I reflect on the implications of the findings for authoritarian sustainability and propose avenues for further research.

Question 1: Does Internet Use Facilitate Anti-Government Protest Under Authoritarian Regimes?

The empirical research started in Chapter three, where I examined whether internet use facilitated anti-government protest under authoritarian regimes. A large-n, quantitative country-level analysis of the period 1990–2013 was carried out, looking at the extent to which the percentage of the population using the internet predicted – ceteris paribus – the number of anti-government protests. A similar analysis was conducted at the individual level (2011–2015), investigating whether – other things being equal – internet users living under authoritarian regimes were more prone to protesting. In line with more cyber-optimistic ideas, the chapter showed that both at the country and individual level, internet use facilitated protest. The country-level analysis furthermore revealed that the effect holds in authoritarian regimes especially, as opposed to democracies and partial authoritarian regimes, and that within the group of authoritarian regimes, the least authoritarian ones, using the least repression, suffered most from internet-enabled protest. Notably, the authoritarian states with the least freedom worldwide, such as North Korea or Turkmenistan, were not part of the analysis due to missing data.

Remarkably, moreover, neither the country- nor the individual-level analysis showed evidence for the idea that higher online repression reduced the effect of internet use on protesting. In addition, contradicting the idea of the authoritarian state that learned over time how to prevent internet-enabled protests, the chapter found no evidence for a dwindling effect of internet use over time. Neither did the chapter find support for the idea that the internet's effect became stronger in the social media years after 2005.

Question 2: Tracing Causal Mechanisms, How and Under What Conditions Does Internet Use Facilitate Anti-Government Protest?

The conducted large-n study provided the best available systematic evidence for the causal relationship, yet on a very aggregate level. Hence, whilst identifying a broader trend among all authoritarian regimes, the analysis could not explain how and under what conditions the internet's challenge to information scarcity affected protest under authoritarian regimes. In order to get a better understanding of the causal mechanisms

and the conditions under which they are likely to unfold, Chapters four, five and six therefore took a closer look at the mobilisation process in the authoritarian state of Malaysia.

An important reason for studying the internet and protest in Malaysia, besides the information scarcity as a result of strict government control over traditional media, lay in the stark variation of the key variables of interest. For instance, mass anti-government rallies took place both before and after the widespread use of internet and social media, allowing an in-depth investigation into how the technology has possibly changed the dynamics of protest under authoritarian regimes. Moving beyond merely analysing correlations, the chapters relied on two intensive fieldwork periods that gave access to a rich amount of empirical material, ranging from interview data with activists and protest sympathisers, to a self-commissioned nationwide survey with sympathisers from an anti-government protest movement. In triangulation with the other sources, secondary literature as well as existing survey data were also used.

Importantly, to allow for a profound investigation into the causal mechanisms linking internet use to anti-government protest, the chapters disaggregated the mobilisation process by breaking it up into three analytically distinct steps. Building on the theoretical framework of Oegema and Klandermans (1987), I examined the internet's role in the development of sympathy for Malaysian anti-government protest movements (Chapter four), the informing of Malaysian protest sympathisers about an upcoming rally (Chapter five), and the motivation of informed Malaysian protest sympathisers in joining a risky anti-government rally (Chapter six). Chapter seven subsequently explored the applicability of the Malaysian findings to other authoritarian contexts, with new empirical tests and theoretical reflections based on secondary literature. The following paragraphs reiterate the most important findings from Chapters four to seven.
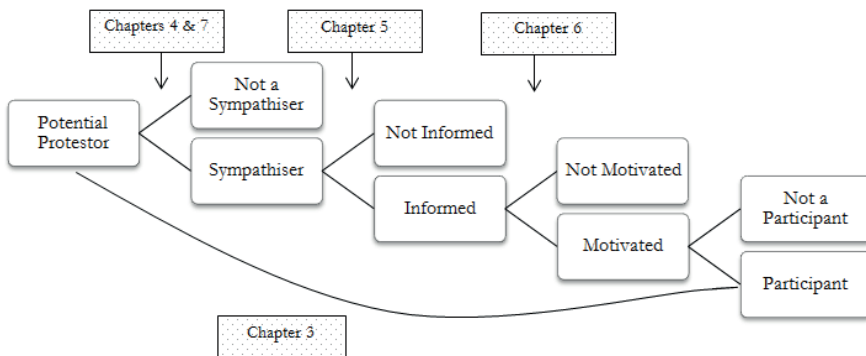

Figure 1: Visual representation of the mobilisation chain, based on the work of Oegema and Klandermans (1987)

Step 1: Becoming Sympathetic to an Anti-Government Protest Movement

Most studies looking at internet-enabled mobilisation treat the anti-regime sentiment in society, or people's sympathy towards anti-government protest movements, as an exogenous 'given' that has nothing to do with internet use. In this view, the internet is 'merely' a tool that becomes important once people have enough reason to protest against their government. Deviating from such an approach, Chapter four paid explicit attention to how internet use affects the formation of political ideas long before the idea of a rally floats around.

Using both qualitative and quantitative evidence, the chapter showed that in Malaysia the internet functioned as an alternative public sphere that allowed for the exchange of alternative political information, thereby directly challenging the information scarcity in society. As a result, Malaysian internet users were exposed to alternative political information, often highly critical towards the regime, and their political ideas changed accordingly. In line with Bailard's (2014) idea of the internet's 'mirror function', Malaysians learned online about the actual performance of their government, and became disappointed in a regime that turned out to be more corrupt, less democratic, and more repressive than they had previously assumed. Or, to cite Toh Kin Woon, a former Malaysian government official who now actively supports the opposition: "with internet people have access to all kinds of information. We get access to a website which tells us so much about corruption scandals and so many other issues. This has helped to create negative images of the ruling elite in the minds of people".[256]

The explanation for the internet's effect was found in Malaysia's *asymmetry in information controls*, a term that connotes an unevenness in the online (high) and offline (low) media freedoms (Kerr 2013). Whereas the traditional media was strictly controlled by the Malaysian government, the internet was relatively free, which created a space for the circulation of alternative political information. Initially, the Malaysian authorities did not want to control cyberspace as they worried that state interference in the internet would scare off potential foreign investors. After suffering some major political defeats, however, and seeing these as linked to the freedom in cyberspace, the Malaysian government abandoned the idea of an uncontrolled internet, reasoning that the political costs of leaving cyberspace unregulated had become too high. Yet the chapter showed that, even when an authoritarian state tried to get a tight grip on cyberspace through increased online repression, it was not always able to do so. International and domestic constraints, the socio-technical obstacles of online repression, and the ineffectiveness of the state's interventions in

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256   Interview with Toh Kin Woon, 14 February 2016, Penang.

cyberspace made strict control over the internet by Malaysia's regime unattainable. While Deibert (2015, 64) claims many states are now "actively shaping cyberspace to their own strategic advantage", the Malaysian case showed that not every authoritarian state is able to do so effectively.

Interestingly, Chapter four also showed that the impact of internet use on anti-regime sentiment was strongest in more recent times, when the Malaysian government did most to control cyberspace. Two factors could, at least partly, account for this counterintuitive finding. The first is the *endurance* of Malaysia's asymmetry in information controls. Producers of online alternative information in Malaysia could function in relative freedom for a period of decades, over time facilitating a process of 'natural selection'. Whereas in the late 1990s oppositional websites sprang up – often merely providing a platform for anonymous rumourmongering – over time it is mainly the more professional endeavours with high journalistic standards that have survived. These online platforms, of which *Malaysiakini* is a prime example, gradually built a reputation of being trustworthy, and as their information's credibility increased, so did its impact on Malaysians' political ideas. Hence, due to the endurance of the asymmetry in information controls, the online Malaysian media has increasingly started to function as a credible 'watchdog' for the Malaysian polity, a task that has traditionally been fulfilled by other media in liberal democracies.

The second factor that contributed to the more recent increased impact of internet use on Malaysians' anti-regime sentiment lay in the rise of *social media*. My qualitative evidence suggested that internet users who would not use the internet for political purposes themselves only became exposed to alternative political information thanks to social media. Especially Facebook, but also the messaging platform WhatsApp became extremely popular venues to share political news among peers, thereby contributing to Malaysians' exposure to alternative information. Moreover, together with increased smartphones and access to mobile broadband, social media use also made it increasingly difficult for the authorities "to escape the 'little brother' surveillant gaze of citizen-reporters" (Chadwick and Howard 2009, 5). And as government malpractices and failures could no longer be swept easily under the carpet, Malaysians' appreciation of their government shrank further.

Scaling up the Malaysian Findings from Step 1
Chapter four, in short, showed how Malaysia's asymmetry in information controls allowed internet use to become important in the creation of a fertile ground for anti-government mobilisation, especially in the more recent years. Chapter seven showed that the asymmetry in information controls, i.e. more on- than offline media freedom, is not a necessary condition for internet use to have an effect on anti-

regime sentiment. In a quantitative study of 25 authoritarian regimes (2010–2015), the chapter showed that, even in states with more symmetric information controls, internet use increased anti-regime sentiment. This finding made it imperative to reflect on why internet use could still make citizens more negative about their governments despite the fact that the internet – at least at first sight – did not offer more freedom than the traditional media. Tentatively, I proposed two explanations:

First, authoritarian states were perhaps, despite high online repression, still *not able* to prevent the circulation of alternative information in cyberspace. In other words, an apparent symmetry in information controls (little on- and offline media freedom) might in reality not have been so symmetric. Concretely, this means that even in regimes such as Vietnam, China, Egypt or Belarus, where the internet was supposedly as unfree as television, radio and newspapers, the internet still allowed for more circulation of alternative information than the traditional media. Importantly, the internet as an alternative public sphere under authoritarian rule could in this explanation still have had many shortcomings, partly as a result of online repression. What it proposes, however, is that, despite its flaws, the internet still challenged authoritarian regimes' information scarcity, thereby exposing citizens – compared with the pre-internet days – to more alternative political information.

As Chapter seven outlined, there is considerable evidence that China, despite having allegedly the world's most advanced internet controls, was still unable to succeed in controlling cyberspace in such a manner that it could prevent internet users from being exposed to alternative political information. Further, prior to the Arab Spring, alternative political information critical towards the Ben-Ali regime in Tunisia was able to flourish in cyberspace despite Tunisia's "multilayered censorship apparatus that was among the world's most sophisticated" (Maher and York 2013, 23). Similarly, in Belarus, after many popular independent websites had been blocked after the presidential elections of 2006, internet networks remained key in exchanging information that was not available elsewhere (Tarkowski, Fathy and Melyantsou 2011). Illustrating the notion that authoritarian states with vast amounts of technical and economic resources at their disposal also had a hard time controlling cyberspace, Saudi Arabia's Minister of Culture and Information remarked that "the ministry cannot monitor everything published on Twitter" and that "censorship [on Twitter] is difficult due to the big number of users" (Boghardt 2013).

A second explanation is that authoritarian regimes were able but *did not want to* control the internet very strictly. This is in line with what MacKinnon (2011) calls 'networked authoritarianism'. In a networked authoritarian state, the government stays in control while a wide range of discussions about the country's problems nonetheless occur on the internet (idem, 33). As a consequence, "the average person with Internet or mobile access has a much greater sense of freedom – and may feel

that he has the ability to speak and be heard – in ways that were not possible under classic authoritarianism" (idem). At the same time, however, "individual rights and freedoms are not protected; those whom the regimes see as threatening are jailed; free and fair elections are not taking place; and the judicial and legal systems are tools of the government" (idem).

Allowing the circulation of some alternative information on the internet can on the one hand be seen as a necessary evil that regimes choose over an option that is even worse. As Chapters four and five revealed, the American-based social media platforms in particular posed a problem to some regimes as not only their political content could not be censored. Not wanting to suffer from the public uproar that a shutdown of an entire platform would cause (Zuckerman 2008), regimes might have calculated that the circulation of some alternative content on social media was the lesser evil.

Yet, alternatively, a relatively free cyberspace might also have provided regimes with valuable information both about citizens' concerns and about the functioning of local bureaucracies. Through an internet where citizens have some room to steam off their frustrations, the regime might have gained insight into mass preferences that were previously hidden, and adjusted their policies accordingly. In this line, then general secretary of the communist party of China Hu Jintao remarked in 2008 that the internet "is an important channel for us to understand the concerns of the public and assemble the wisdom of the public" (as quoted in Mackinnon 2012, 43), while Russian opposition leader Alexei Navalny said in 2010 that the internet functioned as a focus group for Putin's government (Asmolov 2010).

Taken together, Chapters four and seven thus argued that internet use challenged the information scarcity in authoritarian regimes irrespective of regimes' online repression, and that as a consequence of being exposed to more alternative political information, netizens under authoritarian rule were likely to have more anti-regime sentiment than non-internet users. Whereas in Malaysia the regime was ultimately unable to control cyberspace more strictly, drawing the same conclusion for Chapter seven's 25 other regimes would be too premature. Possibly a relatively free cyberspace also gave authoritarian regimes certain benefits that outweighed the costs of a population that was more aware of the skeletons in the government's closet. A promising avenue for future research would be to further distinguish between when and where authoritarian regimes cannot, and where they do not want to, control cyberspace tightly.

Finally, Chapter seven stressed that the identified effect of internet use on anti-regime sentiment was likely to hold in most, but not all, authoritarian regimes. Different dynamics were likely to apply to the least free authoritarian regimes worldwide – such as North Korea, Eritrea, Uzbekistan and Turkmenistan – that

were not part of Chapter seven's analysis due to missing data. As internet users in those extremely repressed societies often do not dare to access alternative political information, and do not have a clue who or what to believe in the online realm, internet use is unlikely to have much of an impact on anti-regime sentiment.

Step 2: Being Informed About an Upcoming Anti-Government Protest

Chapter five moved on to the second step of the chain and examined how internet use has possibly changed the extent to which protest sympathisers can be informed about an upcoming anti-government rally the moment a protest is decided on. Being informed was understood as knowing about the 'what, where, when and how' of a protest. The chapter argued that, in Malaysia, it was the use of social media, rather than internet use, that made informing protest sympathisers much easier. In-depth interviews with 22 Malaysian activists and quantitative survey material were used to show that the rise of social media greatly facilitated the diffusion of protest information into multiple networks and across very diverse publics. Whereas in the pre-social media days Malaysians still had to make an effort to find political information, thereby easily missing information about an upcoming demonstration, in the age of social media information got increasingly pushed to them over social networks. This could explain – at least partly – that, despite relatively similar internet penetration rates in 2007 and 2011, many Malaysians were not aware of the announced 2007 anti-government rally, but did know about the 2011 rally before it took place. Bersih's movement characteristics were also found to be conducive to social media's facilitative role in the informing of sympathisers. Being a highly organised, mostly urban-based, inclusive, non-sectarian movement, that was moreover strongly supported by the Malaysian opposition parties, chiefly helped Bersih's information to travel easily over the ethnic cleavages in Malaysian society

Chapter five furthermore showed on the one hand how Malaysian anti-government protest movements benefited from social media because it amplified the diffusion of their information, but how on the other hand it made the movement's campaign vulnerable to online repression, as it created the risk that misinformation was spread on social media as well. In response to this risk, one of the main protest movements under study in Chapter five, Bersih, fell increasingly back on one-to-many communication channels when reaching out to its supporters. Through solely communicating over its official Facebook and Twitter accounts, as well as over specifically designed apps that send push messages, the movement attempted to offer protest sympathisers a trustworthy information channel.

In trying to explain why the Malaysian authorities' online repression was unable to prevent social media's facilitative role, the chapter identified four reasons that made social media's 'success' possible. First, the government's harsh repression of protestors in the streets was captured in hundreds of images and videos, which were ideal 'hot' content to make the protest movements' information travel in cyberspace. Second, according to the interviewed activists, with its interventions the government made some severe blunders in cyberspace – such as blocking Bersih's website and flooding the Bersih hashtag – which unintentionally only fostered attention for the rally on social media. Third, the movements' reliance on Facebook and Twitter in their communications made them relatively invulnerable to state repression in cyberspace. The authorities most likely refrained from blocking these platforms as this would have politicised and infuriated many Malaysians who were now relatively apolitical or even supportive of the regime. Fourth and last, the successful spread of information over social media was also the result of mild offline repression in Malaysia. Due to this mild repression, Bersih was able to gain a lot of trust and credibility among Malaysians over the years, which also facilitated the extent to which Malaysians were willing to share Bersih's content on social media.

Scaling up the Malaysian findings from Step 2
Whereas the Malaysian findings from Chapter four were systematically tested in Chapter seven for 25 other authoritarian regimes, the generalisability of Chapter five's claims were not empirically examined in a separate chapter. Although untested, Chapter seven suggested – based on theoretical reasoning and secondary literature – that also in other authoritarian contexts the use of social media, rather than internet use as such, is conducive to informing sympathisers, as it is via social media that the 'what, where, when, and how' is mostly likely to go viral online. Yet the chapter also proposed that social media is less likely to play a facilitative role in more repressive authoritarian contexts than Malaysia, such as Uzbekistan or Saudi Arabia, as in those circumstances the following three conditions are often not met.

First, the chapter suggested that social media is only likely to facilitate the informing of sympathisers if people dare to share information about a protest on their own social media accounts. As in highly repressive authoritarian contexts openly associating yourself with an anti-government movement is often highly dangerous, however, Chapter seven proposed that citizens in those societies are likely to refrain from sharing anything online, with the ultimate consequence that information covering the 'what, where, when and how' of a rally does not travel easily over social media.

The second reason why the chapter found it unlikely that social media plays a facilitative role in informing sympathisers in more repressive authoritarian contexts

was because the necessary trust in protest movements is often lacking. According to the chapter, people are only likely to share online information if they have sufficient trust in the movement that made the call for a protest. Yet, as anti-government protest movements seldom have the necessary space to build a good name and reputation, people are mostly unwilling to openly align themselves to protest movements the moment a protest is announced.

Third and last, the chapter proposed that even when people dare to share a call for a demonstration online, and do trust those who announce the rally, a more repressive authoritarian regime can still hinder the online informing of sympathisers in the wake of a protest by shutting down the most popular social media platforms or even the entire internet.

Step 3: Being Motivated to Join an Anti-Government Protest

Chapter six examined the third step in the mobilisation chain, investigating whether and how the use of the internet affected the motivation of informed sympathisers under high risk. Seventeen in-depth interviews were conducted with Malaysians who sympathised with the protest movement Bersih and knew about Bersih rallies before they occurred, but had not necessarily joined the protests. Some of them did participate, others did not, primarily because the perceived risks were considered too high. After the interviews, a nationwide survey was also conducted to test the hypotheses in a more systematic fashion.

In contrast to steps one and two, internet use did not turn out to play an important role in Malaysia in the chain's third step. Most of the hypothesised mechanisms were inspired by Arab Spring cases, but turned out be largely irrelevant in the investigated Bersih protests. For instance, based on the Arab Spring examples, a hypothesis was explored that individual internet use increases informed sympathisers' motivation because it can guarantee them that there will be 'a safety in numbers' in the streets. The interviews and survey demonstrated, however, that the Malaysian informed sympathisers did not use the internet to check for 'safety in numbers', but instead used it to find out how the government was responding to the protests in the streets and whether an aggressive pro-government group was present at the rally or not. The effect of internet use in Malaysia, in other words, was mostly conditional on the kind of information that reached the informed sympathisers through the internet: if people found online that the risks of going out were higher than expected, they were less likely to take action; if they found it was actually safer than they initially thought, they were more likely to take to the streets. Furthermore, the hypothesised 'world is watching' mechanism, proposing that informed sympathisers dare more because they know the regime can no longer use repression with the world's eyes watching, turned out to have little explanatory value. Although some interviewees indicated

that the widespread use of social media is indeed likely to have put restraints on the government's repression – the absence of overt repression during the last Bersih protests is noteworthy in this regard – the increased costs of repression for the regime do not appear to have directly affected the decision-making of the informed sympathisers.

Similarly, another mechanism based on the Arab Spring, assuming that informed sympathisers will be exposed to such dramatic online audiovisual material that it will overwhelm their careful assessment of risk, was also unable to explain changes in their motivation to join a Bersih rally. Although there were all sorts of videos and images circulating among Bersih sympathisers prior to the anti-government protests, none appears to have been very influential in the sympathisers' decision-making prior to one of the rallies. Instead, the almost permanent exposure to all sorts of alternative political messages online, both in text form as well as in videos and images, had gradually altered Malaysians' thinking about the regime in power – as the first step in the chain prescribes – rather than instantly with a 'moral shock' (Jasper and Poulsen 1995; Jasper 1998).

The only mechanism for which some evidence was found that internet use indeed affected the motivation of informed sympathisers was the 'conducive social media networks'. As in steps one and two, it was thus the use of social media in particular that facilitated anti-government mobilisation in Malaysia. Because of its absence in existing literature, the mechanism was initially not hypothesised as a potential causal pathway, yet the 17 in-depth interviews (not the survey) revealed that it was often their online visibility that affected the informed sympathisers' motivation to join the rally. Either because they wanted the social rewards of going ('cool thing to show to your peers online'), or were afraid of the social costs of not going ('if you don't go, you will be frowned upon'), their use of social media made it more likely that they would join the rally. As one interviewee explained to me: "Even if you had doubts of going at the beginning, you would wanna post on social media that you did go for the rally. That you were there".[257] Remarkably, this finding that social media use increased Malaysians' susceptibility to peer pressure, and thereby increased their motivation to join a rally, goes against the often-heard argument that social media's weak links cannot explain high-risk activism (Gladwell 2010).

Scaling up the Malaysian Findings from Step 3
Whereas the applicability of the Malaysian findings in other authoritarian contexts was further explored earlier in either additional empirical tests (step one) or theoretical reasoning (step two), the (lack of) Malaysian findings in step three,

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257   Interview with Ama (#12), 1 March 2016, Kuala Lumpur.

together with little evidence other than what we know from the Arab Spring cases, made it less of a valuable investment to do something similar for step three. Nevertheless, some suggestions were made on the external validity of Chapter six's findings.

First, it was suggested that the 'safety in numbers' mechanism, which was not found to be relevant in the investigated Malaysian protest because informed sympathisers already knew that the turnout was going to be big for Bersih, is likely to have had most explanatory value in contexts where informed sympathisers had very little knowledge about the expected turnout. Such a context is most likely to be found in regimes with high information scarcity, very little protest history, and mass political preference falsification (Kuran 1995).

Second, the chapter suggested that the mechanism which proposed that informed sympathisers dared more because the world's eyes were watching was likely to have most explanatory value in regimes that had most to fear from bad publicity in the West. It used Levitsky and Way's (2010) conceptualisation of linkage and leverage to argue that these are likely to be authoritarian regimes that are most vulnerable towards pressure from the West and that also have ties with it.

Third, the 'dramatic (audio)visual information' mechanism, which was also not relevant in explaining informed sympathisers' motivation in the investigated Malaysian protests, is likely to have most explanatory value in situations where an sudden and shocking exposure of injustice is shown to people on the internet in an (audio)visually attractive way. The chapter claimed that this process is unlikely to be limited to a specific type of authoritarian regime, but is most likely to occur in spontaneous rallies, rather than pre-planned rallies such as Bersih.

Fourth and last, for the 'conducive social media networks' mechanism, the only mechanism for which some evidence was found in Malaysia, it was argued that both social media and a low on- and offline repression environment are likely to be necessary for the mechanism to 'work'. Only if sympathisers dare to share their support for a protest or a protest movement on social media might the mechanisms have some explanatory value.

The chapter teaches us to be cautious about assumptions from the Arab Spring in the third step of the chain, and future research is therefore encouraged to look further into how internet use affects the motivation to protest in other authoritarian contexts.

The Findings Taken Together

Based on previous paragraphs, the following conclusions can thus be drawn: first, internet use facilitated anti-government protest under authoritarian rule, and primarily in authoritarian regimes with relatively mild repression. For the extremely repressive states no conclusions could be drawn, due to missing data. Second, for

Malaysia as well as for many more repressive authoritarian regimes, the explanation for *how* this was possible lay – at least partly – in the increase in alternative political information that the internet brought about, resulting in a growth of support for anti-government protest movements. Third, in Malaysia another explanation for the 'how' question lay in social media's facilitative role in the informing of protest sympathisers about the 'what, where, when and how' of an announced rally. Yet in more repressive authoritarian contexts social media is less likely to play such a role, as in such circumstances citizens are unlikely to have dared to share information about a rally online and most likely did not have the necessary trust in the organisers of a rally, or because regimes could block internet access or specific platforms when they were under the gun. Fourth, except for the 'conducive social media networks' mechanism, the internet was shown to be unimportant in Malaysia for pushing informed sympathisers into the streets. Whether the hypothesised mechanisms in step three are overgeneralised findings from the Arab Spring, or do in fact have more explanatory value in other authoritarian contexts, is hard to tell without further empirical research. Fifth, the research showed that social media usage, rather than internet use as such, was important in facilitating anti-government mobilisation, and also that authoritarian environments with relatively low on- and offline repression were most fruitful ground for internet-enabled mobilisation.

Implications of Findings for Authoritarian Sustainability

Internet-Enabled Protests Do Not Equal Regime Crisis

While it is tempting to interpret the research findings as unambiguously bad news for authoritarian regimes, the analysis of Malaysia also showed that internet-enabled anti-government protests do not always pose a threat to authoritarian rulers. The Malaysian regime seems to have learned that its violent response to the Bersih protest, rather than the protest itself, poses a problem. The new motto of the Malaysian regime in the last two Bersih protests (2015, 2016) therefore appears to have been 'let them have their protest; nothing will change anyway'. With this lenient response, the regime not only spared itself the damaging audience costs in the age of social media, but, by showing that protest is perfectly possible in Malaysia, anti-government protest demanding fair elections can ironically enough even be used as 'proof' to demonstrate the democratic character of the country. Moreover, paradoxically, thanks to the recent absence of state repression during Bersih four and five, some of the excitement surrounding the rallies seems to have disappeared: by permitting the protest, it looks like the regime has in an elegant way taken the sting out of the rallies, transforming them into slightly obligatory performative acts, rather than desperate outcries of an angry population.

Malaysia does not seem to be the only authoritarian state realising that protests do not equal a regime crisis. Schedler (2016) even speaks about "the disturbing normality" of protests under authoritarian rule. In China, plenty of (mainly smaller) protests take place that usually do not challenge the regime in power. Goebel's database (2017) on China reports 74,452 protests for the period 2013 to 2016. Some even believe these protests can work in the regime's favour: Lorentzen (2013) claims they can be helpful in mitigating informational problems for the regime, while Chen (2012) sees them as convenient pressure valves for citizens' grievances (Chen 2012). My research thus connects to this work by showing that internet-enabled anti-government protests are not necessarily a fundamental threat to an authoritarian regime.

And Yet It Can Be Threatening for the Regime

And yet at the same time my research has shown that the internet's facilitative role in the mobilisation process *can* challenge the sustainability of authoritarian rule and that regimes' capacity to control cyberspace is limited. While the Malaysian authorities' incapacity might not (yet) have resulted in fatal mass protests that brought an end to the BN government's rule, the regime's real losses of an uncontrollable internet might be felt at the ballot box. As a matter of fact, the anti-regime sentiment that was caused by the exposure to alternative online political information does not just result in more willingness to protest, but is also likely to make Malaysians less likely to vote for BN in Malaysia's (flawed) elections. Illustrative in this regard is that, in the last four decades, the Malaysian government's worst performance in electoral terms was in the period when internet and social media usage was highest (2008 and 2013). Thus, while the regime might seem smart in permitting internet-enabled protest, the internet's facilitative role in the mobilisation chain's first step might hurt it badly in the polling stations.

The cited works on permitted or even encouraged protests in China, together with the popular idea of an authoritarian regime that nowadays crafts cyberspace to its own advantage, paints furthermore a picture that is far too rosy for the authoritarian regime when held against my Malaysian findings. These showed that, rather than an all-mighty government that strategically intervened in cyberspace when deemed necessary, the authorities only realised cyberspace was important after it had already lost some crucial political battles. When it did try to step up its game with increasing online repression, moreover, its interventions were marked by ineffectiveness, sometimes as a result of strategic mistakes, sometimes because of the socio-technical constraints it faced.

Policy Implications

The relentless surveillance in many Western democracies makes it doubtful whether the policy implications that derive from this research should be acted upon by governments that do not seem to take online freedom very seriously themselves (Bauman et al. 2014). Since the credibility and commitment of state actors is somewhat questionable, the following policy recommendations are directed at civil society that is committed to sustainable democracy and the protection of human (digital) rights.

The first point relates to the use of American-based social media platforms. While platforms such as Facebook, Twitter and YouTube are often criticised for – among other things – their hunger for user data, for sugar coating economic interests with noble mission statements, and even for undermining democracy (Sunstein 2017), these platforms might actually be important in challenging the information scarcity in authoritarian regimes. My research showed that Facebook and Twitter were not as easily blocked by the Malaysian authorities as other websites spreading alternative political information: specific content from these platforms could not be taken down, while blocking the entire platforms completely was highly costly in political terms. Hence, although encouraging the political and apolitical usage of Facebook, Twitter and YouTube might sound naïve in the light of all the platforms' shortcomings, it is likely to be a pragmatic way to raise authoritarian regimes' costs for stifling political dissent.

Crucially, the above-made point puts an incredible, state-like responsibility in the hands of a few tech companies that are not democratically elected: these companies come to decide which content is censored, how user data is protected, and who ultimately gets exposed to what information. From a normative point of view this is obviously undesirable. Yet, from a pragmatic point of view, this is the current reality we live under, making civil society's close scrutiny of these companies' activities an essential task. Persistent pressure is already put on social media platforms to be transparent about their censorship policies, their handling of user data, and the algorithms they use to optimise people's time spent on the platform (Tufekci 2015; Jackson 2014). So far these three issues are shrouded in mystery. The second point that follows from this research is that online freedom should not be understood nor pressed for in a narrow sense. It makes little sense to strive against censorship, or internet shutdowns, if no one dares to say anything critical about the state anyway. In Malaysia, the limited online repression of the authorities was only beneficial because Malaysia's mildly offline repressive climate allowed critical voices to also effectively make use of this freedom. The fight for rights in cyberspace should therefore always be part of a broader strategy that aims to improve civil

rights, and the freedom of speech and access to information in particular. The broader human rights community and digital activists should be, perhaps more than they currently are, in constant and close interaction with each other to draw on their complementary knowledge and expertise.

Third and last, in the aftermath of the (mostly 'failed') Arab Spring protests, a lot of scepticism has come to surround the idea of the internet as an enabler of positive change under authoritarian rule: perhaps internet use might facilitate short-lived collective action, but it is unlikely to foster anything positive in the long run. My research suggests, however, that an evaluation of the internet's success should not only be rated by looking at whether an internet-enabled protest succeeds in achieving its goals. Instead, civil society should take a more long-term perspective, considering whether internet use has contributed to challenging information scarcity under authoritarian rule, and appreciating more gradual changes in society. When the source is trusted, alternative political information on the internet, and specifically on social media, can change people's minds.

Appendix

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Chapter 3: Does Internet Use Facilitate Protest Under Authoritarian Regimes?

Table A1: Descriptive Statistics for the Country Level Analysis

Variables	Obs.	Mean	Std. dev.	Min	Max
Protests (CNTS)	2723	0.73	2.84	0	55
Protests (SCAD)	900	4.24	13.93	0	311
Internet use	2723	17.17	23.96	0	96.21
Regime type (FH)	2723	0.76	0.78	0	2
Regime type (PIV)	2723	0.52	0.71	0	2
Internet Controls	184	44.55	19.48	6	91
Total number of articles (logged)	2723	2.55	1.57	0	6.96
Unemployment	2723	8.71	6.07	0.3	38.7
Inflation	2723	19.61	166.87	-18.12	4734.92
GNI per capita (/1000)	2723	12.94	15.2	0.25	123.28
Elections	2723	0.28	0.45	0	1
Population size (logged)	2723	16.02	1.7	12.24	21.02
Youth bulge	2723	0.18	0.04	0.06	0.28
Urbanisation	2723	55.34	23.03	6.46	100
Arab Spring	2723	0.01	0.12	0	1

The descriptive statistics are based on the first model of testing H4 as to have the largest possible sample when all regime types are included.

Table A2: IRR's for Table Two in the Country Level Analysis

	1. Base Model	2. Polity IV Model	3. SCAD Model	4. Fixed Effects Model	5. First Differences Model	6. Arab Spring Model
	Regime type: FH	Regime type: Polity IV	Regime type: FH	Regime type: FH	Regime type: FH	Regime type: FH
	Dep. Var.: Protests (CNTS)	Dep. Var.: Protests (CNTS)	Dep. Var.: Protests (SCAD)	Dep. Var.: Protests (CNTS)	Dep. Var.: Protests (CNTS)	Dep. Var.: Protests (CNTS)
Protests (CNTS) (t-1)	0.995	1.085		0.991	1.019	0.985
Protests (SCAD) (t-1)			1.022			
Internet use (t-1)	1.071	1.042	1.032	1.055		1.032
Δ Internet use (t-1)					1.126	
Total number of articles (logged) (t-1)	1.655	1.296	1.096	1.126	1.884	1.535
Unemployment (t-1)	1.023	1.016	1.048	0.961	1.036	0.977
Inflation (t-1)	1.000	1.000	0.999	1.000	0.998	1.000
GNI per capita(/1000) (t-1)	0.953	0.991	0.980	0.926	0.983	0.945
Elections (t-1)	0.831	2.332	0.698	1.097	1.412	0.783
Population size (t-1)	1.073	1.354	1.373	1.263	0.977	1.167
Youth bulge (t-1)	46.589	0.026	279.473	2.370	0.009	0.362
Urbanisation (t-1)	1.010	0.999	1.001	1.010	1.011	1.013
Arab Spring						15.575
Constant	0.009	0.001	0.003	0.003	0.149	0.009
lnalpha	3.456	4.046	0.970		4.184	2.114

The incident rate ratio's show the factor with which the expected number of protests is likely to grow, with a 1% increase in internet use. As one can see, the factor is highest in the base model, and cut more than in half when controlled for the Arab Spring.

Table A3: Auth. Regimes with Some Limited Freedoms that were Part of the Sample (FH: 5.5)

Russia	2004-2013
Azerbaijan	1996, 2000-2003, 2006-2012
Guinea-Bissau	2012-2013
Gambia, The	2011
Mauritania	1998-2004, 2008-2013
Cote d'Ivoire	1996, 1999-2000, 2003, 2008-2009
Guinea	2006-2007
Togo	1992, 1994-1998, 2002-2006
Gabon	2009-2013
Central African Republic	2004
Chad	1999-2005
Congo, Rep.	2006-2013
Congo, Dem. Rep.	2006-2007
Uganda	2000-2001
Kenya	1998-2001
Burundi	1992, 2002-2006, 2008-2011, 2013
Angola	2002-2013
Afghanistan	2008
Tajikistan	2002-2011
Kyrgyz Republic	2000-2004, 2009
Kazakhstan	1995-2013
Bhutan	2002-2007
Pakistan	2000, 2002-2007
Maldives	2007
Nepal	2005
Thailand	2006
Cambodia	2001-2013
Brunei	2002-2010
Zimbabwe	2013
Swaziland	1996-1997, 1999-2002
Algeria	1998-2013
Tunisia	1995-2006
Iraq	2009-2011, 2013
Egypt	1999-2000, 2004-2011, 2013
Jordan	2002, 2009-2013
Yemen	1997-2002, 2009-2010

Table A3: Continued

Bahrain	2001, 2009-2010
Qatar	2005-2013
United Arab Emirates	2009-2010
Oman	2002-2013

Table A4: Auth. Regimes with the Least Freedom that were Part of the Sample (FH:6-7)

Haiti	2005
Belarus	1996-2003, 2007-2013
Azerbaijan	1995, 2013
Equatorial Guinea	1998-2013
Gambia, The	1996-2000, 2012-2013
Mali	2012
Niger	1997-1998
Cote d'Ivoire	2002, 2004-2007, 2010-2011
Guinea	2008-2009
Liberia	2003
Togo	1993
Cameroon	1998-2013
Nigeria	1997
Central African Republic	2003, 2013
Chad	2006-2013
Congo, Rep.	1997
Congo, Dem. Rep.	1997-2005, 2008-2013
Kenya	1996-1997
Burundi	1993-2001
Rwanda	1997-2002, 2012
Ethiopia	2010-2013
Angola	1997-2001
Zimbabwe	2012
Swaziland	2003-2013
Algeria	1995-1997
Tunisia	2007-2010
Libya	2003-2010
Sudan	1996-2006, 2008, 2011-2013
Iran	1995-2010, 2013
Iraq	2006-2008, 2012
Egypt	1994-1998, 2001-2003
Saudi Arabia	1996-2013
Yemen	2001, 2011-2013
Bahrain	1996-2000, 2011-2013
United Arab Emirates	2011-2013
Afghanistan	2009-2013

Table A4: Continued

Tajikistan	2012-2013
China	1994-2013
Bhutan	2000-2001
Pakistan	1999
Cambodia	1998-2000
Lao	1999-2013
Vietnam	1997-2013
Brunei	1996-2001
Indonesia	1995-1997

Countries excluded from the analysis due to missing data are, among others: Cuba, Eritrea, Syria, Saddam's Iraq, North Korea, Myanmar , Uzbekistan and Turkmenistan

Table A5: IRR's for Table Three in the Country Level Analysis

	1. Authoritarian Regimes with some Limited Freedoms	2. Authoritarian Regimes with the Least Freedom
	Regime type: FH	Regime type: FH
	Dep var. Protests (CNTS)	Dep var. Protests (CNTS)
Protests (CNTS) (t-1)	0.988	1.004
Internet use (t-1)	1.049	1.014
Total number of articles (logged) (t-1)	1.346	1.404
Unemployment (t-1)	0.943	1.027
Inflation (t-1)	0.984	1.000
GNI per capita(/1000) (t-1)	0.931	0.950
Elections (t-1)	0.558	1.002
Population size (t-1)	1.517	1.224
Youth bulge (t-1)	7.584	0.004
Urbanisation (t-1)	1.015	1.015
Arab Spring	15.948	21.143
Constant	0.000	0.009
Lnalpha	1.379	2.340

As also becomes clear from the incident rate ratio's, internet use has a much stronger effect in authoritarian regimes with some limited freedoms than in the regimes with the least freedom. Also when taken into account the incident rate ratio from model 6 in A2 (1.032) it becomes clear that the effect in the group of authoritarian regimes is primarily driven by the regimes with some limited freedoms, i.e. the ones with less extreme forms of repression. In those regimes, a 1% increase in internet use, leads to an increase in expected number of with a factor of 1.049.

Table A6: Robust. Checks for Table Three in Country Level Analysis

	1. Authoritarian Regimes with some Limited Freedoms	2. Authoritarian Regimes with the Least Freedom	3. Authoritarian Regimes with some Limited Freedoms	4. Authoritarian Regimes with the Least Freedom
	Regime type: FH	Regime type: FH	Regime type: FH	Regime type: FH
	Dep var. Protests (CNTS)	Dep var. Protests (CNTS)	Dep var. Protests (SCAD)	Dep var. Protests (SCAD)
Protests (CNTS) (t-1)	0.071	-0.009		
	-0.066	-0.034		
Protests (SCAD) (t-1)			0.01	0.034**
			-0.007	-0.015
Internet use (t-1)	0.062***	0.050**	0.039*	-0.026
	-0.019	-0.02	-0.023	-0.021
Total number of articles (logged) (t-1)	0.377***	0.419***	0.226	0
	-0.139	-0.157	-0.164	-0.126
Unemployment (t-1)	-0.026	0.084	0.068***	0.024
	-0.025	-0.056	-0.019	-0.015
Inflation (t-1)	-0.014	0	-0.007	-0.001
	-0.021	-0.001	-0.005	0
GNI per capita(/1000) (t-1)	-0.054***	-0.022	0.05	-0.043
	-0.018	-0.024	-0.057	-0.032
Elections (t-1)	-0.095	-0.151	-0.600**	-0.155
	-0.434	-0.375	-0.242	-0.247
Population size (t-1)	0.306**	0.131	0.270*	0.175
	-0.145	-0.137	-0.147	-0.137
Youth bulge (t-1)	19.448**	-4.062	8.002	12.243**
	-8.535	-7.648	-11.656	-6.165
Urbanisation (t-1)	0.030**	0.003	-0.015	0.005
	-0.012	-0.014	-0.014	-0.011
Arab Spring			0.437	1.238***
			-0.394	-0.373
Constant	-11.964***	-4.124*	-5.807*	-4.593*
	-3.32	-2.378	-3.511	-2.494
Observations	270	304	131	143

***p<0.01, **p<0.05, *p<0.1.

Arab Spring variable excluded (1&2) and using SCAD rather than CNTS data (3 &4)

When the Arab Spring control variable is excluded (1 & 2) both the authoritarian regimes with some limited freedoms as well as the ones with the least freedom face more protests because of rising internet use. This indicates that during the Arab Spring some very repressive regimes did suffer from internet-enabled protests, but that this is the exception rather than the rule. Additionally, the results of Table three do not change when using SCAD rather than CNTS data: Internet use still only has an effect in the authoritarian regimes with some limited freedoms, yet it is only significant at the 90% CI level.

Table A7: IRR's for Table Six in Country Level Analysis

	1. Model with Interaction	2. Model Polity IV	3. Model SCAD	4. Fixed Effects Model	5. First Differences Model	6. Arab Spring Model
	Regime type: FH	Regime type: Polity IV	Regime type: FH	Regime type: FH	Regime type: FH	Regime type: FH
	Dep var. Protests (CNTS)	Dep var. Protests (CNTS)	Dep var. Protests (SCAD)	Dep var. Protests (CNTS)	Dep var. Protests (CNTS)	Dep var. Protests (CNTS)
Protests (CNTS) (t-1)	1.138	1.145		1.028	1.141	1.137
Protests (SCAD) (t-1)			1.045			
Internet use (t-1)	1.007	1.008	0.996	1.013		1.006
Δ Internet use (t-1)					0.946	
Authoritarian regime type (t-1)*Internet use (t-1)	1.046	1.047	1.043	1.015		1.007
Partially Authoritarian regime type (t-1)*Internet use (t-1)	1.008	1.025	1.028	1.007		0.998
Authoritarian regime type (t-1)	0.986	0.750	1.193	0.991	1.553	0.941
Partially Authoritarian regime type (t-1)	1.204	1.087	1.374	1.360	1.374	1.272
Authoritarian regime type (t-1)*Δ Internet use (t-1)					1.174	
Partially Authoritarian regime type (t-1)*Δ Internet use (t-1)					1.048	
Total number of articles (logged) (t-1)	1.437	1.437	1.180	1.273	1.397	1.434
Unemployment (t-1)	1.013	1.015	1.030	0.987	1.016	1.000
Inflation (t-1)	1.000	1.000	0.999	1.000	1.000	1.000
GNI per capita(/1000) (t-1)	0.979	0.973	0.991	0.972	0.991	0.977

Elections (t-1)	1.249	1.272	0.802	1.028	1.302	1.261
Population size (t-1)	1.254	1.266	1.392	1.079	1.248	1.255
Youth bulge (t-1)	8.064	13.401	0.597	0.414	0.234	0.567
Urbanisation (t-1)	1.007	1.007	1.002	1.010	1.010	1.006
Arab Spring						14.876
Constant	0.001	0.001	0.005	0.029	0.003	0.003
Lnalpha	2.850	2.918	0.890		3.070	2.455

The incident rate ratio's, show relatively similar rates in the first four models. Here, a 1% increase in internet use, leads to an increase in the expected number of protest by a factor of roughly 1.045. In the fixed effects model however, the incident rate ratio is much lower with 1.015, indicating that when looking only at within country effects of internet use on protest, the estimated effect is much lower (though still significant at the 99% CI level).

Table A8: Descriptive Statistics for the Individual Level Analysis

Variables	Obs	Mean	Std. Dev.	Min	Max
Protesting	21,060	0.07	0.26	0	1
Internet use	21,060	2.24	1.66	1	5
Urbanisation	21,060	0.46	0.50	0	1
Gender	21,060	1.50	0.50	1	2
Age	21,060	40.40	15.40	18	103
Education	21,060	2.81	1.16	1	5
Employment	21,060	0.59	0.49	0	1
Political Interest	21,060	2.50	0.95	1	4
Television use	16,800	2.03	1.53	1	5
Radio use	16,769	2.94	1.67	1	5
Newspaper use	16,754	3.51	1.49	1	5
Income	7,708	2.89	1.19	1	5
Fairness Elections (country)	21,060	1.55	0.93	0	3
GNI per capita (/1000) (country)	21,060	9299.30	6610.91	1550	22423
Level of Democracy (country)	21,060	5.94	0.51	5.5	7
Corruption (country)	21,060	2.77	0.94	1.1	4.8
Repression (country)	21,060	3.66	0.65	2.5	5
Internet Penetration Rate (country)	21,060	60.54	11.40	46	83

The descriptive statistics are based on the first model of testing H1.

Table A9: Robust. Checks for Table Eight, in Individual Level Analysis With Other Media Use and Income as Controls

	1. Model with other Media Use	2. Model with Income
	Protesting	Protesting
Internet Use	0.118***	0.109***
	-0.021	-0.035
Urbanisation	0.067	0.253**
	-0.062	-0.102
Gender	-0.249***	0.084
	-0.063	-0.099
Age	0.006***	0.020***
	-0.002	-0.003
Education	0.086***	0.062
	-0.028	-0.051
Employment	0.084	-0.045
	-0.073	-0.179
Political Interest	0.359***	0.407***
	-0.036	-0.06
Television Use	0.018	
	-0.03	
Radio Use	-0.004	
	-0.019	
Newspaper Use	-0.129***	
	-0.023	
Income		-0.153***
		-0.051
Elections	-0.343**	-0.787***
	-0.138	-0.276
GDP per capita	0	0.000***
	0	0
Level of Democracy	-0.272	-1.956**
	-0.337	-0.848
Corruption	0.217**	0.754*
	-0.092	-0.41
Repression	0.969***	
	-0.191	
Internet Pen.	-0.007	
	-0.017	
Constant	-5.437***	3.687
	-1.535	-4.282
Random Effects Parameters		
Var(Internet Use)		
Between Country Variance	0.006	0
	0.012	0

Table A9: Continued

Covariance		
Between Person Variance		
Observations	16,715	7,708
Number of groups	7	5
Av. No. Of Obs per Country	2,387.90	1,541.60

***p<0.01, **p<0.05, *p<0.1.

As can be seen in the models, both including other media use or income does not affect the effect or significance of internet use, although its strength reduces somewhat. As one would expect in societies where the traditional media are strictly controlled by the government, newspaper usage decreases protest participation. Radio and television usage are not significant. A higher income decreases the likelihood of protesting.

Table A10: Internet and Protesting with Varying Levels of Freedom Under Auth. Regimes

	Protesting
Level of Democracy	-1.467***
	-0.456
Internet Use	0.385**
	-0.166
Level of Democracy*Internet Use	-0.039
	-0.028
Urbanisation	0.133**
	-0.058
Gender	-0.277***
	-0.059
Age	0.008***
	-0.002
Education	0.098***
	-0.027
Employment	0.074
	-0.068
Political Interest	0.384***
	-0.034
Elections	-0.218*
	-0.114
GDP per capita	0
	0
Corruption	-0.042
	-0.159
Repression	1.430***
	-0.223
Internet Pen.	0.017
	-0.019
Constant	-0.519
	-2.755
Random Effects Parameters	
Var(Internet Use)	
Between Country Variance	0.113

	0.069
Covariance	
Between Person Variance	
Observations	21,060
Number of groups	9
Av. No. Of Obs per Country	2,340

***p<0.01, **p<0.05, *p<0.1.

Based on the country level finding that the effect of internet use holds primarily in regimes with some limited freedoms, the coefficient of the interaction term 'level of democracy* internet use' indicates whether similar evidence could be found at the individual level. The interaction term is insignificant however, which might also be the result of the low number of authoritarian regimes in the sample (only eight different countries).

Table A11: Robust. Checks for Table Nine in Individual Level Analysis With Other Media Use and Income

	1. Model with other Media Use	2. Model with Income
	Protesting	Protesting
Online Repression	0.014	0.036
	-0.016	-0.028
Internet Use	-0.394**	-0.242*
	-0.182	-0.141
Online Repression*Internet Use	0.009***	0.006***
	-0.003	-0.002
Urbanisation	0.086	0.252**
	-0.062	-0.102
Gender	-0.256***	0.074
	-0.062	-0.099
Age	0.006**	0.020***
	-0.002	-0.003
Education	0.081***	0.058
	-0.029	-0.051
Employment	0.081	-0.039
	-0.073	-0.178
Political Interest	0.353***	0.405***
	-0.036	-0.06
Television Use	0.023	
	-0.03	
Radio Use	-0.009	
	-0.019	
Newspaper Use	-0.125***	
	-0.023	
Income		-0.164***
		-0.051
Elections	-0.402***	-0.295**
	-0.118	-0.12
GDP per capita	0.000*	0.000***
	0	0
Level of Democracy	0.152	-1.848**
	-0.286	-0.797

Table A11: Continued

Corruption	0.336***	
	-0.089	
Repression	0.576***	
	-0.19	
Internet Pen.	-0.026	
	-0.016	
Constant	-7.277***	2.274
	-1.629	-3.322
Random Effects Parameters		
Var(Internet Use)		
Between Country Variance	0	0
	0	0
Covariance		
Between Person Variance		
Observations	16,715	7,708
Number of groups	7	5
Av. No. Of Obs per Country	2,387.90	1,541.60

***p<0.01, **p<0.05, *p<0.1.

In the models, when the sample is reduced due to missing data for the included controls, increasing internet controls lead surprisingly enough to a stronger effect of internet use on protesting. This goes against the theoretical expectation that online repression decreases the internet's effect.

Average Marginal Effects of Internet Use with 95% CIs
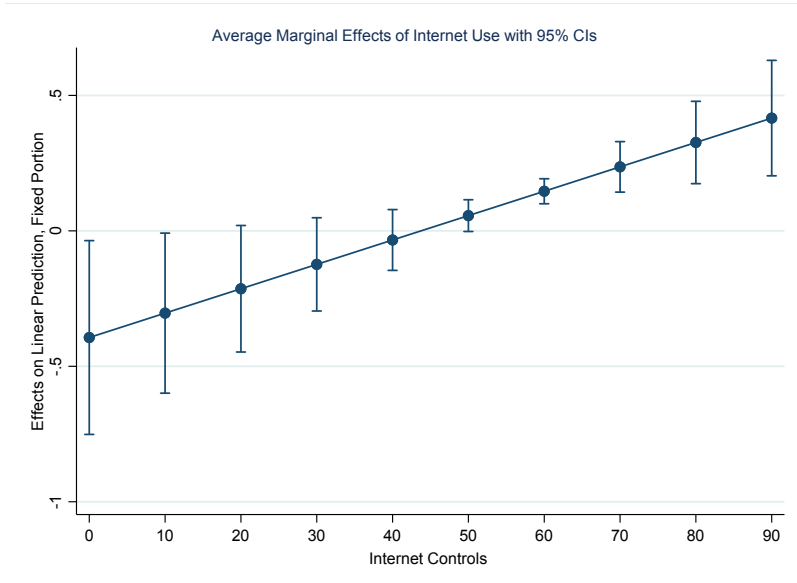
The figure above shows the marginal effects of internet use with rising online repression. As one can see, rising online repression lead to a stronger effect of internet use on protesting, especially in the countries with higher internet online repression. Important to mention here however, is that the number of included countries, seven, is very small, raising doubt on the validity of the finding.

Chapter 4: Internet Use and Sympathizing with an Anti-Government Protest Movement

Table B1: Interviewees Chapter Four

	Name	Function	Interview
1.	Tian Chua	NGO activist during Reformasi, actively involved in the planning and organization of Bersih as representative from PKR, now MP and vice-president of the PKR	2nd Interview: 23th of November 2016, KL
2.	Masjalizah Hamzah	Actvist during Reformasi, ex- treasurer of Bersih, ex-journalist, worked for CIJ (Centre for Independence Journalism)	24th of January 2016, KL
3.	Sabri Zain	Owner and writer of the online 'Reformasi Diary'.	10th of November 2016 (Skypecall)
4.	Sharaat Kuttan	Civil society activist during Reformasi, one of the founders of the news website Saksi.com, now radio DJ at BFM radio.	7th of February 2016, Petaling Jaya
5.	Medaline Chang	Ex-member of the daily secretariat for Bersih 1, now working for opposition party DAP	1st Interview: 24th of February 2016, KL
6.	Faisal Mohammed	Ex-member of the daily secretariat for Bersih 1	22th of November 2016, KL
7.	Ahmed Farouk Musa	Ex member of Bersih's steering committee, now working for the Renaissance Front.	2nd Interview: 24th of November 2016, KL
8.	Anil Netto	Bersih representative in Penang, working for Aliran one of Bersih's endorsing NGOs	15th of February 2016, Penang
9.	Toh Kin Woon	Vice Chairperson Bersih in North Malaysia, senior research fellow at the Penang institute.	14th of February 2016, Penang
10.	Andrew Khoo	Legal advisor to Bersih, working for 'Global Bersih', member of the Bar Council.	17th of February 2016, KL
11.	Hilman Idham	Organizer of workshops in universities throughout the country to mobilize for Bersih	6th of Feburaty 2016, KL
12.	Chin Huat Wong	Reformasi activist, ex- steering committee member Bersih	21st of February 2016, KL
13.	Jahabar Sadiq	Founder and Chief Editor of *The Malaysian Insider*	1st of March 2016, KL
14.	Steven Gan	Founder and Chief Editor of *Malaysiakini*	3rd of March 2016, KL
15.	Nurul Izzah Anwar	Daughter of Anwar Ibrahim and current MP for opposition party PKR.	22th of February 2016, KL
16.	Fatih Aris Omar	Journalist with extensive experience in both printed press and online journalism. Used to work for *Malaysiakini*. Currently works for The Malay Mail Online.	22th of January 2016, KL
17.	Zan Azlee	Journalist and Filmmaker	8th of February 2016, KL.

Table B2: Asian Barometer Data (2007 and 2011)

Perceived Corruption:

How widespread do you think corruption and bribe-taking are in the national government?

1=Hardly anyone is involved

2= Not a lot of officials are corrupt

3= Most officials are corrupt

4= Almost everyone is corrupt

Trust PM:

How much trust do you have in the Prime Minister?

1=None at all

2= Not very much trust

3= Quite a lot of trust

4= A great deal of trust

Trust Government:

How much trust do you have in the national government?

1= None at all

2= Not very much trust

3= Quite a lot of trust

4= A great deal of trust

Perceived Fairness elections:

On the whole, how free and fair would you say the last national election was?

1= Not free and fair

2= Free and fair but with major problems

3= Free and far but with minor problems

4= Completely free and fair

Level of Democracy:

How much of a democracy is Malaysia?

1= Not a democracy

2= an democracy with major problems

3= A democracy with minor problems

4= a full democracy

Satisfaction with government:

How satisfied are you with the current national government?

1= very dissatisfied

2= somewhat dissatisfied

3= somewhat satisfied

4= very satisfied

Internet use:

How often do you use the internet?

1= Never

2= Hardly ever

3= Several times a year

4= At least once a month

5= At least once a week

6= Almost daily

Income:

House hold income per month?

1= Lowest level (less than 5500)

2= Low level (5501 to 10000)

3= Middle level (10001 to 20000)

4= High level (20001 to 40000)

5= Highest level (40001 and above)

Education:

1=No formal education

2= Incomplete primary/elementary

3= Complete primary/elementary

4= Incomplete secondary/high school

5= Complete secondary/high school

6= Incomplete secondary/high school

7= Complete secondary/high school

8= Some university education

9= University education completed

10= Post-graduate degree

Age:

Age in years (18/100)

<u>Unemployment:</u>

Currently unemployed and seeking work?

0= No

1= Yes

<u>Urban</u>

Where does the respondent live?

1= Village or countryside

2= Small city or town

3= Regional center or other major city

4= Capital or megacity

<u>Gender</u>

1=Male

2= Female

<u>Religion</u>

0= Muslim (Wave 2007)

1= Roman Catholic/Protestant/Methodist (Wave 2007)

2= Hindu/Sikh (Wave 2007)

3= Buddhism/Taoism/Confucianism (Wave 2007)

4= Other (Wave 2007)

0= Muslim (Wave 2007)

1= Roman Catholic/Protestant (Wave 2011)

2= Hindu/Sikh (Wave 2011)

3= Buddhism (Wave 2011)

4= Other (Wave 2011)

Table B3: Internet Use and Anti-Regime Sentiment with WVS Data (2006 and 2011)

With the two waves from the World Value Survey (WVS) (2006 & 2011), I also looked into internet's effect on Malaysians' anti-regime sentiment. The first two dependent variables were ordinal variables with four categories, measuring the perceived protection of human rights and the level of confidence in the government. Both variables go from 1= low to 4=high (see specifics on all variables below). For estimating the coefficient of internet use on these two variables ordinal logit regression models were used. The last dependent variable measures the perceived level of democracy with a ten-step scale going from 1 (not democratic at all) to 10 (completely democratic), making an OLS model appropriate.

Internet use was measured a little differently over the two waves. In the 2006 wave, it was a dichotomous variable measuring whether the respondent used internet last week (0=no, 1= yes). In the 2011 wave, the frequency of internet use was measured by a 5-point ordinal scale going from 'never' to 'daily'. In my model, the two measurements were combined by adding the categories 'daily' and 'weekly' from the 2011 wave to the '1' in the 2006 wave, and the categories 'never', 'less than monthly', and 'monthly' of the 2011 wave to the 2006 wave's '0' category, making the independent variable of interest internet use a dummy variable. Although sometimes differently operationalized, the WVS data contain quite similar control variables as the Asian Barometer data (see below for specificities), although the WVS data do allow to control for ethnicity directly.

Variables Used:

Internet Use:

0= Did not use internet, email last week (in WVS 2006)

1= Did use internet email last week (in WVS 2006)

combined with:

0= Uses internet never, less than monthly, and monthly (in WVS 2011)

1= Weekly and daily (in WVS 2011)

How much respect is there for human rights in the country?

1= No respect at all

2= Not much respect

3= Fairly much respect.

4= A great deal of respect for human rights

Confidence in government in KL:

1= None at all

2= Not very much

3= Quite a lot

4= A great deal

Level of democracy of Malaysia?

1 Not at all Democratic until 10 Completely Democratic.

Income:

1=Lowest decile until 10= Highest Decile.

Age:

In absolute years

Unemployed

0=no

1=yes

Gender

1= Male

2= Female

Education:

1= No formal education until 9= University level education with degree.

Ethnicity:

1= Malay

2= Chinese/Japanese

3= Indian, Hindu, Pakistani

4= Other Malaysian groups

As compared to the Asian Barometer data, the models in the Table below show only weak support for the suggested effects. Only the perceived level of democracy is significant (at the 90% level) in the expected direction. Surprisingly, the perceived protection of human rights in the country is significant but has the opposite direction as expected. Internet users are more likely to be positive about the protection of human rights than non-users. Additionally, there is no effect of internet use on the confidence in the government. When the models are run separately for the two time periods, it turns out that the findings presented in the Table are primarily driven by the 2006 data, in the 2011 data internet use is not significant in any of the models.[258] Removing ethnicity from the equation changes the results slightly. Once removed the significance of internet use on the level of democracy increases to 99%, and the effect on confidence in the government also becomes significant at the 90% level.

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258   In the 2006 data the perceived protection of human rights is positively affected by internet use and significant at the 99% level. The effect of internet use on the perceived level of democracy is significant at the 95% level.

Table: Internet use and anti-regime sentiment

	Protection Human Rights	Confidence in Gov.	Level of Democracy
Internet Use	0.151*	-0.093	-0.175*
	-0.089	-0.088	-0.090
Education	-0.0680***	-0.0664***	0.001
	-0.022	-0.023	-0.023
Age	0.002	-0.001	0.005
	-0.003	-0.003	-0.003
Income	0.163***	0.108***	0.151***
	-0.024	-0.024	-0.025
Gender	-0.030	0.137*	0.126*
	-0.075	-0.076	-0.074
Unemployment	-0.165	0.140	0.008
	-0.261	-0.278	-0.216
Year (2011)	-0.141***	-0.0910***	0.026
	-0.017	-0.017	-0.017
Chinese/Japanese (ref: Malay)	-0.194**	-0.590***	-0.570***
	-0.091	-0.094	-0.088
Indian, Hindu Pakistani (ref: Malay)	0.361**	0.095	-0.105
	-0.147	-0.152	-0.143
Other Malaysian Groups (ref Malay)	-0.119	-0.562***	0.137
	-0.134	-0.182	-0.136
Constant cut1	-286.6***	-185.7***	
	-34.410	-34.100	
Constant cut2	-283.2***	-183.6***	
	-34.400	-34.100	
Constant cut3	-281.1***	-181.3***	
	-34.390	-34.090	
Constant			-46.930
			-33.590
Observations	2494	2492	2493
R-squared			0.042

*** p<0.01, ** p<0.05, * p<0.1

How to make sense of the weak results in the World Value Survey data? There is no reason to believe the World Value Survey data is better or worse than the Asian Barometer data (Smith, Fisher and Heath 2011), nor that the WVS surveys were held in a fundamentally different time where internet users were temporarily more satisfied with the government and the political situation in the country. The most plausible explanation for the positive effect of internet use on the perceived protection of human rights is that human rights *are* more protected than non-internet users think. The logic behind the suggested effects of internet use in this chapter is that the relative freedom online allows people to get a better sense of what really is going in the country. In many instances, for example with the elections or the corruption, this means Malaysians get more aggrieved as they find out things are worse than expected. With human rights abuses this could be the other way around, however. As the Malaysian government does not –some rare exceptions notwithstanding- commit grave human rights abuses (think of torture, extrajudicial killings or disappearances), internet users are not more likely to find information about human right abuses on the internet. In fact, the results suggest they know better than the non-internet users that human rights are relatively well-protected in the country. Admittedly, I do not have an explanation for the non-effect of internet use in the WVS data with regard to the confidence in the government. This concept lies very close to the measures of satisfaction with the government and the trust in the government that are dependent variables in the Asian Barometer data and in those models internet use does have a significant effect in the expected direction.

Table B4: Merdeka Research Center: Bersih Four and Five Data (2015 and 2016)

Sympathizing with Bersih

Complete question: What do you think of BERSIH? Are you…

0= very unfavorable/somewhat unfavorable

1=somewhat favorable/very favorable

Importance Internet as Source

Internet most important or second important media source about country's domestic and political affairs?

0=no

1=yes

Ethnicity:

1. Malay

2. Chinese

3. Indian

4. Muslim Bumiputera

5. Non-Muslim Bumiputera

Age:

1. 21-25

2. 26-30

3. 31-35

4. 36-40

5. 41-45

6. 46-50

7. 51-55

8. 56-60

9. 61 and above

Gender:

1. Male

2. Female

Urbanisation

0= Rural

1= Urban

Unemployment

0. Employed (or student, or retired)

1. Unemployed

<u>Income</u>

1. Less than RM2,000 per month

2. Between RM2,000 – RM2,999 per month

3. Between RM3,000 – RM6,999 per month

4. Between RM7,000 - RM9,999 per month

5. Above RM10,000 per month

<u>Education</u>

1. No formal education

2. Primary school

3. Secondary school

4. Diploma/Polytechnics/Teacher's College

5. Degree & above

<u>Working for the Government or a Government linked</u> company

0=no

1=yes

<u>Gender</u>

1= Male

2= Female

In analyses of Chapter 6, for the 2016 survey, the following variables are included.

<u>Have you attended a Bersih rally before?</u>

0=no

1=yes

<u>Attendance of Bersih 5</u>

0=no

1=yes

Before you decided whether to attend a BERSIH 5.0 event or not, did you have an idea about how many people would attend the event you considered going to?

0=no

1= yes

Don't know

Refuse

How did you hear about how many people would attend the event? (can tick multiple, please rank the mentioned ways by the respondent (so not all) in terms of importance: 1 is most important, 2 is a little less important, etc.)

1. Talking to people in person

2. Internet (including email, Whatsapp, Facebook, Twitter, websites, etc.)

3. Phone calls, SMS

4. Radio and Television

5. Newspaper

6. Other

Don't Know

Refuse

How did information about the expected turnout affect your own decision to attend the BERSIH 5.0 event?

1. The expected turnout was lower than I expected, which was a reason for me not to join the event

2. The expected turnout was lower than I expected, which was a reason for me to join the event

3. The expected turnout was higher than I expected which was a reason for me to join the event

4. The expected turnout was higher than I expected which was a reason for me not to join the event

5. This information did not affect my decision to attend the event

Don't know

Refuse

Before deciding to attend a BERSIH 5.0 event, did you worry about any of the following? (can tick multiple boxes, please rank the mentioned worries by the respondent (so not all) on the basis of what was most worrisome: 1 is most worrisome, 2 a little less worrisome, etc.)

1. Getting arrested (in pie chart 'Arrested or beaten up by police')

2. Getting beaten up by the police, teargas, water cannons (in pie chart 'Arrested or beaten up by police')

3. Race riots, racial violence (in pie chart 'Red shirts or racial violence')

4. Red shirts movement disturbing the event (in pie chart 'Red shirts or racial violence')

5. Losing my scholarship or place in university (in pie chart 'Losing job or scholarship')

6. Social disapproval by family or friends (in pie chart 'Other worries')

7. Losing my job/problems at work (in pie chart 'Losing job or scholarship')

8. I had no worries (in pie chart 'I had not worries')

Don't know

Refuse

Beforeyou decided whether to attend a BERSIH 5.0 event, did you have an idea about whether the red shirts movement would be present at the BERSIH 5.0 event you considered going to?

0=no

1= yes

How did you hear about whether the redshirts movement would be present? (can tick multiple,please rank the mentioned ways by the respondent (so not all) in terms of importance: 1 is most important, 2 is a little less important, etc.)

1. Talking to people in person

2. Internet (including email, Whatsapp, Facebook, Twitter, websites, etc.)

3. Phone calls, SMS

4. Radio and Television

5. Newspaper

Don't know

Refuse

How did information about the presence or absence of the red shirts movement affect your own decision to attend the BERSIH 5.0 event?

1.Information about their presence worried me and was a reason for me not to join the event

2. Information about their presence was a reason for me to join the event

3. Information about their absence was a reason for me to join the event

4. Information about their absence was a reason for me to not to join the event

5. This information did not affect my decision to attend the event

Don't know

Refuse

How did you communicate with friends and/or family about going to a BERSIH 5.0 event? (can tick multiple boxes, please rank the mentioned ways by the respondent (so not all) in terms of importance: 1 is most important, 2 is a little less important, etc.)

1. Talking to people in person

2. Internet (including email, Whatsapp, Facebook, Twitter, websites, etc.)

3. Phone calls, SMS

4. Radio and Television

5. Newspaper

Don't know

Refuse

Before and during the BERSIH 5.0 events, did you see friends and/or family showing on social media their support for BERSIH or their intention to join a BERSIH 5.0 event?

1. No

2. Yes, some

3. Yes, many

Don't know

Refuse

Table B5: Merdeka Research Center: Bersih Three Data (2012)

Satisfaction with how the police handled situation during Bersih 3

Complete question: How far are you satisfied or dissatisfied with the way police handled the situation during the recent BERSIH 3.0 rally?

0= very dissatisfied/somewhat dissatisfied

1= somewhat satisfied/very satisfied

Police instigated chaos?

Complete question: There're some scenes of chaos during the BERSIH rally, some people say that the demonstrators were out to cause trouble; others say that situation became bad after the police fired tear gas into the crowd. Who do u think is to blame for the situation?

0= Rally participants/both rally go-ers and police, others.

1= Police

Importance Internet as Source

Internet most important or second most important media source to follow country's domestic and political affairs?

0=no

1=yes

Ethnicity:

1. Malay

2. Chinese

3. Indian

Age:

1. 21-25

2. 26-30

3. 31-35

4. 36-40

5. 41-45

6. 46-50

7. 51-55

8. 56-60

9. 61 and above

Gender:

1. Male

2. Female

Urbanisation

0= Rural

1= Urban

Unemployment

0. Employed (or student, or retired)

1. Unemployed

Work for Government or Government linked company

0. No

1. Yes

Income

1. Less than RM1,500 per month

2. Between RM1,501 - RM3,000 per month

3. Between RM3,001 - RM5,000 per month

4. Above RM5,000 per month

Education

1. No formal education

2. Primary school

3. Secondary school

4. Diploma/Polytechnics/Teacher's College

5. Degree & above

Table B6: Logistical Regression Model Police During Bersih Three

	Satisfaction with Police	Police Instigated Chaos
Internet Important Media Source	-0.637***	0.590***
	(0.213)	(0.207)
Chinese (ref Malay)	-2.945***	0.829***
	(0.273)	(0.195)
Indian (ref Malay)	-1.293***	1.008***
	(0.284)	(0.296)
Age	0.00132	0.0206
	(0.0349)	(0.0356)
Gender	0.188	0.0955
	(0.169)	(0.167)
Urbanisation	-0.183	0.196
	(0.170)	(0.173)
Unemployment	1.051**	0.446
	(0.488)	(0.438)
Work for Gov	0.461	-0.0601
	(0.300)	(0.316)
Income	-0.00878	0.0706
	(0.0963)	(0.0943)
Education	-0.249**	0.148
	(0.122)	(0.117)
Constant	1.239**	-2.265***
	(0.543)	(0.544)
Observations	828	749

***p<0.01, **p<0.05, *p<0.1.

Chapter 5: Internet Use and Informing Protest Sympathizers About an Anti-Government Protest

Table C1: List of Interviewed Activists

	Name	Function	Interview
1.	Tian Chua	NGO activist during Reformasi, actively involved in the planning and organization of Bersih as representative from PKR	1st Interview: 13nd of February, KL 2nd Interview: 23th of November 2016, KL
2.	Hishammudin Rais	Ex- student leader in the 1970's, actively involved in Reformasi movement, advisor to Bersih	28th of November 2016, KL
3.	Masjalizah Hamzah	Actvist during Reformasi, ex- treasurer of Bersih	24th of January 2016, KL
4.	Saari Sungib	Ex-leader of the Islamic NGO JIM, and as part of that function actively involved in the Reformasi movement	29th of November 2016, KL
5.	Sharaat Kuttan	Civil society activist during Reformasi, one of the founders of the news website Saksi.com	7th of February 2016, Petaling Jaya
6.	Medaline Chang	Ex-member of the daily secretariat for Bersih 1	1st Interview: 24th of February 2016, KL 2nd Interview: 20th of November 2016, KL
7.	Faisal Mohammed	Ex-member of the daily secretariat for Bersih 1	22th of November 2016, KL
8.	Dr. Dzulkefly	Actively involved in the planning and organization of Bersih as representative from PAS	2nd of March 2016, KL
9.	Maria Chin Abdullah	Current chair of Bersih, ex- member of the Bersih steering committee	25th of February 2016, KL
10.	Mandeep Singh	Currently a member of the Bersih secretariat and responsible for the outreach	10th of February 2016, Petaling Jaya
11.	Nathaniel Tan	Ex- communication officer Bersih	29th of February 2016, KL
12.	Izmil Amri Ismail	Ex communication officer Bersih	24th of February 2016, KL
13.	Ahmed Farouk Musa	Ex member of Bersih's steering committee	1st Interview: 16th of February 2016, KL 2nd Interview: 24th of November 2016, KL
14.	Anil Netto	Bersih representative in Penang, working for Aliran one of Bersih's endorsing NGOs	15th of February 2016, Penang
15.	Adam Adli	Student activist, ex-member of the student movement that endorses Bersih	28th of February 2016, KL
16.	Toh Kin Woon	Vice Chairperson Bersih in North Malaysia	14th of February 2016, Penang
17.	New Sin Ye	Ex- member of Bersih's steering committee, legal advisor to Bersih	29th of February 2016, KL
18.	Andrew Khoo	Legal advisor to Bersih, working for 'Global Bersih'	17th of February 2016, KL
19.	Hilman Idham	Organizer of workshops in universities throughout the country to mobilize for Bersih	6th of Feburary 2016, KL
20.	Anne Lasimbang	Ex- Vice Chairperson Bersih in Sabah	2nd of February 2016, KL (Skypecall)
21.	Chin Huat Wong	Reformasi activist, ex- steering committee member Bersih	21st of February 2016, KL
22.	Anonymous[3]	Member of the daily secretariat for Bersih 1	12th of February 2016, KL
23.	Sabri Zain	Owner and writer of the online 'Reformasi Diary'	1th of November 2016, KL

Table C2: Merdeka Research Center: Bersih Two Data (2011)

<u>Knowing or understanding the demands of Bersih</u>

Complete question: In July 9 2011, Bersih, which was formed by a coalition of NGOs held a public rally to demand for clean and fair election in Kuala Lumpur. How much do you understand or know about the demands of Bersih?

0=Not very much/Not at all

1= A fair amount/A great deal

<u>Internet use :</u>

1. Never

2. Rarely

3. Every month or so

4. A few times per month

5. At least once per week

6. Almost every day

7. Several hours per day

<u>Ethnicity:</u>

1. Malay

2. Chinese

3. Indian

4. Bumiputera-Muslim

5. Bumiputera Non-Muslim

6. Others

<u>Age:</u>

1. 21-25

2. 26-30

3. 31-35

4. 36-40

5. 41-45

6. 46-50

7. 51-55

8. 56-60

9. 61 and above

Gender:

1. Male

2. Female

Urbanisation

1. Countryside

2. Small town or township

3. City center

4. Capital city

Unemployment

0. Employed (or student, or retired)

1. Unemployed

Work for Government or Government linked company

0. No

1. Yes

Income

1. Less than RM1,500 per month

2. Between RM1,501 - RM3,000 per month

3. Between RM3,001 - RM5,000 per month

4. Above RM5,000 per month

Education

1. No formal education

2. Primary school

3. Secondary school

4. Diploma/Polytechnics/Teacher's College

5. Degree & above

Table C3: Knowing and Understanding the Bersih Demands

	Knowing and understanding demands Bersih
Internet use	0.134***
	(0.0380)
Chinese (ref:Malay)	-0.271
	(0.184)
Indian (ref: Malay)	0.424*
	(0.255)
Bumiputera -Muslim (ref:Malay)	-1.151***
	(0.292)
Bumiputera Non-Muslim (ref:Malay)	-1.027***
	(0.296)
Age	0.131***
	(0.0321)
Gender	-0.729***
	(0.138)
Urbanisation	0.0476
	(0.144)
Unemployment	-0.155
	(0.338)
Work for Gov	0.197
	(0.244)
Income	0.317***
	(0.0811)
Education	0.242**
	(0.101)
Constant	-1.414***
	(0.466)
Observations	1,019

***p<0.01, **p<0.05, *p<0.1.

The table shows that internet use is positive and significant at the 99% CI in predicting the dependent variable 'knowing and understanding Bersih's demands'. Surprisingly, ethnicity and urbanization are not significant in explaining the dependent variable.

Chapter 7: Scaling up the Malaysian Findings

Table D1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Trust in State Institutions	60,206	0.003	0.74	-2.055	1.557
(Perceived) Level of Democracy	56,909	-0.024	0.891	-1.754	1.759
(Perceived) Level of Corruption	46,679	0.6	0.49	0	1
(Perceived) Fairness Elections	49,903	0.649	0.477	0	1
Internet Use	60,206	2.165	1.635	1	5
Online Repression (country)	60,206	45.646	15.684	26	83
Urbanisation	60,206	0.458	0.498	0	1
Gender	60,206	1.502	0.5	1	2
Age	60,206	39.044	15.003	-1	108
Education	60,206	2.586	1.167	1	5
Employment	60,206	0.54	0.498	0	1
Television use	48,207	2.359	1.68	1	5
Radio use	48,213	2.475	1.623	1	5
Newspaper use	48,078	3.654	1.482	1	5
Income	17,689	2.623	1.186	1	5
Political Interest	60,206	2.574	1.002	1	4
Fairness Elections (country)	60,206	4.901	3.606	0	12
GNI per capita (country)	60,206	8360.104	6484.281	3.6	30500
Level of Democracy (country)	60,206	4.516	1.394	1.5	7
Corruption (country)	60,206	3.214	0.975	1.1	5.4
Repression (country)	60,206	3.197	0.768	1	5
Internet Penetration Rate (country)	60,206	32.20	15.02	5.40	83.70

Table D2: Robust. Checks for Table Two (H1)

Other Media Use Included

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Internet Use	-0.017**	-0.009	0.041***	-0.043***
	-0.006	-0.008	-0.01	-0.009
Urbanisation	-0.141***	-0.090***	0.168***	-0.156***
	-0.024	-0.031	-0.028	-0.026
Gender	0.058***	0.064***	-0.068***	0.137***
	-0.016	-0.021	-0.024	-0.024
Age	0.002***	0.000	0	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.043***	-0.035***	0.063***	0.010
	-0.009	-0.012	-0.014	-0.013
Employment	0.001	0.023	0.072***	0.030
	-0.011	-0.015	-0.025	-0.024
Political Interest	0.039***	0.055***	0	0.038***
	-0.012	-0.011	-0.012	-0.012
Television	0.004	-0.011	0.005	-0.003
	-0.006	-0.009	-0.01	-0.009
Radio	-0.005	-0.024***	-0.005	0.005
	-0.005	-0.009	-0.009	-0.008
Newspaper	-0.005	0.006	0.006	0.029***
	-0.007	-0.006	-0.011	-0.010
Elections	-0.019	-0.012	-0.047	0.321***
	-0.062	-0.080	-0.036	-0.04
GDP per Capita	0	0.000	0.000	-0.000***
	0	0.000	0.000	0.000
Level of Democracy	0.115	0.260**	-0.352***	-0.827***
	-0.118	-0.103	-0.105	-0.128
Corruption	0.583***	0.998***	-0.512***	2.441***
	-0.2	-0.175	-0.110	-0.104
Repression	-0.124	-0.310**	0.674***	0.004
	-0.153	-0.157	-0.068	-0.064
Internet Pen.	-0.004	-0.006	0.020***	0.023***
	-0.004	-0.004	-0.004	-0.005
Constant	-2.077***	-3.126***	1.093	-5.116***
	-0.776	-0.843	-0.696	-1.245
Random Effects Parameters				
Var (Internet Use)	0.001	0.0022		
	0.000	0.0006		
Between Country Variance	0.311	0.8760	0.3679	10.055
	0.130	0.2912	0.2050	4.298

Table D2: Continued

Covariance	-0.007	-0.0110		
	0.006	0.0109		
Between Person Variance	0.481	0.7316		
	0.025	0.0367		
Observations	48,001	45,080	34,208	47,268
Country	17	17	11	19
Av. No. of Obs. per Country	2823.6	2,651.8	3,109.8	3,062.20

***p<0.01, **p<0.05, *p<0.1.

Once the variables measuring other media use are added to the models, and the Asian countries are dropped from the analysis as a consequence, the effect of internet use becomes insignificant in explaining the perceived level of democracy.

Income Included

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Internet Use	-0.024***	-0.024***	0.092***	-0.073***
	-0.008	-0.008	-0.018	-0.021
Urbanisation	-0.142***	-0.084***	0.172***	-0.268***
	-0.016	-0.032	-0.051	-0.063
Gender	0.061***	0.034**	-0.114**	0.208***
	-0.019	-0.017	-0.046	-0.057
Age	0	0.000	-0.003*	0.009***
	-0.001	-0.001	-0.002	-0.002
Education	-0.035***	-0.050***	0.050**	-0.046
	-0.009	-0.014	-0.025	-0.03
Employment	0.018	0.025	-0.067	-0.054
	-0.021	-0.018	-0.051	-0.065
Political Interest	0.075***	0.056***	-0.013	0.120***
	-0.018	-0.016	-0.026	-0.033
Income	0.006	0.046*	0.048**	-0.077***
	-0.018	-0.027	-0.02	-0.025
Elections	0.043***	0.020	-0.065**	-0.009
	-0.012	-0.017	-0.028	-0.029
GDP per Capita	-0.000**	0.000	0	-0.000***
	0	0.000	0	0
Level of Democracy	0.235***	0.064	-0.442***	0.098
	-0.07	-0.096	-0.094	-0.092
Corruption	0.006	0.016	-0.073	-0.05
	-0.098	-0.096	-0.39	-0.223
Repression	-0.085	-0.032	0.505***	-1.231***
	-0.1	-0.14	-0.156	-0.114

Table D2: Continued

Internet Pen.	0.004	0.006	0.007	0.012**
	-0.005	-0.005	-0.011	-0.006
Constant	-0.896**	-0.221	-0.335	5.459***
	-0.420	-0.358	-0.809	-0.67
Random Effects Parameters				
Var (Internet Use)	0.001	0.001		
	0.000	0.000		
Between Country Variance	0.057	0.131	0.0099	10.0552
	0.026	0.049	0.0080	4.2977
Covariance	-0.004	-0.009		
	0.003	0.006		
Between Person Variance	0.351	0.496		
	0.030	0.057		
Observations	17,689	17,209	9,421	47,268
Country	12	12	7	19
Av. No. of Obs. per Country	1474.1	1,434.1	1,345.9	2487.8

***$p<0.01$, **$p<0.05$, *$p<0.1$.

When income is included in the models, and the sample size shrinks as a result, the effect of internet use remains significant and only increases in terms of strength.

When running the same models from Table two, but now interacting internet use with regional dummies (models presented below), it shows that especially in Asian authoritarian countries internet use decreases the perceived level of democracy and the perceived fairness of the elections, while internet use increases the perceived corruption particularly in Asian authoritarian states. In addition, running the standard models from Table two without the Asian countries shows that internet use no longer significantly predicts the perceived fairness level of democracy. By contrast, compared to the other regions, internet use has a more positive effect on the perceived fairness of the elections in Sub-Saharan Africa, and a more negative effect on the perceived level of corruption in both authoritarian regimes from Sub-Saharan Africa and the Middle East.

Table D3: Further Analysis into Asia (H1)

Interacting Internet use with Asian Dummy

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Internet Use	-0.018**	-0.007	0.038***	-0.043***
	-0.008	-0.01	-0.009	-0.009
Asia	-0.002	0.209	-1.439***	2.636**
	-0.301	-0.352	-0.256	-1.148
Asia*Internet Use	-0.009	-0.029*	0.080***	-0.076***
	-0.011	-0.016	-0.015	-0.018
Urbanisation	-0.149***	-0.095***	0.177***	-0.185***
	-0.026	-0.028	-0.023	-0.023
Gender	0.050***	0.052***	-0.072***	0.151***
	-0.013	-0.016	-0.021	-0.021
Age	0.002**	0.000	-0.001	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.042***	-0.034***	0.058***	-0.008
	-0.007	-0.010	-0.012	-0.011
Employment	-0.004	0.019*	0.042*	0.013
	-0.008	-0.010	-0.022	-0.022
Political Interest	0.043***	0.059***	-0.001	0.044***
	-0.011	-0.010	-0.011	-0.011
Elections	-0.025	-0.024	-0.055***	0.01
	-0.034	-0.037	-0.019	-0.028
GDP per Capita	0.000	0	0.000**	-0.000***
	0.000	0	0	0
Level of Democracy	0.138	0.286***	-0.376***	-0.724***
	-0.124	-0.102	-0.083	-0.132
Corruption	0.596***	1.033***	-0.465***	2.096***
	-0.228	-0.201	-0.094	-0.099
Repression	-0.122	-0.293*	0.651***	-0.009
	-0.153	-0.154	-0.065	-0.063
Internet Pen.	-0.004	-0.005	0.018***	0.027***
	-0.004	-0.004	-0.003	-0.005
Constant	-2.118***	-3.486***	1.054**	-1.464
	-0.765	-0.638	-0.492	-0.972
Random Effects Parameters				
Var (Internet Use)				
Between Country Variance	0.326	0.733	0.2155	5.1665
	0.125	0.190	0.0888	2.1727
Covariance				
Between Person Variance				

Table D3: C continued

Observations	60,206	56,909	45,206	47,268
Country	24	24	18	19
Av. No. of Obs. per Country	2508.6	2,371.2	2,511.4	2478.8

***p<0.01, **p<0.05, *p<0.1.

Compared to the other regions internet use has a stronger effect in Asian authoritarian regimes on the perceived level of democracy and the perceived fairness of the elections, and a more positive on the perceived level of corruption. In other words, the effect of internet use on anti-regime sentiment is stronger in Asian authoritarian regimes.

Excluding Asia

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Internet Use	-0.016**	-0.008	0.038***	-0.051***
	-0.008	-0.009	-0.01	-0.009
Urbanisation	-0.149***	-0.092***	0.162***	-0.164***
	-0.030	-0.034	-0.027	-0.025
Gender	0.054***	0.062***	-0.064***	0.143***
	-0.016	-0.02	-0.024	-0.023
Age	0.002***	0.000	0	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.041***	-0.033**	0.060***	0.003
	-0.009	-0.013	-0.014	-0.013
Employment	-0.007	0.019	0.073***	0.02
	-0.008	-0.012	-0.025	-0.024
Political Interest	0.040***	0.059***	0	0.031***
	-0.012	-0.011	-0.012	-0.012
Elections	-0.034	-0.035	-0.045	0.315***
	-0.066	-0.085	-0.035	-0.039
GDP per Capita	0.000	0	0	-0.000***
	0.000	0	0	0
Level of Democracy	0.152	0.304***	-0.365***	-0.847***
	-0.123	-0.098	-0.104	-0.128
Corruption	0.590***	1.028***	-0.512***	2.425***
	-0.213	-0.2	-0.109	-0.103
Repression	-0.125	-0.298*	0.679***	0.011
	-0.155	-0.157	-0.067	-0.064
Internet Pen.	-0.004	-0.006	0.020***	0.025***
	-0.004	-0.004	-0.004	-0.004
Constant	-2.250***	-3.591***	1.173*	-4.732***
	-0.826	-0.864	-0.692	-1.23
Random Effects Parameters				

Table D3: C continued

Var (Internet Use)				
Between Country Variance	0.280	0.813	0.366	9.836
	0.107	0.249	0.201	4.204
Covariance				
Between Person Variance				
Observations	48,311	45,362	34,424	37,062
Country	17	17	11	12
Av. No. Of Obs. Per Country	2841.8	2,668.4	3,129.5	3,088.5

***p<0.01, **p<0.05, *p<0.1.

The exclusion of the Asian countries rather than the inclusion of the controls explains the change in results on the perceived level of democracy. Here the significance of internet use has disappeared.

Table D4: Further Analysis into Sub-Saharan Africa (H1)

Interacting internet use with Sub-Saharan Africa

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Internet Use	-0.017**	-0.014	0.080***	-0.089***
	-0.008	-0.01	-0.011	-0.011
Sub-Saharan Africa	0.585	0.651	0.577	-1.653
	-0.447	-0.581	-0.402	-1.31
Sub-Saharan Africa*Internet Use	-0.007	0.003	-0.034**	0.064***
	-0.020	-0.025	-0.014	-0.013
Urbanisation	-0.148***	-0.094***	0.178***	-0.193***
	-0.024	-0.027	-0.023	-0.023
Gender	0.050***	0.052***	-0.071***	0.150***
	-0.013	-0.016	-0.021	-0.021
Age	0.002***	0.001	-0.001	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.042***	-0.035***	0.056***	-0.007
	-0.007	-0.01	-0.012	-0.011
Employment	-0.004	0.020*	0.038*	0.015
	-0.009	-0.011	-0.022	-0.022
Political Interest	0.043***	0.059***	-0.002	0.046***
	-0.011	-0.01	-0.011	-0.011
Elections	-0.030	-0.032	-0.046**	0.013
	-0.036	-0.04	-0.021	-0.029

Table D4: Continued

GDP per Capita	0.000	0	0	-0.001***
	0	0	0	0
Level of Democracy	0.155	0.305***	-0.361***	-0.765***
	-0.117	-0.098	-0.097	-0.133
Corruption	0.590***	1.033***	-0.557***	2.150***
	-0.221	-0.195	-0.096	-0.099
Repression	-0.124	-0.298*	0.702***	-0.023
	-0.152	-0.153	-0.064	-0.064
Internet Pen.	-0.004	-0.006	0.018***	0.028***
	-0.004	-0.004	-0.003	-0.005
Constant	-2.453***	-3.797***	0.378	0.422
	-0.831	-0.776	-0.625	-1.288
Random Effects Parameters				
Var (Internet Use)				
Between Country Variance	0.293	0.669	0.538	6.789
	0.114	0.666	0.194	2.768
Covariance				
Between Person Variance				
Observations	60,206	56,909	45,206	47,268
Country	24	24	18	19
Av. No. of Obs. per Country	2,508,6	2,371.2	2,511.4	2,487.8

***p<0.01, **p<0.05, *p<0.1.

The effect of internet use on anti-regime sentiment is lower in Sub-Saharan Africa compared to the other regions when anti-regime sentiment is operationalized as the perceived level of corruption and the perceived fairness of the elections. For the other two operationalizations there is no significant difference between Sub-Saharan Africa and the others.

Table D5: Further Analysis into Middle-East (H1)

Interacting internet use with Middle-East

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Internet Use	-0.019**	-0.012	0.070***	-0.049***
	-0.009	-0.01	-0.009	-0.009
Middle East	-0.574**	-1.201***	1.160***	-1.488
	-0.247	-0.327	-0.413	-1.33
Middle East*Internet Use	-0.002	0	-0.057***	-0.023
	-0.017	-0.023	-0.018	-0.014
Urbanisation	-0.149***	-0.094***	0.172***	-0.187***
	-0.025	-0.027	-0.023	-0.023
Gender	0.050***	0.052***	-0.072***	0.150***
	-0.013	-0.016	-0.021	-0.021
Age	0.002**	0.001	-0.001	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.042***	-0.035***	0.061***	-0.008
	-0.008	-0.011	-0.012	-0.011
Employment	-0.004	0.020**	0.035	0.018
	-0.008	-0.01	-0.022	-0.022
Political Interest	0.043***	0.059***	-0.002	0.046***
	-0.011	-0.01	-0.011	-0.011
Elections	-0.025	-0.027	-0.038*	-0.007
	-0.033	-0.036	-0.02	-0.029
GDP per Capita	0	0	0	-0.000***
	0	0	0	0
Level of Democracy	0.139	0.291***	-0.398***	-0.686***
	-0.127	-0.11	-0.093	-0.14
Corruption	0.598***	1.031***	-0.514***	2.115***
	-0.222	-0.188	-0.093	-0.1
Repression	-0.122	-0.293*	0.689***	-0.028
	-0.152	-0.152	-0.063	-0.064
Internet Pen.	-0.003	-0.005	0.018***	0.026***
	-0.004	-0.004	-0.003	-0.005
Constant	-2.000***	-3.225***	0.656	-0.509
	-0.732	-0.593	-0.5330	-1.0360
Random Effects Parameters				
Var (Internet Use)				
Between Country Variance	0.265	0.530	0.412	5.463
	0.139	0.194	0.147	2.576
Covariance				

Between Person Variance				
Observations	60,206	56,909	45,206	47,268
Country	24	24	18	19
Av. No. of Obs. per Country	2508.6	2,371.2	2,511.4	2,487.8

***p<0.01, **p<0.05, *p<0.1.

In the Middle East, like Sub-Saharan Africa, the effect of internet use on anti-regime sentiment is lower compared to the other regions, when anti-regime sentiment is operationalized as the perceived level of corruption. For the other three operationalizations there is no significant difference between the Middle-East and the others.

Table D6: Further Analysis into Post-Soviet Region (H1)

Interacting internet use with post-Soviet Region

	Trust in State Institutions
Internet Use	-0.024***
	-0.008
Soviet Union	-0.221
	-0.513
Soviet Union*Internet Use	0.025
	-0.017
Urbanisation	-0.149***
	-0.025
Gender	0.050***
	-0.013
Age	0.002***
	-0.001
Education	-0.041***
	-0.007
Employment	-0.003
	-0.008
Political Interest	0.043***
	-0.011
Elections	-0.027
	-0.036
GDP per Capita	0
	0
Level of Democracy	0.146
	-0.122
Corruption	0.597***

Table D6: Continued

	-0.23
Repression	-0.125
	-0.153
Internet Pen.	-0.004
	-0.004
Constant	-2.151***
	-0.757
Random Effects Parameters	
Var (Internet Use)	
Between Country Variance	0.338
	0.137
Covariance	
Between Person Variance	
Observations	60,206
Country	24
Av. No. of Obs. per Country	2508.6

***p<0.01, **p<0.05, *p<0.1.

The post-Soviet Region has no different effect of internet use on anti-regime sentiment compared to the other regions.

Table D7: Robust. Checks for Table Three (H2)

Direct Effects of Online Repression

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Internet Use	-0.020***	-0.015**	0.062***	-0.053***
	-0.005	-0.007	-0.008	-0.008
Urbanisation	-0.143***	-0.089***	0.173***	-0.190***
	-0.021	-0.026	-0.023	-0.023
Gender	0.051***	0.052***	-0.071***	0.152***
	-0.013	-0.016	-0.021	-0.021
Age	0.002**	0.000	-0.001	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.042***	-0.034***	0.058***	-0.009
	-0.008	-0.010	-0.012	-0.011
Employment	0.003	0.026**	0.037*	0.02
	-0.009	-0.013	-0.022	-0.022
Political Interest	0.043***	0.060***	-0.004	0.043***
	-0.011	-0.010	-0.011	-0.011
Elections	-0.040	-0.039	-0.012	0.180***

	-0.039	-0.042	-0.022	-0.038
GDP per Capita	0.000	0.000	0.000*	-0.001***
	0.000	0.000	0.000	0.000
Level of Democracy	-0.068	0.096	0.052	-0.288*
	-0.178	-0.148	-0.136	-0.152
Corruption	0.626***	1.043***	-0.662***	2.002***
	-0.222	-0.191	-0.106	-0.099
Repression	-0.019	-0.21	0.517***	-0.545***
	-0.113	-0.137	-0.078	-0.106
Internet Pen.	-0.005	-0.007*	0.018***	0.054***
	-0.003	-0.004	-0.003	-0.006
Online Repression	0.038	0.037	-0.075***	-0.207***
	-0.036	-0.035	-0.024	-0.033
Constant	-3.164**	-4.368***	2.917***	9.695***
	-1.566	-1.526	-1.081	-2.212
Random Effects Parameters				
Var (Internet Use)	0.010	0.002		
	0.000	0.000		
Between Country Variance	0.330	0.736	0.779	34.291
	0.141	0.158	0.469	13.371
Covariance	0.000	0.001		
	0.004	0.010		
Between Person Variance	0.445	0.661		
	0.024	0.040		
Observations	60,206	56,909	45,206	47,268
Number of groups	24	24	18	19
Av. No. Of Obs. Per Country	2508.6	2371.2	2511.4	2487.8

***p<0.01, **p<0.05, *p<0.1.

Adding online repression as a control does not change the effect of internet use. As one would logically expect, online repression leads to a lower perceived corruption. However, it does not have a significant effect on either trust in state institutions or on the perceived level of democracy. Counterintuitively moreover, higher online repression lead to lower perceived fairness of the elections.

Other Media Use Included

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Online Repression	0.083	0.060	-0.264***	-0.072**
	-0.054	-0.043	-0.041	-0.034
Internet use	0.029	0.055	0.015	0.156***
	-0.029	-0.035	-0.028	-0.027
Online Repression*Internet Use	-0.001	-0.001*	0.001	-0.005***
	-0.001	-0.001	-0.001	-0.001
Urbanisation	-0.146***	-0.096***	0.165***	-0.158***
	-0.027	-0.032	-0.028	-0.026
Gender	0.056***	0.064***	-0.066***	0.140***
	-0.016	-0.021	-0.024	-0.024
Age	0.002***	0.000	0.000	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.043***	-0.035***	0.064***	0.011
	-0.008	-0.011	-0.014	-0.013
Employment	-0.008	0.015	0.077***	0.035
	-0.010	-0.013	-0.025	-0.024
Political Interest	0.041***	0.056***	-0.008	0.037***
	-0.012	-0.011	-0.012	-0.012
Television	-0.057	-0.048	0.006	0.344***
	-0.063	-0.079	-0.045	-0.042
Radio	0.007	-0.007	0.009	0
	-0.007	-0.012	-0.010	-0.009
Newspaper	-0.004	-0.024***	-0.011	0.001
	-0.004	-0.008	-0.009	-0.008
Elections	-0.004	0.008	0.007	0.029***
	-0.008	-0.007	-0.011	-0.010
GDP per Capita	0.000*	0.000	0	-0.000***
	0.000	0.000	0.000	0.000
Level of Democracy	-0.084	0.085	0.486***	-0.637***
	-0.171	-0.140	-0.168	-0.158
Corruption	0.722***	1.106***	-1.033***	2.424***
	-0.223	-0.208	-0.136	-0.110
Repression	0.072	-0.153	0.106	-0.243**
	-0.097	-0.109	-0.115	-0.110

Table D7: Continued

Internet Pen.	-0.013***	-0.010***	0.039***	0.032***
	-0.005	-0.003	-0.011	-0.006
Constant	-6.409**	-5.813***	12.378***	-1.551
	-2.495	-1.968	-2.521	-2.066
Random Effects Parameters				
Var (Internet Use)				
Between Country Variance	1.8963	1.0661	7.7069	13.8049
	1.2946	0.3912	4.6116	6.1090
Covariance				
Between Person Variance				
Observations	48,001	45,080	34,208	36,830
Country	17	17	11	12
Av. No. of Obs. per Country	2,823.60	2651.8	3,109.80	3,069.20

***p<0.01, **p<0.05, *p<0.1.

Income Included

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Online Repression	0.014*	0.024**	-0.027***	0.015**
	-0.008	-0.010	-0.005	-0.007
Internet use	0.023	0.04	0.025	-0.100*
	-0.021	-0.034	-0.041	-0.053
Online Repression *Internet Use	-0.001**	-0.001*	0.001*	0
	0.000	-0.001	-0.001	-0.001
Urbanisation	-0.140***	-0.081***	0.171***	-0.269***
	-0.015	-0.031	-0.051	-0.063
Gender	0.061***	0.036**	-0.113**	0.200***
	-0.019	-0.017	-0.046	-0.057
Age	0	0.000	-0.003	0.009***
	-0.001	-0.001	-0.002	-0.002
Education	-0.039***	-0.056***	0.054**	-0.048
	-0.008	-0.013	-0.025	-0.030

Table D7: Continued

Employment	0.015	0.021	-0.054	-0.073
	-0.022	-0.021	-0.051	-0.065
Political Interest	0.076***	0.056***	-0.010	0.112***
	-0.019	-0.017	-0.026	-0.033
Income	0.024*	-0.013	-0.041*	-0.015
	-0.014	-0.02	-0.024	-0.029
Elections	0.004	0.043	0.049**	-0.077***
	-0.018	-0.027	-0.020	-0.025
GDP per Capita	-0.000***	-0.000**	0.000***	-0.000***
	0.000	0.000	0.000	0.000
Level of Democracy	0.090	-0.192	-0.185**	-0.044
	-0.132	-0.165	-0.084	-0.109
Corruption	-0.025	-0.07	-0.789***	0.305
	-0.125	-0.137	-0.232	-0.273
Repression	-0.093	-0.035	0.755***	-1.433***
	-0.067	-0.108	-0.105	-0.151
Internet Pen.	0.008	0.015**	0.017***	0.011*
	-0.006	-0.007	-0.005	-0.006
Constant	-0.809*	-0.059	0.64	5.247***
	-0.466	-0.478	-0.605	-0.705
Random Effects Parameters				
Var (Internet Use)				
Between Country Variance	0.0302	0.0630	0.0000	0.0000
	0.0158	0.0226	0.0000	0.0000
Covariance				
Between Person Variance				
Observations	17,689	17209	9,421	9,075
Country	12	12.0	7	7
Av. No. of Obs. per Country	1,474.10	1,474.10	1,345.90	1,296.40

***p<0.01, **p<0.05, *p<0.1.

Even when the models from Table 3 are run with the controls for other media (see below), and when income is added as a control, the interaction term predicting the perceived level of democracy remains significant and negative. The findings for trust in state institutions is almost as robust. Here the interaction term only becomes insignificant when the media controls are added. Hence,

high internet controls with increasing individual internet use indeed surprisingly seems to result in a negative effect on the perceived level of democracy and trust in state institutions.

Table D8: Further Analysis into Asia (H2)

Only Asia

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	Logit
Online Repression	–0.014***	0.003***	–0.025***	0.017**
	0.000	–0.001	–0.005	–0.007
Internet use	–0.020	0.003	0.050	–0.124**
	–0.014	–0.027	–0.038	–0.049
Online Repression *Internet Use	–0.000*	–0.001	0.001*	0.001
	0.000	0.000	–0.001	–0.001
Urbanisation	–0.142***	–0.106***	0.210***	–0.331***
	–0.030	–0.008	–0.046	–0.056
Gender	0.031	0.009	–0.108**	0.188***
	–0.019	–0.009	–0.043	–0.052
Age	–0.001	0.001*	–0.002	0.007***
	–0.001	–0.001	–0.002	–0.002
Education	–0.050***	–0.037***	0.050**	–0.076***
	–0.011	–0.014	–0.022	–0.027
Employment	0.000	0.013	–0.061	–0.068
	–0.023	–0.020	–0.047	–0.060
Political Interest	0.059***	0.058***	–0.010	0.115***
	–0.016	–0.022	–0.025	–0.03
Elections	0.084***	0.042***	–0.037	–0.019
	–0.001	–0.002	–0.023	–0.028
GDP per Capita	0.000***	–0.000***	0.000***	–0.000***
	0	0.000	0.000	0.000
Level of Democracy	0.530***	0.219***	–0.166**	–0.098
	–0.006	–0.010	–0.082	–0.106
Corruption	–0.675***	–0.062*	–0.739***	0.469*
	–0.023	–0.034	–0.221	–0.261
Repression	–0.038***	–0.253***	0.717***	–1.485***
	–0.011	–0.017	–0.099	–0.144
Internet Pen.	0.014***	0.005***	0.015***	0.009

Table D8: Continued

Constant	-0.001	-0.001	-0.005	-0.006
	0.128***	0.021	0.585	5.129***
	-0.046	-0.096	-0.575	-0.673
Random Effects Parameters				
Var (Internet Use)	11895.0000			
	7.0000			
Between Country Variance	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000
Covariance				
Between Person Variance				
Observations	11,895	11,547	10,782	10,206
Country	7	7	7	7
Av. No. of Obs. per Country	1,699.3	1,649.6	1,540.3	1,458.0

***p<0.01, **p<0.05, *p<0.1.

Excluding Asia

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Online Repression	0.088	0.070	-0.267***	-0.068**
	-0.055	-0.045	-0.040	-0.034
Internet use	0.029	0.056	0.006	0.149***
	-0.028	-0.034	-0.027	-0.027
Online Repression *Internet Use	-0.001*	-0.001*	0.001	-0.005***
	-0.001	-0.001	-0.001	-0.001
Urbanisation	-0.149***	-0.093***	0.156***	-0.169***
	-0.030	-0.033	-0.027	-0.025
Gender	0.054***	0.061***	-0.064***	0.145***
	-0.016	-0.020	-0.024	-0.023
Age	0.002***	0.000	0.000	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.042***	-0.034**	0.060***	0.005
	-0.010	-0.013	-0.014	-0.013

Table D8: Continued

Employment	-0.008	0.019	0.079***	0.025
	-0.008	-0.013	-0.025	-0.024
Political Interest	0.041***	0.060***	-0.007	0.031***
	-0.012	-0.011	-0.012	-0.012
Elections	-0.062	-0.053	0.011	0.337***
	-0.065	-0.083	-0.045	-0.042
GDP per Capita	0.000**	0.000	0	-0.000***
	0	0.000	0.000	0.000
Level of Democracy	-0.091	0.056	0.461***	-0.669***
	-0.168	-0.150	-0.167	-0.157
Corruption	0.726***	1.141***	-1.037***	2.418***
	-0.224	-0.220	-0.135	-0.109
Repression	0.082	-0.133	0.105	-0.228**
	-0.099	-0.112	-0.113	-0.110
Internet Pen.	-0.014***	-0.011***	0.041***	0.033***
	-0.005	-0.004	-0.011	-0.006
Constant	-6.708***	-6.479***	12.749***	-1.351
	-2.555	-2.127	-2.513	-2.043
Random Effects Parameters				
Var (Internet Use)				
Between Country Variance	2.237	1.316	8.178	13.533
	1.342	0.583	4.845	5.995
Covariance				
Between Person Variance				
Observations	48,311	45,362	34,424	37,062
Country	17	17	11	12
Av. No. of Obs. per Country	2,841.8	2,668.4	3,129.5	3,088.5

***p<0.01, **p<0.05, *p<0.1.

For the perceived level of corruption the Asian countries seem to be responsible for the counterintuitive result. Online repression only leads to a stronger positive effect of internet use on the perceived level of corruption once the Asian countries are included in the analysis. Once the Asian states are excluded, the interaction term predicting the perceived fairness of the elections becomes negative and significant, indicating that the counterintuitive effect of online repression on this operationalization of anti-regiment is less present in Asia.

Table D9: Further Analysis into Sub-Saharan Africa (H2)

Only Sub-Saharan Africa:

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Online Repression	0.051***	0.123***	0.004	0.400***
	-0.017	-0.021	-0.012	-0.079
Internet use	0.081**	0.121***	0.003	0.242***
	-0.040	-0.039	-0.030	-0.030
Online Repression *Internet Use	-0.003***	-0.003***	0.001	-0.007***
	-0.001	-0.001	-0.001	-0.001
Urbanisation	-0.164***	-0.139***	0.163***	-0.190***
	-0.041	-0.024	-0.030	-0.031
Gender	0.026	0.037	-0.065**	0.176***
	-0.021	-0.029	-0.026	-0.028
Age	0.002***	0.000	0.000	0.005***
	-0.001	-0.001	-0.001	-0.001
Education	-0.057***	-0.031	0.075***	0.006
	-0.015	-0.025	-0.016	-0.016
Employment	0.008	0.026	0.082***	0.027
	-0.009	-0.019	-0.027	-0.029
Political Interest	0.045***	0.055***	-0.017	0.038***
	-0.015	-0.015	-0.013	-0.014
Elections	0.031**	0.030**	-0.119***	0.436***
	-0.014	-0.015	-0.036	-0.065
GDP per Capita	0	0.000	0	-0.001**
	0	0.000	0.000	-0.001
Level of Democracy	0.098*	0.041	-0.288**	-1.724***
	-0.058	-0.054	-0.137	-0.228
Corruption	0.569***	1.350***	0.086	4.349***
	-0.062	-0.110	-0.097	-0.470
Repression	-0.131***	-0.260***	0.428***	-0.058
	-0.036	-0.037	-0.079	-0.144
Internet Pen.	-0.006*	-0.008	0.025***	0.052*
	-0.003	-0.006	-0.003	-0.027
Constant	-3.518***	-7.745***	0.183	-19.983***

	-0.966	-1.736	-0.610	-5.741
Random Effects Parameters				
Var (Internet Use)				
Between Country Variance	0.369	1.948	0.060	22.483
	0.215	0.707	0.034	11.510
Covariance				
Between Person Variance				
Observations	28,746	26,820	27,745	26,625
Country	8	8	8	8
Av. No. of Obs. per Country	3,593.3	3,352.5	3,468.1	3,328.1

***p<0.01, **p<0.05, *p<0.1.

Excluding Sub-Saharan Africa

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	Logit
Online Repression	-0.075***	-0.031*	-0.088***	0.102***
	-0.014	-0.016	-0.024	-0.026
Internet use	-0.011	0.01	0.014	-0.095***
	-0.021	-0.035	-0.033	-0.035
Online Repression *Internet Use	0	-0.001	0.001***	0.001
	0.000	-0.001	-0.001	-0.001
Urbanisation	-0.131***	-0.054	0.179***	-0.212***
	-0.015	-0.035	-0.036	-0.035
Gender	0.072***	0.064***	-0.095***	0.116***
	-0.014	-0.017	-0.035	-0.034
Age	0.001	0.000	-0.003**	0.007***
	-0.001	-0.001	-0.001	-0.001
Education	-0.031***	-0.037***	0.032*	-0.025
	-0.008	-0.010	-0.017	-0.016
Employment	-0.011	0.018	-0.030	-0.023

	-0.015	-0.014	-0.038	-0.036
Political Interest	0.043**	0.069***	0.011	0.084***
	-0.017	-0.013	-0.020	-0.018
Elections	0.064***	-0.019	0.093**	-0.332***
	-0.018	-0.021	-0.042	-0.042
GDP per Capita	0	0.000	0.000***	0
	0	0.000	0.000	0.000
Level of Democracy	1.636***	0.937***	0.764*	-2.295***
	-0.196	-0.265	-0.391	-0.397
Corruption	1.775***	1.685***	-1.782***	0.884***
	-0.119	-0.143	-0.433	-0.227
Repression	0.670***	0.427***	0.728***	0.462***
	-0.086	-0.078	-0.161	-0.161
Internet Pen.	-0.016***	-0.005	0.033	-0.004
	-0.006	-0.006	-0.024	-0.010
Constant	-11.876***	-9.839***	2.173	3.368*
	-1.362	-1.531	-1.711	-1.933
Random Effects Parameters				
Var (Internet Use)				
Between Country Variance	1.188	1.870	0.431	1.188
	0.537	0.982	0.196	0.537
Covariance				
Between Person Variance				
Observations	31,460	30,089	17,461	20,643
Country	16	16	10	11
Av. No. of Obs. per Country	1,966.3	1,880.6	1,476.1	1,876.6

***p<0.01, **p<0.05, *p<0.1.

When only the Sub-Saharan countries are included the interaction terms become much stronger and more significant in explaining anti-regime sentiment in model 1, 2 and 4. Once Sub-Saharan countries are excluded the effects on the first two dependent variables disappear. Thus, the counterintuitive results in Table 3 of the chapter are primarily driven by the Sub-Saharan African authoritarian regimes.

Table D10: Further Analysis into the Middle East (H2)

Only Middle-East

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			logit	*logit*
Online Repression	0.101***	0.132***	-0.240***	0.030
	-0.005	-0.006	-0.038	-0.059
Internet use	-0.133***	-0.180***	0.004	-0.168**
	-0.016	-0.045	-0.093	-0.070
Online Repression *Internet Use	0.002***	0.003***	0.001	0.002
	0.000	-0.001	-0.002	-0.001
Urbanisation	-0.112***	-0.025	0.095	-0.122***
	-0.030	-0.082	-0.061	-0.045
Gender	0.092***	0.117***	-0.055	0.061
	-0.019	-0.028	-0.064	-0.046
Age	0.003	0.001	-0.002	0.007***
	-0.002	-0.002	-0.002	-0.002
Education	-0.015	-0.023	0.011	0.006
	-0.015	-0.019	-0.027	-0.020
Employment	-0.023	0.028	0.054	-0.037
	-0.018	-0.029	-0.065	-0.047
Political Interest	0	0.082***	0.067**	0.054**
	-0.02	-0.02	-0.034	-0.023
Elections	0.464***	0.446***	-0.107	-0.587**
	-0.021	-0.029	-0.083	-0.265
GDP per Capita	-0.001***	-0.001***	0.001***	0.001
	0	0.000	0.000	-0.001
Level of Democracy	-0.019*	-0.370***	1.264**	-2.490***
	-0.011	-0.017	-0.561	-0.157
Corruption	3.171***	3.570***	-1.523***	-0.714
	-0.099	-0.149	-0.220	-1.350
Repression	2.211***	2.182***		-0.512
	-0.067	-0.105		-0.913
Internet Pen.	-0.043***	-0.049***		0.045
	-0.003	-0.005		-0.038
Constant	-15.951***	-15.273***	8.229***	9.601*
	-0.258	-0.443	-2.691	-5.058

Table D10: Continued

Random Effects Parameters				
Var (Internet Use)				
Between Country Variance	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000
Covariance				
Between Person Variance				
Observations	12,044	11,314	6,679	10,437
Country	4	4	3	4
Av. No. of Obs. per Country	3,011.0	2,828.5	2,226.3	2,609.3

***p<0.01, **p<0.05, *p<0.1.

Excluding Middle-East

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			logit	logit
Online Repression	0.016**	0.069***	-0.032***	0.296***
	-0.008	-0.025	-0.012	-0.065
Internet use	0.035*	0.071***	-0.012	0.105***
	-0.019	-0.021	-0.020	-0.022
Online Repression *Internet Use	-0.001***	-0.002***	0.002***	-0.004***
	0.000	0.000	0.000	0.000
Urbanisation	-0.158***	-0.113***	0.177***	-0.218***
	-0.029	-0.024	-0.025	-0.027
Gender	0.038***	0.036**	-0.074***	0.181***
	-0.015	-0.017	-0.022	-0.025
Age	0.001**	0.000	-0.001	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.049***	-0.039***	0.068***	-0.017
	-0.009	-0.014	-0.013	-0.014
Employment	0.005	0.022*	0.041*	0.009
	-0.008	-0.013	-0.024	-0.026

Table D10: Continued

Political Interest	0.053***	0.055***	-0.015	0.052***
	-0.011	-0.011	-0.011	-0.012
Elections	0.025**	0.019	-0.052**	0.384***
	-0.011	-0.021	-0.022	-0.063
GDP per Capita	-0.000*	-0.000***	0	-0.002***
	0	0.000	0.000	0.000
Level of Democracy	0.222***	0.193**	-0.129	-1.718***
	-0.073	-0.097	-0.129	-0.223
Corruption	0.429***	1.149***	-0.097	3.536***
	-0.038	-0.064	-0.112	-0.211
Repression	-0.163***	-0.322***	0.425***	-0.149
	-0.041	-0.057	-0.075	-0.139
Internet Pen.	-0.007***	-0.005***	0.023***	0.099***
	-0.001	-0.002	-0.003	-0.007
Constant	-2.250***	-5.228***	0.64	-5.838
	-0.237	-0.971	-0.617	-4.351
Random Effects Parameters				
Var (Internet Use)				
Between Country Variance	0.118	1.703	0.3439756	146.938
	0.043	0.998	0.1369153	56.611
Covariance				
Between Person Variance				
Observations	48,162	45,595	38,527	36,831
Country	20	20	15	15
Av. No. of Obs. per Country	2,408.1	2,279.8	2,568.50	2,455.4

***p<0.01, **p<0.05, *p<0.1.

In the Middle East the (counterintuitive) effect of the interaction term is stronger in model one and two, but not present in model three. Once the Middle Eastern states are excluded, the interaction term predicting the perceived fairness of the elections becomes negative and significant, indicating that the counterintuitive effect of online repression on this operationalization of anti-regiment is less present in the Middle East.

Table D11: Further Analysis into Post-Soviet Region (H2)

Only post-Soviet

	Trust in State Institutions
Online Repression	-0.026***
	-0.002
Internet use	0.090**
	-0.040
Online Repression*Internet Use	-0.002***
	-0.001
Urbanisation	-0.136***
	-0.025
Gender	0.083***
	-0.031
Age	0.001
	-0.001
Education	-0.019
	-0.013
Employment	0.039
	-0.046
Political Interest	0.095**
	-0.039
Elections	0.531***
	-0.019
GDP per Capita	0.000***
	0
Level of Democracy	1.466***
	-0.023
Corruption	
Repression	
Internet Pen.	
Constant	-8.212***
	-0.281
Random Effects Parameters	
Var (Internet Use)	
Between Country Variance	0.000
	0.000
Covariance	
Between Person Variance	
Observations	7,521
Country	5
Av. No. of Obs. per Country	1,504.0

***p<0.01, **p<0.05, *p<0.1.

Excluding post-Soviet Union

	Trust in State Institutions
Internet Controls	0.069
	-0.052
Internet use	0.015
	-0.023
Internet Controls*Internet Use	-0.001*
	-0.001
Urbanisation	-0.151***
	-0.029
Gender	0.044***
	-0.014
Age	0.002**
	-0.001
Education	-0.045***
	-0.009
Employment	-0.006
	-0.008
Political Interest	0.039***
	-0.011
Elections	-0.081
	-0.058
GDP per Capita	0
	0
Level of Democracy	-0.047
	-0.172
Corruption	0.669***
	-0.216
Repression	0.039
	-0.125
Internet Pen.	-0.011**
	-0.005
Constant	-5.285**
	-2.477
Random Effects Parameters	
Var (Internet Use)	
Between Country Variance	1.734
	0.926
Covariance	
Between Person Variance	
Observations	52,685
Country	19
Av. No. of Obs. per Country	2,772.9

***p<0.01, **p<0.05, *p<0.1

The analysis of the Post-Soviet region shows that the counterintuitive effect of online repression is stronger in the Post-Soviet states compared to the other regions.

Table D12: Robust. Checks for Table Four (H3)

Comparing Partly Free Internet –Non Free Press to Non-Free Internet – Non Free Press

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
NF Media - PF Internet (vs) NF Media - NF Internet	-0.567***	-0.803***	0.919***	-1.517***
	-0.054	-0.063	-0.127	-0.232
Internet use	-0.044***	-0.056***	0.098***	-0.101***
	-0.006	-0.008	-0.016	-0.017
NF Media-PF Internet*Internet use	0.021*	0.039***	-0.013	0.005
	-0.011	-0.014	-0.021	-0.02
Urbanisation	-0.146***	-0.07	0.218***	-0.229***
	-0.041	-0.047	-0.036	-0.033
Gender	0.059***	0.080***	-0.067*	0.116***
	-0.017	-0.018	-0.034	-0.032
Age	0.001	0	-0.002	0.003**
	-0.001	-0.001	-0.001	-0.001
Education	-0.043***	-0.060***	0.038**	-0.053***
	-0.015	-0.014	-0.017	-0.016
Employment	0.001	0.031**	-0.031	-0.05
	-0.017	-0.014	-0.037	-0.034
Political Interest	0.026	0.064***	0	0.064***
	-0.016	-0.018	-0.018	-0.017
Elections	-0.017	0.021	-0.065	-0.514***
	-0.03	-0.035	-0.055	-0.148
GDP per Capita	0	0	0	0
	0	0	0	0
Level of Democracy	0.061	-0.037	-0.594***	-1.436***
	-0.088	-0.098	-0.22	-0.335
Corruption	0.190***	0.142***	-0.453**	-1.604***
	-0.047	-0.044	-0.204	-0.259
Repression	-0.333***	-0.459***	0.917***	-2.539***

	-0.069	-0.09	-0.124	-0.365
Internet Pen	-0.003	-0.003	0.032***	-0.049***
	-0.004	-0.004	-0.009	-0.014
Constant	0.894	1.808***	0.415	25.935***
	-0.626	-0.554	-1.977	-2.987
Random Effects Parameters				
Var (Internet Use)	0.0010	0.0012		
	0.0006	0.0006		
Between Country Variance	0.0695	0.1462	0.0792	1.3096
	0.0255	0.0655	0.0438	0.8838
Covariance	0.0006	-0.0020		
	0.0036	0.0039		
Between Person Variance	0.4818	0.7269		
	0.0408	0.0541		
Observations	29,159	27,339	17,851	20,864
Country	13	13	9	10
Av. No. of Obs. per Country	2,243	2,103	1,983.40	2,086.40

***p<0.01, **p<0.05, *p<0.1.

This models includes only countries with the most stringent information controls. Compared are 'non-free press, non-free internet' with. 'non-free press, partly free internet'. The results remain similar to Table four.

Direct effects of Asymmetric Controls

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	Logit
Asymmetric Controls	-0.518***	-0.455***	0.926***	0.316***
	-0.091	-0.129	-0.110	-0.109
Internet use	-0.021***	-0.017***	0.063***	-0.053***
	-0.005	-0.007	-0.008	-0.008
Urbanisation	-0.144***	-0.089***	0.163***	-0.180***
	-0.021	-0.026	-0.023	-0.023
Gender	0.048***	0.051***	-0.065***	0.145***
	-0.013	-0.017	-0.021	-0.022
Age	0.002***	0	-0.001	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.041***	-0.033***	0.057***	-0.005
	-0.008	-0.011	-0.012	-0.012
Employment	0	0.025*	0.048**	0.010
	-0.009	-0.013	-0.022	-0.022
Political Interest	0.045***	0.061***	-0.007	0.038***
	-0.011	-0.011	-0.011	-0.011
Elections	0.029	0.032	-0.144***	0.263***
	-0.048	-0.076	-0.036	-0.042
GDP per Capita	0.000	0.000	0.000	-0.000***
	0.000	0.000	0.000	0.000
Level of Democracy	0.135	0.267**	-0.419***	-0.816***
	-0.095	-0.110	-0.099	-0.124
Corruption	0.309**	0.758***	-0.195*	2.592***
	-0.132	-0.165	-0.105	-0.120
Repression	-0.048	-0.239	0.624***	-0.058
	-0.144	-0.163	-0.064	-0.067
Internet Pen.	-0.006***	-0.007**	0.021***	0.026***
	-0.002	-0.003	-0.003	-0.004
Constant	-1.227***	-2.538***	0.285	-4.927***
	-0.3430	-0.4900	-0.646	-1.156
Random Effects Parameters				
Var (Internet Use)	0.001	0.002		
	0.000	0.000		
Between Country Variance	0.167	0.428	0.661	10.753
	0.060	0.133	0.235	3.743
Covariance	-0.002	-0.005		
	0.003	0.007		

Table D12: Continued

Between Person Variance	0.446	0.668		
	0.024	0.038		
Observations	58,767	55,474	43,935	46,068
Country	24	24	18	19
Av. No. of Obs. per Country	2,448.6	2,311.4	2,440.8	2,424.6

***p<0.01, **p<0.05, *p<0.1.

More than with the direct effects of online repression, an asymmetry in information controls leads –as one would logically expect- to lower trust in state institutions, a lower perceived level of democracy in the country, and a higher perceived level of corruption. By contrast, an asymmetry in information controls leads unexpectedly to a higher perceived fairness of the elections.

Other Media use as extra control

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Asymmetric Controls	-0.583***	-0.499***	0.788***	0.409***
	-0.103	-0.134	-0.120	-0.120
Internet use	-0.033***	-0.030**	0.018	-0.023*
	-0.007	-0.012	-0.014	-0.014
Asymmetric Controls*Internet use	0.026***	0.034**	0.053***	-0.029*
	-0.009	-0.016	-0.017	-0.016
Urbanisation	-0.141***	-0.090***	0.160***	-0.155***
	-0.024	-0.031	-0.028	-0.026
Gender	0.057***	0.063***	-0.068***	0.140***
	-0.016	-0.021	-0.024	-0.024
Age	0.002***	0	0	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.042***	-0.034***	0.063***	0.007
	-0.009	-0.012	-0.014	-0.013
Employment	-0.001	0.021	0.071***	0.034
	-0.011	-0.015	-0.025	-0.024
Political Interest	0.042***	0.057***	-0.008	0.037***
	-0.012	-0.011	-0.012	-0.012
Television	0.004	-0.011	0.007	-0.003
	-0.005	-0.009	-0.01	-0.009
Radio	-0.002	-0.021***	-0.012	0.001
	-0.004	-0.008	-0.009	-0.008
Newspaper	-0.006	0.006	0.007	0.029***

Table D12: Continued

	-0.007	-0.006	-0.011	-0.010
Elections	0.038	0.032	-0.154***	0.286***
	-0.051	-0.083	-0.039	-0.042
GDP per Capita	0.000	0	0	-0.000***
	0.000	0.000	0	0
Level of Democracy	0.138	0.279**	-0.343***	-0.860***
	-0.103	-0.122	-0.107	-0.129
Corruption	0.320**	0.779***	-0.177*	2.636***
	-0.130	-0.169	-0.105	-0.121
Repression	-0.049	-0.247	0.589***	-0.058
	-0.145	-0.168	-0.065	-0.0680
Internet Pen.	-0.007***	-0.008**	0.021***	0.026***
	-0.002	-0.0030	-0.004	-0.005
Constant	-1.474***	-2.662***	0.506	-5.457***
	-0.3650	-0.641	-0.701	-1.298
Random Effects Parameters				
Var (Internet Use)	0.001	0.002		
	0.001	0.001		
Between Country Variance	0.173	0.540	0.420	11.435
	0.052	0.157	0.205	4.874
Covariance	-0.007	-0.010		
	0.006	0.008		
Between Person Variance	0.479	0.730		
	0.025	0.036		
Observations	48,001	45,080	34,208	36,830
Country	17	17	11	12
Av. No. Of Obs. Per Country	2,823.6	2,651.8	3,109.8	3,069.2

***p<0.01, **p<0.05, *p<0.1.

Income as extra control

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Asymmetric Controls	-0.181	-0.458**	0.468***	-0.245
	-0.177	-0.210	-0.125	-0.169
Internet use	-0.042***	-0.044***	0.095***	-0.072***
	-0.007	-0.011	-0.021	-0.026
Asymmetric Controls*Internet use	0.040**	0.042*	-0.018	-0.001
	-0.016	-0.022	-0.032	-0.040
Urbanisation	-0.146***	-0.084**	0.151***	-0.239***
	-0.015	-0.033	-0.054	-0.066
Gender	0.053***	0.035*	-0.088*	0.168***
	-0.020	-0.018	-0.049	-0.061
Age	0	0	-0.003*	0.011***
	-0.001	-0.001	-0.002	-0.002
Education	-0.033***	-0.052***	0.057**	-0.013
	-0.009	-0.015	-0.026	-0.032
Employment	0.016	0.026	-0.035	-0.115*
	-0.022	-0.02	-0.054	-0.069
Political Interest	0.079***	0.059***	-0.01	0.082**
	-0.019	-0.017	-0.028	-0.034
Income	0.007	0.051*	0.033	-0.060**
	-0.019	-0.028	-0.021	-0.026
Elections	0.085	0.094	-0.192***	-0.03
	-0.077	-0.092	-0.046	-0.052
GDP per Capita	-0.000**	-0.000**	0.000***	-0.000***
	0.000	0	0	0.000
Level of Democracy	0.346	0.253	-0.778***	0.086
	-0.221	-0.276	-0.133	-0.155
Corruption	-0.015	-0.052	-0.315***	0.486***
	-0.115	-0.113	-0.121	-0.1510
Repression	-0.106	-0.029	0.681***	-1.425***
	-0.112	-0.145	-0.095	-0.14
Internet Pen.	0.007	0.018***		
	-0.0070	-0.006		
Constant	-1.472	-1.31	1.784**	5.222***
	-1.282	-1.482	-0.832	-0.953
Random Effects Parameters				
Var (Internet Use)	0.004	0.010		
	0.000	0.000		
Between Country Variance	0.045	0.077	0.000	0.000

Table D12: Continued

	0.025	0.040	0.000	0.000
Covariance	-0.002	-0.004		
	0.003	0.005		
Between Person Variance	0.352	0.507		
	0.032	0.058		
Observations	16,338	15,861	8,216	7,935
Country	12	12	7	7
Av. No. Of Obs. Per Country	1,361.5	1,321.8	1,173.7	1,133.6

***p<0.01, **p<0.05, *p<0.1.

Including income does not change Table four's results.

Adding other media use as a control does not change Table four's results in the first two columns. The results in the third and fourth column do change, however. This time in line with the expectation, one sees that internet users in countries with more asymmetric controls think their officials are more corrupt and the elections less fair. As one would logically expect, newspaper use increases the perceived fairness of the elections (but not the other operationalizations of anti-regime sentiment). Radio use by contrast, decreases the perceived level of democracy.

Table D13: Further Analysis into Asia (H3)

Only Asia

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Asymmetric Controls	0.243***	-0.077	0.475***	-0.240
	-0.041	-0.066	-0.121	-0.163
Internet use	-0.038***	-0.041***	0.114***	-0.062***
	-0.007	-0.007	-0.019	-0.023
Asymmetric Controls*Internet use	0.004	0.021	-0.025	-0.021
	-0.015	-0.028	-0.031	-0.038
Urbanisation	-0.149***	-0.108***	0.186***	-0.288***
	-0.031	-0.01	-0.049	-0.059
Gender	0.013	0.001	-0.084*	0.154***
	-0.018	-0.011	-0.045	-0.056
Age	-0.001	0.001	-0.003	0.008***
	-0.001	-0.001	-0.002	-0.002
Education	-0.047***	-0.038**	0.051**	-0.041
	-0.011	-0.016	-0.023	-0.029
Employment	-0.003	0.018	-0.042	-0.105*
	-0.024	-0.021	-0.049	-0.063
Political Interest	0.063***	0.064***	-0.009	0.088***
	-0.016	-0.023	-0.026	-0.032
Elections	-0.031***	0.011**	-0.173***	-0.015
	-0.004	-0.006	-0.044	-0.05
GDP per Capita	0.000***	-0.000***	0.000***	-0.000***
	0.000	0	0.000	0.000
Level of Democracy	0.109***	0.157***	-0.718***	0.11
	-0.012	-0.019	-0.127	-0.149
Corruption	-0.289***	0.041***	-0.320***	0.559***
	-0.013	-0.016	-0.1160	-0.1450
Repression	-0.080***	-0.252***	0.661***	-1.470***
	-0.01	-0.015	-0.09	-0.133
Internet Pen.	-	-	-	-
Constant	1.145***	0.484***	1.532*	5.021***
	-0.072	-0.097	-0.790	-0.910
Random Effects Parameters				
Var (Internet Use)	0.000	0.000		
	0.000	0.000		
Between Country Variance	0.000	0.002	0.000	0.000

Table D13: Continued

	0.000	0.001	0.000	0.000
Covariance	0.000	-0.001		
	0.000	0.001		
Between Person Variance	0.272	0.348		
	0.011	0.021		
Observations	10,456	10,112	9,511	9,006
Country	7	7	7	7
Av. No. Of Obs. Per Country	1,493.7	1,444.6	1,358.7	1,286.6

**p<0.05, *p<0.1.

Excluding Asia

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Asymmetric Controls	-0.594***	-0.554***	0.793***	0.405***
	-0.103	-0.137	-0.119	-0.119
Internet use	-0.034***	-0.031**	0.017	-0.033**
	-0.007	-0.013	-0.013	-0.013
Asymmetric Controls*Internet use	0.029***	0.039**	0.050***	-0.027*
	-0.009	-0.017	-0.017	-0.015
Urbanisation	-0.142***	-0.085***	0.152***	-0.164***
	-0.025	-0.031	-0.027	-0.025
Gender	0.055***	0.061***	-0.066***	0.145***
	-0.016	-0.02	-0.024	-0.023
Age	0.002***	0	0.000	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.040***	-0.032**	0.060***	0.001
	-0.010	-0.013	-0.014	-0.013
Employment	-0.001	0.025	0.074***	0.024
	-0.010	-0.015	-0.025	-0.024
Political Interest	0.042***	0.061***	-0.006	0.031***
	-0.012	-0.012	-0.012	-0.012
Elections	0.037	0.034	-0.152***	0.278***
	-0.052	-0.082	-0.038	-0.042
GDP per Capita	0.000	0	0	-0.000***
	0.000	0	0	0
Level of Democracy	0.135	0.277**	-0.359***	-0.878***
	-0.102	-0.116	-0.106	-0.129
Corruption	0.314**	0.771***	-0.172*	2.624***

Table D13: Continued

	-0.131	-0.168	-0.104	-0.121
Repression	-0.047	-0.244	0.593***	-0.052
	-0.145	-0.166	-0.0650	-0.0680
Internet Pen.	-0.007***	-0.008**	0.022***	0.027***
	-0.002	-0.003	-0.004	-0.005
Constant	-1.457***	-2.758***	0.578	-5.101***
	-0.3600	-0.582	-0.693	-1.285
Random Effects Parameters				
Var (Internet Use)	0.001	0.002		
	0.001	0.001		
Between Country Variance	0.174	0.541	0.412	11.226
	0.053	0.150	0.198	4.787
Covariance	-0.007	-0.011		
	0.006	0.009		
Between Person Variance	0.479	0.731		
	0.025	0.036		
Observations	48,311	45,362	34,424	37,062
Country	17	17	11	12
Av. No. Of Obs. Per Country	2,841.8	2,668.4	3,129.5	3,088.5

***p<0.01, **p<0.05, *p<0.1.

Whereas the unexpected interaction effects for explaining trust in state institutions and the perceived level of democracy turns out to be primarily driven by countries other than the Asia ones, the analyses show that in the Asian authoritarian countries asymmetric information controls with high internet use leads to less perceived corruption and a higher perceived fairness of the elections.

Table D14: Further Analysis into Sub-Saharan Africa (H3)

Excluding Sub-Saharan Africa

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Asymmetric Controls	0.009	0.139	0.028	1.781
	-0.312	-0.702	-0.183	-6.097
Internet use	-0.015	-0.004	0.001	-0.038**
	-0.019	-0.029	-0.016	-0.016
Asymmetric Controls*Internet use	-0.013	-0.015	0.070***	-0.004
	-0.029	-0.045	-0.019	-0.019
Urbanisation	-0.156***	-0.134***	0.159***	-0.201***
	-0.04	-0.023	-0.03	-0.031
Gender	0.027	0.037	-0.068**	0.175***
	-0.02	-0.028	-0.026	-0.028
Age	0.002**	0	0	0.005***
	-0.001	-0.001	-0.001	-0.001
Education	-0.057***	-0.03	0.077***	0.01
	-0.015	-0.023	-0.016	-0.016
Employment	0.016*	0.034*	0.073***	0.02
	-0.01	-0.02	-0.028	-0.029
Political Interest	0.044***	0.052***	-0.017	0.037***
	-0.015	-0.016	-0.013	-0.014
Elections	0.056***	0.088***	-0.115***	0.501***
	-0.016	-0.031	-0.035	-0.089
GDP per Capita	-0.000***	-0.000*	0	-0.003***
	0	0	0	-0.001
Level of Democracy	0.175***	0.256***	-0.213**	-1.311***
	-0.042	-0.085	-0.096	-0.317
Corruption	0.441***	0.958***	0.062	2.137***
	-0.069	-0.195	-0.094	-0.562
Repression	-0.208***	-0.462***	0.402***	-0.555***
	-0.027	-0.046	-0.071	-0.105
Internet Pen.	-0.001	0.008	0.023***	0.170***
	-0.003	-0.01	-0.003	-0.043
Constant	-1.220**	-1.784	0.146	7.207
	-0.561	-1.781	-0.569	-6.327
Random Effects Parameters				
Var (Internet Use)	0.001	0.003		
	0.001	0.001		

Between Country Variance	0.236	1.393	0.053	66.230
	0.163	1.234	0.030	50.938
Covariance	-0.004	-0.019		
	0.004	0.025		
Between Person Variance	0.481	0.721		
	0.033	0.061		
Observations	28,746	26,820	27,745	26,625
Country	8	8	8	8
Av. No. Of Obs. Per Country	3,593.3	3,352.5	3,468.1	3,328.1

***p<0.01, **p<0.05, *p<0.1.

When Sub-Saharan Africa is excluded, the interaction term is insignificant in the first two models, indicating that these countries are largely responsible for table four's counterintuitive findings. The interaction term becomes significant in predicting the perceived level and has the excepted direction: When the African countries are excluded internet use has especially in countries with asymmetric information controls a positive effect on the perceived level of corruption.

Table D15: Further Analysis into Middle-East (H3)

Only Middle East

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Asymmetric Controls	2.143***	2.901***	6.070***	0.789
	-0.117	-0.129	-0.966	-1.164
Internet use	-0.048***	-0.059***	0.054**	-0.028
	-0.006	-0.018	-0.027	-0.025
Asymmetric Controls*Internet use	0.025***	0.051***	0	-0.047*
	-0.01	-0.012	-0.035	-0.027
Urbanisation	-0.111***	-0.022	0.092	-0.125***
	-0.032	-0.084	-0.060	-0.045
Gender	0.092***	0.117***	-0.054	0.064
	-0.019	-0.027	-0.064	-0.046
Age	0.003	0.001	-0.002	0.007***
	-0.002	-0.002	-0.002	-0.002
Education	-0.014	-0.02	0.011	0.003
	-0.015	-0.017	-0.027	-0.021
Employment	-0.025	0.023	0.053	-0.034
	-0.018	-0.029	-0.065	-0.047
Political Interest	0.001	0.084***	0.068**	0.057**

	-0.021	-0.02	-0.034	-0.023
Elections	-1.289***	-1.942***	-2.098***	-1.144*
	-0.06	-0.064	-0.315	-0.683
GDP per Capita	0.003***	0.004***	0.002***	0.002
	0	0	0.000	-0.002
Level of Democracy	-2.982***	-4.445***	-7.863***	-3.412**
	-0.142	-0.149	-1.063	-1.582
Corruption	-2.981***	-4.771***	5.298***	-2.672
	-0.19	-0.2	-1.1380	-1.9830
Repression	-2.395***	-4.080***		-1.994
	-0.149	-0.152		-1.616
Internet Pen.	0.273***	0.383***		0.144
	-0.011	-0.012		-0.132
Constant	-2.008***	3.455***	6.161**	13.924***
	-0.426	-0.413	-2.867	-3.198
Random Effects Parameters				
Var (Internet Use)	0.004	0.001		
	0.000	0.001		
Between Country Variance	0.002	0.008	0.000	0.000
	0.001	0.005	0.000	0.000
Covariance	-0.001	-0.003		
	0.001	0.002		
Between Person Variance	0.477	0.757		
	0.055	0.014		
Observations	12,044	11,314	6,679	10,437
Country	4	4	3	4
Av. No. Of Obs. Per Country	3,011.0	2,828.5	2,226.3	2,609.3

***$p<0.01$, **$p<0.05$, *$p<0.1$.

Excluding Middle East

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Asymmetric Controls	-0.085	-0.354	0.207	-4.830*
	-0.183	-0.515	-0.386	-2.469
Internet use	-0.026***	-0.024*	0.056***	-0.050***
	-0.008	-0.013	-0.012	-0.013
Asymmetric Controls*Internet use	0.016	0.019	0.018	0.006
	-0.016	-0.022	-0.016	-0.017
Urbanisation	-0.153***	-0.109***	0.168***	-0.212***
	-0.025	-0.021	-0.025	-0.027
Gender	0.035**	0.034*	-0.066***	0.171***
	-0.015	-0.018	-0.023	-0.025
Age	0.001**	0	-0.001	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.046***	-0.035**	0.070***	-0.001
	-0.009	-0.014	-0.013	-0.014
Employment	0.014	0.033**	0.043*	0.006
	-0.009	-0.015	-0.024	-0.026
Political Interest	0.053***	0.054***	-0.015	0.045***
	-0.012	-0.012	-0.011	-0.012
Elections	0.035	0.089***	-0.104***	0.683***
	-0.025	-0.032	-0.039	-0.05
GDP per Capita	0	-0.000*	0	-0.001***
	0	0	0	0
Level of Democracy	0.253***	0.379***	-0.341***	-0.456***
	-0.078	-0.08	-0.103	-0.138
Corruption	0.413***	1.058***	-0.042	3.570***
	-0.059	-0.114	-0.115	-0.165
Repression	-0.198***	-0.465***	0.502***	-0.742***
	-0.045	-0.052	-0.072	-0.081
Internet Pen.	-0.006***	-0.006***	0.022***	0.053***
	-0.001	-0.002	-0.003	-0.008
Constant	-1.576***	-3.061***	-0.006	-4.469*
	-0.368	-0.759	-0.679	-2.416
Random Effects Parameters				
Var (Internet Use)	0.001	0.002		
	0.000	0.001		
Between Country Variance	0.147	1.079	0.469	21.340
	0.112	0.557	0.180	8.714
Covariance	-0.002	-0.012		
	0.003	0.014		

Table D15: Continued

Between Person Variance	0.433	0.639		
	0.027	0.046		
Observations	46,723	44,160	37,256	35,631
Country	20	20	15	15
Av. No. Of Obs. Per Country	2,336.2	2,208.0	2,483.7	2,375.4

***p<0.01, **p<0.05, *p<0.1.

When looking only at the Middle East, the asymmetry in information controls has a similar effect as in Table four. Only model four is different, when the perceived fairness of the elections is predicted. Here one sees that the interaction term becomes significant at the 90% level, indicating that in Middle Eastern countries with asymmetry internet use leads to a lower perceived fairness of the elections.

Table D16: Further Analysis into Post-Soviet Region (H3)

Only post-Soviet Region

	Trust in State Institutions
Asymmetric Controls	0.159***
	-0.045
Internet use	-0.040***
	-0.013
Asymmetric Controls*Internet use	0.059***
	-0.019
Urbanisation	-0.135***
	-0.025
Gender	0.085***
	-0.03
Age	0.001
	-0.001
Education	-0.019
	-0.013
Employment	0.038
	-0.043
Political Interest	0.093**
	-0.038
Elections	0.900***

	-0.018
GDP per Capita	0.000***
	0
Level of Democracy	1.852***
	-0.032
Corruption	
Repression	
Internet Pen.	
Constant	-12.968***
	-0.222
Random Effects Parameters	
Var (Internet Use)	0.000
	0.000
Between Country Variance	0.001
	0.001
Covariance	0.000
	0.000
Between Person Variance	0.440
	0.000
Observations	7,521
Country	5
Av. No. Of Obs. Per Country	1,504.2

***p<0.01, **p<0.05, *p<0.1.

Excluding post-Soviet

	Trust in State Institutions
Asymmetric Controls	-0.563***
	-0.102
Internet use	-0.034***
	-0.007
Asymmetric Controls*Internet use	0.018
	-0.012
Urbanisation	-0.145***
	-0.024

Table D16: Continued

Gender	0.042***
	-0.014
Age	0.002**
	-0.001
Education	-0.045***
	-0.01
Employment	-0.002
	-0.009
Political Interest	0.039***
	-0.011
Elections	0.033
	-0.048
GDP per Capita	0
	0
Level of Democracy	0.114
	-0.081
Corruption	0.319**
	-0.143
Repression	-0.047
	-0.146
Internet Pen.	-0.005**
	-0.002
Constant	-1.073***
	-0.342
Random Effects Parameters	
Var (Internet Use)	0.001
	0.000
Between Country Variance	0.181
	0.060
Covariance	-0.007
	0.004
Between Person Variance	0.446
	0.027
Observations	51,246
Country	19
Av. No. Of Obs. Per Country	2,697.2

***p<0.01, **p<0.05, *p<0.1.

The counterintuitive effect of the asymmetry in information controls turns out to be especially strong in the post-Soviet region for explaining trust in state institutions. Here in particular the asymmetry leads to a higher trust in state institutions. In addition, one sees that the significance completely disappears when the post-Soviet region is excluded.

Table D17: Looking Within the Group of Authoritarian Regimes

	Trust in State Institutions	Perceived Level of Democracy	Perceived Level of Corruption	Perceived Fairness Elections
			Logit	*Logit*
Internet Use	0.008	0.03	0.051**	0.097***
	-0.02	-0.027	-0.021	-0.023
Level of Democracy	0.159	0.322***	-0.383***	-0.618***
	-0.133	-0.114	-0.098	-0.134
Internet Use* Level of Democracy	-0.006	-0.009	0.002	-0.034***
	-0.005	-0.006	-0.004	-0.005
Urbanisation	-0.149***	-0.094***	0.175***	-0.184***
	-0.025	-0.027	-0.023	-0.023
Gender	0.050***	0.052***	-0.071***	0.151***
	-0.013	-0.016	-0.021	-0.021
Age	0.002**	0.001	-0.001	0.006***
	-0.001	-0.001	-0.001	-0.001
Education	-0.043***	-0.036***	0.058***	-0.01
	-0.008	-0.011	-0.012	-0.011
Employment	-0.004	0.020*	0.035	0.018
	-0.008	-0.011	-0.022	-0.022
Political Interest	0.043***	0.060***	-0.003	0.046***
	-0.011	-0.01	-0.011	-0.011
Elections	-0.025	-0.026	-0.040*	0.007
	-0.035	-0.039	-0.02	-0.029
GDP per Capita	0	0	0	-0.000***
	0	0	0	0
Corruption	0.604***	1.048***	-0.553***	2.147***
	-0.231	-0.207	-0.095	-0.099
Repression	-0.126	-0.303*	0.707***	-0.039
	-0.156	-0.159	-0.064	-0.064
Internet Pen.	-0.004	-0.006	0.019***	0.025***
	-0.004	-0.004	-0.003	-0.005
Constant	-2.204***	-3.572***	0.801	-0.963
	-0.751	-0.62	-0.562	-1.029

Table D17: Continued

Random Effects Parameters				
Var (Internet Use)				
Between Country Variance	0.327	0.759	0.586	6.627
	0.125	0.202	0.207	2.856
Covariance				
Between Person Variance				
Observations	60,206	56,909	45,206	47,268
Country	24	24	18	19
Av. No. of Obs. per Country	2,508.60	2,371.20	2,511.40	2,487.80

***p<0.01, **p<0.05, *p<0.1

In this table below I look within the group of authoritarian regimes. Chapter three's country-level analysis showed that the effect of internet use on anti-government repression was especially strong in regimes with some limited freedom, i.e. those regime with slightly milder forms of repression. This table does not show that internet's effect on anti-regime sentiment is especially strong in regimes with some limited freedoms. The interaction effect is only significant in the last model predicting the perceived fairness of the elections: In line with what one would expect on the basis of Chapter three, authoritarian regimes with the least freedom, internet's positive effect on the perceived fairness of the elections is weaker.

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Summary

This research provides a general study into whether, when and how internet use affects anti-government protest under authoritarian regimes. Its core contribution to the literature is twofold. First, rather than the democratization of authoritarian regimes, that has received most academic attention, the study investigates whether internet use promotes anti-government protest. Second, it explores when and how internet use facilitates mobilisation by examining the causal mechanisms. The study makes use of a mixed methods research design moving from large-n country year analyses, to in-depth exploratory qualitative fieldwork in Malaysia, and then back again to a quantitative analysis of multiple authoritarian regimes.

Chapter one introduces the topic and explains what is currently missing in our understanding of the relationship. It argues –among others- that our view of what internet-enabled mobilization *is,* is often too narrow, as we tend to be solely interested in events that take place just prior to, or during a protest, thereby disregarding how internet use affects political ideas before there is the call for a protest. Another flaw in our thinking that Chapter one stipulates is that close to everything we know about the relationship is based on studies of the Arab Spring, which has led to the undesirable situation were a discussion on the topic is often conflated with one on the causes of these specific uprisings. The chapter subsequently sets out the mixed methods research design to study the relationship and explains its strengths and limitations.

Chapter two provides a review of the existing literature and argues that it is the information scarcity in authoritarian regimes that makes these states possibly vulnerable to internet-enabled mobilisation: the authoritarian state's control over information and communication combined with citizens' inability to talk freely has traditionally limited the development of an independent public sphere under authoritarian rule, yet by increasing citizens' access to alternative political information, either long before, just before, or during an anti-government protest, internet use might in particular circumstances facilitate anti-government mobilisation. Chapter two proposes moreover a disaggregation of the mobilisation process by breaking it up into three analytically distinct steps, For people to become a protest participant, they 1) need to sympathize with the cause of a protest; 2) need to be informed about the upcoming protest; and 3) must be motivated to participate. The three steps allow for an in-depth investigation into the internet's role in each step separately. Chapter two concludes by proposing two important contextual factors that can moderate the effect of internet use on protest: the state's on- and offline repression, and the use of social media.

In order to understand how internet use affects anti-government protest in the three steps of the mobilisation chain, it is vital to first know whether there is a

significant effect of internet use on protesting at all. Only if that question is answered positively does it become relevant to explore why this is so. The large n- quantitative studies in Chapter three, both at the country and the individual level, therefore investigate the internet's direct effect. A large-n, quantitative country-level analysis of the period 1990–2013 is carried out, looking at the extent to which the percentage of the population using the internet predicted – ceteris paribus – the number of anti-government protests. A similar analysis is conducted at the individual level (2011–2015), investigating whether – other things being equal – internet users living under authoritarian regimes were more prone to protesting. In line with more cyber-optimistic ideas, the chapter shows that both at the country and individual level, internet use facilitated protest. The country-level analysis furthermore reveals that the effect held in authoritarian regimes especially, as opposed to democracies and semi-democracies, and that within the group of authoritarian regimes, the least authoritarian ones, using the least repression, suffered most from internet-enabled protest. Notably, the authoritarian states with the least freedom worldwide, such as North Korea or Turkmenistan, are not part of the analysis due to missing data. Neither the country- nor the individual-level analysis show evidence for the idea that higher online repression reduced the effect of internet use on protesting. In addition, contradicting the idea of the authoritarian state that learned over time how to prevent internet-enabled protests, the chapter also finds no evidence for a dwindling effect of internet use over time.

To investigate the causal mechanisms with the mobilisation chain, the study 'goes' qualitative, as the necessary quantitative data are unavailable, and because it is hard to know where to look as almost all potential causal mechanisms are based on accounts of the Arab Spring. In order to examine the processes lying between the independent variable 'internet use' and the dependent variable 'protest', the research therefore conducts an in-depth case study of Malaysia, with two periods of intensive fieldwork. The choice for Malaysia is informed by its authoritarian nature including an information scarcity, as well as by the six outbreaks of mass protest in the country in a period when internet penetration rates rose from 3% in 1998 to close to 80% in 2016.

Chapter four investigates the internet's role in the first step of the mobilisation chain by studying whether internet use affected Malaysians' sympathy for anti-government protest movements and their anti-regime sentiment. Using both qualitative and quantitative evidence, the chapter shows that in Malaysia the internet functioned as an alternative public sphere that allowed for the exchange of alternative political information, thereby challenging Malaysia's information scarcity. As a result, Malaysian internet users were exposed to alternative political information, often highly critical towards the regime, and their political ideas changed accordingly. Malaysians learned online about the actual performance of

their government, and became disappointed in a regime that turned out to be more corrupt, less democratic, and more repressive than they had previously assumed.

The explanation for the internet's effect lies in Malaysia's asymmetry in information controls, a term that connotes an unevenness in the online (high) and offline (low) media freedoms. Whereas the traditional media was strictly controlled by the Malaysian government, the internet was relatively free, which created a space for the circulation of alternative political information. Initially, the Malaysian authorities did not want to control cyberspace as they worried that state interference in cyberspace would scare off potential foreign investors. After suffering some major political defeats, however, and seeing these as linked to the freedom in cyberspace, the Malaysian government abandoned the idea of an uncontrolled internet, reasoning that the political costs of leaving cyberspace unregulated had become too high. Yet the chapter showed that, even when an authoritarian state tried to get a tight grip on cyberspace through increased online repression, it was not always able to do so. International and domestic constraints, the socio-technical obstacles of online repression, and the ineffectiveness of the state's interventions in cyberspace made strict control over the internet by Malaysia's regime unattainable.

Chapter five moves on to the second step of the chain and examines how internet use has changed the extent to which protest sympathisers can be informed about an upcoming anti-government protest. The chapter argues that in Malaysia, it was the use of social media, rather than internet use, that made informing protest sympathisers much easier. In-depth interviews with 22 Malaysian activists and quantitative survey material are used to show that the rise of social media greatly facilitated the diffusion of protest information into multiple networks and across very diverse publics. Whereas in the pre-social media days Malaysians still had to make an effort to find political information, thereby easily missing information about an upcoming demonstration, in the age of social media information got increasingly pushed to them over social networks. This could explain – at least partly – that, despite relatively similar internet penetration rates in 2007 and 2011, many Malaysians were not aware of the announced 2007 anti-government rally, but did know about the 2011 rally before it took place.

In trying to explain why the Malaysian authorities' online repression was unable to prevent social media's facilitative role, the chapter identifies four reasons that made social media's 'success' possible. First, the government's harsh repression of protestors in the streets was captured in hundreds of images and videos, which was ideal 'hot' content to make the protest movements' information travel in cyberspace. Second, according to the interviewed activists, with its interventions the government made some severe blunders in cyberspace – such as blocking the protest movement's website and flooding the protesters' hashtag – which unintentionally only fostered

attention for the rally on social media. Third, the movements' reliance on Facebook and Twitter in their communications made them relatively invulnerable to state repression in cyberspace. Rather than that the authorities were technically unable to take down Facebook or Twitter, they most likely refrained from censoring these platforms as it would have politicised and infuriated many Malaysians who were now apolitical or even supportive of the regime. Fourth and last, the successful spread of information over social media was also the result of mild offline repression in Malaysia. Due to this mild repression, the protest movement Bersih was able to gain a lot of trust and credibility among Malaysians over the years, which also facilitated the extent to which Malaysians were willing to share Bersih's content on social media.

Chapter six examines the third step in the mobilisation chain, investigating whether and how the use of the internet affected the motivation of informed sympathisers under high risk. Seventeen in-depth interviews were conducted with Malaysians who sympathised with the protest movement Bersih and knew about Bersih rallies before they occurred, but had not necessarily joined the protests. Some of them did participate, others did not, primarily because the perceived risks were considered too high. After the interviews, a nationwide survey was also conducted to test the hypotheses in a more systematic fashion. In contrast to steps one and two, internet use did not turn out to play an important role in Malaysia in the chain's third step. Most of the hypothesised mechanisms were inspired by Arab Spring cases, but turned out be largely irrelevant in the investigated Bersih protests. For instance, online information about the (expected) protestor turnout was not found to decrease the perceived risk of potential protestors, nor were they more prone to take risks because they were exposed to dramatic online audio-visual materials.

The only mechanism for which some evidence was found that internet use affected the motivation of informed sympathisers was through 'conducive social media networks'. The 17 in-depth interviews (not the survey) revealed that their increased online visibility affected the informed sympathisers' motivation to join the rally. Either because they wanted the social rewards of going ('cool thing to show to your peers online'), or were afraid of the social costs of not going ('if you don't go, you will be frowned upon'), their use of social media made it more likely that they would participate.

The aspect that makes this research distinct from most mixed-methods designs where regression analyses (Chapter three) are combined with an in-depth case study (Chapter four-six), is that it makes the 'full circle' by also taking the case study findings back to a the large n- regression analyses comparing multiple countries. By using individual level survey data, Chapter four's Malaysian findings are tested in Chapter seven in multiple other authoritarian regimes, while the wider applicability

for Chapter five and six findings' is explored on the basis of secondary literature and theoretical reflections.

Chapter seven shows that the asymmetry in information controls, which was crucial in making Malaysians more sympathetic towards protest movements, is not a necessary condition to make internet users under authoritarian rule think less about their government. In a quantitative study of 25 authoritarian regimes (2010–2015), the chapter shows that, even in states with more symmetric information controls, internet use increased anti-regime sentiment, which makes it imperative to reflect on why internet use could still make citizens more negative about their governments despite the fact that the internet – at least at first sight – did not offer more freedom than the traditional media. Tentatively, the chapter proposes two explanations: First, authoritarian states were perhaps, despite high online repression, still not able to prevent the circulation of alternative information in cyberspace. In other words, an apparent symmetry in information controls (little on- and offline media freedom) might in reality not have been so symmetric. A second explanation is that authoritarian regimes were able but did not want to control the internet very strictly, as a relatively free cyberspace might also have provided regimes with valuable information both about citizens' concerns and about the functioning of local bureaucracies.

Chapter five's claims, which suggested that social media, rather than internet use as such, was conducive for the informing of protest sympathizers in Malaysia, is likely to only have similar explanatory value in authoritarian regimes with relatively mild forms state repression. In more repressive authoritarian contexts, social media is less likely to be conducive to the informing process, as people living in those regimes often do not dare to share information about a protest on their own social media accounts, because the necessary trust in protest movements is often lacking there, and because more repressive authorities can often hinder the online informing of sympathisers in the wake of a protest by shutting down the most popular social media platforms or even the entire internet.

With regard to Chapter six' finding that conducive social media networks increased the motivation of Malaysians to protest, Chapter seven suggests that this mechanisms is likely to work similarly in other authoritarian settings, though again under the condition that sympathisers dare to share their support for a protest or a protest movement on social media. The hypothesized mechanisms that the chapter did not find support for in the Malaysian case, might according to Chapter seven still have explanatory value in other authoritarian circumstances, but they might also be overgeneralized findings from the Arab Spring cases.

Chapter eight discusses the findings collectively and reflects on their implications for authoritarian sustainability. On the one hand, the chapter warns for not being overly optimistic about the finding that internet use facilitates anti-government protest under authoritarian rule, as internet-enabled protests are not necessarily a threat to the regime in power. Yet, on the other hand, Chapter eight suggests that the internet's facilitative role in the mobilisation process can be a challenge to the sustainability of authoritarian rule. Not only because of internet-enabled protests themselves, but also by causing a decreasing legitimacy of the regime, that in the Malaysian case might hurt the authorities most at the ballot box.

The recommendations for civil society with which the research ends contain three points. First, albeit often heavily criticized on various grounds, American-based social media like Facebook and Twitter can play an important role in challenging the information scarcity in authoritarian states, because they are not as easily controlled by regimes as other websites. Second, the fight for rights in cyberspace should always be part of a broader strategy that aims to improve civil rights, and the freedom of speech and access to information in particular. Third, for the evaluation of the internet's success in authoritarian regimes, one should take a more long-term perspective, considering whether internet use has contributed to challenging information scarcity under authoritarian rule, and appreciating more gradual changes in society.

Samenvatting

Heeft internet gebruik een faciliterend effect bij anti-regering protest in autoritaire regimes? En zo ja, hoe dan? Met het beantwoorden van deze vragen draagt mijn studie op twee manieren bij aan het veelbesproken debat naar de politieke effecten van internetgebruik in autoritaire regimes. Ten eerste kijkt mijn studie naar de effecten van internet gebruik op protesten tegen de regering en niet, wat de meeste studies doen, naar de democratisering van autoritaire staten. Ten tweede onderzoekt mijn studie *hoe* internetgebruik protesten tegen de regering faciliteert, middels een studie naar de onderliggende causale mechanismen. Dit doe ik in een onderzoeksdesign waarbij kwantitatieve en kwalitatieve methoden worden gecombineerd. De studie start met een kwantitatief onderzoek waarin het effect van internetgebruik op anti-regering protest onderzocht wordt, alvorens er in een meer exploratief, kwalitatief onderzoek in Maleisië naar de causale mechanismen wordt gekeken. Het onderzoek eindigt weer met een kwantitatieve analyse van meerdere autoritaire regimes, waarbij onderzocht wordt in hoeverre de Maleisië bevindingen ook van toepassing zijn op andere autoritaire contexten.

In het eerste hoofdstuk wordt het centrale thema geïntroduceerd en wordt er stilgestaan bij wat er ontbreekt in ons begrip over internetgebruik in relatie tot protesten in autoritaire regimes. Ik betoog hier onder andere dat er veelal een te nauwe kijk op de relatie bestaat: Wanneer er een protest plaatsvindt in een autoritair regime, wordt er vaak uitsluitend gekeken naar internetgebruik vlak voor, of tijdens een protest, maar zelden naar hoe blootstelling aan online informatie mensen hun politieke ideeën al veel eerder heeft beïnvloed. Een ander probleem dat ik identificeer is dat vrijwel al onze kennis over het onderwerp gebaseerd is op studies naar Arabische Lente protesten. Dit gaat soms zo ver dat een debat over het onderwerp gelijk wordt gesteld aan een discussie over de oorzaken van deze specifieke opstanden. Het hoofdstuk sluit af met een uiteenzetting over de voordelen en beperkingen van de gekozen onderzoeksmethoden.

Hoofdstuk twee geeft een overzicht van de bestaande literatuur en beargumenteert dat de *informatie-schaarste* in autoritaire regimes deze staten kwetsbaar maakt voor mobilisatie via internet. Autoritaire regimes hebben decennia lang de totstandkoming van een onafhankelijke publieke sfeer kunnen belemmeren door controle te houden over informatie- en communicatiestromen, alsmede door burgers hun vrijheid van meningsuiting in te perken. Echter, door internetgebruik krijgen burgers in autoritaire regimes meer toegang tot alternatieve politieke informatie –zowel lang voor, vlak voor, als tijdens een protest- waardoor internetgebruik onder bepaalde omstandigheden een mobiliserend effect kan hebben. Om mobilisatie via internet grondig te kunnen onderzoeken, stel ik in hoofdstuk twee voor om het mobilisatie

proces op te breken in drie verschillende stappen: Voordat mensen deelnemen aan een anti-regering protest, moeten zij de 'mobilisatie-keten' doorlopen, die bestaat uit: 1) sympathiseren met de protestbeweging; 2) geïnformeerd zijn over een aankomend protest; en 3) gemotiveerd zijn om deel te nemen aan het protest. Naast de mobilisatie-keten met haar drie stappen, introduceer ik ook twee contextuele factoren waar het mobiliserend effect van internetgebruik vaak van afhankelijk is. Dit zijn on- en offline staatsrepressie en het gebruik van sociale media

Alvorens onderzocht kan worden hoe internetgebruik in de drie verschillende stappen van de keten anti-regering protest beïnvloedt, is het cruciaal om te weten of er überhaupt sprake is van een effect. De grote -n, kwantitatieve analyses in hoofdstuk drie, op zowel land- als individueel niveau, onderzoeken daarom het directe effect van internetgebruik op protest in autoritaire regimes. Ik doe een land/jaar analyse voor de periode 1990-2013, waarin ik kijk naar de mate waarin het internetgebruik in een land - ceteris paribus - een effect heeft op het aantal anti-regering protesten. Een soortgelijke analyse voer ik uit op individueel niveau (2011-2015), waarbij ik onderzoek of internetgebruikers in autoritaire regimes - ceteris paribus - vaker bereid zijn om te demonstreren. In overeenstemming met meer 'cyber optimistische' ideeën, blijkt dat zowel op land- als individueel niveau internetgebruik anti-regering protest faciliteert in autoritaire regimes. De landen analyse laat bovendien zien dat het effect in autoritaire regimes sterker is dan in democratieën en semi-autoritaire regimes, en dat binnen de groep van autoritaire regimes met name de autoritaire regimes met een mildere vorm van repressie te kampen hebben met mobilisatie via internet. Opvallend is bovendien dat noch de landen analyse, noch de analyse op individueel niveau bewijs laat zien dat een toename in online staatsrepressie gezorgd heeft voor een afname in het effect van internetgebruik op protest. Ook vind ik geen bewijs voor een veranderend effect van internetgebruik over tijd, iets wat men zou verwachten wanneer autoritaire staten zouden leren hoe mobilisatie via internet voorkomen kan worden.

Omdat kwantitatieve data voor een onderzoek naar de causale mechanismen niet voor handen waren, en wellicht belangrijke nog, omdat het onmogelijk was te weten naar welke data precies gezocht moest met bestaande studies die zich vrijwel uitsluitend baseren op de Arabische Lente, doet mijn studie een diepgravende onderzoek in Maleisië om te begrijpen *hoe* internetgebruik anti-regering protest faciliteert. Maleisië vormde een goede case voor een dergelijk onderzoek vanwege haar autoritaire karakter, inclusief de besproken informatie-schaarste, alsmede vanwege de zes grote anti-regering demonstraties die plaats hebben gevonden in een periode waarin internetgebruik onder de bevolking groeide van 3% in 1998 naar 80% in 2016. Twee veldwerk periodes in Maleisië stelden mij in staat om de onderliggende processen tussen de onafhankelijke variabele 'internetgebruik' en de

afhankelijke variabele 'anti-regering protest' middels de stappen van de mobilisatie-keten grondig te bestuderen.

In Hoofdstuk vier bestudeer ik de rol van internetgebruik in de eerste stap van de mobilisatie-keten, door te onderzoeken hoe internetgebruik van invloed is geweest op de steun van Maleisiërs voor de Maleisische regering als anti-regering protestbewegingen. Gebruikmakend van zowel kwalitatieve als kwantitatieve methoden, beargumenteer ik dat het internet in Maleisië lange tijd gefunctioneerd heeft als een alternatieve publieke sfeer waar politieke informatie kon worden uitgewisseld die niet voorhanden was in de strikt gecontroleerde traditionele Maleisische media. Via het internet verkregen Maleisiërs toegang tot nieuwe, alternatieve informatie – variërend van corruptieschandalen, machtsmisbruik, tot staatsrepressie – die een sterke invloed hadden op hun politieke ideeën: Steun voor de regering brokkelde af, terwijl anti-regering protestbewegingen juist aan populariteit wonnen.

De verklaring voor het hierboven beschreven effect – zo betoog ik in hoofdstuk vier - ligt in de asymmetrische controle van de Maleisische regering over communicatie- en informatiestromen. Waar kranten, televisie en radio strak gecontroleerd werden, was er voor Maleisiërs relatief veel vrijheid online om alternatieve politieke informatie uit te wisselen. In eerste instantie kozen de Maleisische autoriteiten er bewust voor om het internet vrij van staatscontrole te laten met als doel om buitenlandse investeerders aan te trekken. Nadat de regering echter enkele gevoelige politieke nederlagen leed en zij ervan overtuigd raakte dat één van de oorzaken hiervan het vrije Maleisische internet was, besloten zij het internet verder te gaan controleren. Interessant genoeg laat mijn hoofdstuk echter zien dat hoewel de Maleisische regering sindsdien van alles geprobeerd heeft om het om het internet onder controle te krijgen, zij hier veelal niet geslaagd zijn. Verschillende binnen- als buitenlandse factoren hebben hieraan bijgedragen, en ook de 'socio-technische beperkingen' van online staatsrepressie spelen zijn een verklarende facrtor.

Hoofdstuk vijf gaat verder met de tweede stap in de mobilisatie-keten en onderzoekt de rol van internet in het informeren van sympathisanten van een protestbeweging voor een aankomend protest. Diepte-interviews met 22 Maleisische activisten en kwantitatief survey materiaal laten zien dat meer dan 'slechts' internetgebruik, het gebruik van sociale media cruciaal was in het sneller informeren van (meer) sympathisanten van Maleisische protestbewegingen over een demonstratie, alsmede in het bereiken verschillende secties van de samenleving. Waar voor het gebruik van sociale media Maleisiërs vaak nog politieke informatie misten doordat zij zich actief moesten inzetten om deze informatie te verkrijgen, werd het in de tijd van sociale media onder hun neus gedrukt zonder dat daar enige moeite voor gedaan moest worden. Dit verklaart – gedeeltelijk althans – waarom ondanks nagenoeg

gelijke internettoegang in Maleisië in 2007 en 2011, veel Maleisiërs in 2007 niet en in 2011 wél op de hoogte waren van een aangekondigd anti-regering protest van de beweging Bersih.

Ik draag vier redenen aan waarom de Maleisische autoriteiten niet in staat zijn geweest om het informeren van protestsympathisanten via sociale media te voorkomen. Ten eerste bewees de regering zichzelf een slechte dienst door de straatprotesten keihard neer te slaan. Deze harde aanpak leverde namelijk een karrevracht aan materiaal op waarop te zien was hoe de regering tekeer ging tegen vreedzame demonstranten, iets wat de circulatie van sociale media content over de demonstraties alleen maar sterk deed toenemen. Ten tweede maakte de regering - volgens de geïnterviewde activisten - enkele grove blunders met hun interventies in cyberspace. Zo werd door het blokkeren van de protestbeweging haar website, alsmede het gebruiken van de demonstratie-hashtag, de aandacht voor het protest onbedoeld alleen maar vergroot door staatsinterventies. Ten derde maakte de Maleisische protestbeweging Bersih in haar communicatie met name gebruik van Facebook en Twitter, waardoor zij redelijk immuun bleek voor staatsrepressie in cyberspace. Hoewel de autoriteiten technisch gezien zeker in staat waren om Maleisiërs de toegang tot Facebook en Twitter te ontzeggen, besloten zij dit niet te doen, waarschijnlijk omdat zij vreesden nog meer Maleisiërs tegen zich in het harnas te jagen. Het merendeel van de Maleisiërs gebruikt deze sociale media louter voor apolitieke doeleinden en zouden juist gepolitiseerd kunnen worden door een blokkade van Facebook of Twitter. Ten vierde en tot slot, is de succesvolle verspreiding van informatie via sociale media ook mogelijk dankzij de relatief milde offline staatsrepressie in Maleisië. Dankzij de relatief milde repressie is het mogelijk geweest voor een protestbeweging als Bersih om een goede naam op te bouwen door de jaren heen en het vertrouwen van veel Maleisiërs te winnen, waardoor veel Maleisiërs op het moment suprême bereid bleken informatie over een Bersih-protest te willen delen.

Hoofdstuk zes bestudeert de derde en laatste stap in de mobilisatie-keten en onderzoekt of en hoe internetgebruik de motivatie om deel te nemen aan een protest beïnvloedt van mensen die zowel sympathiseren met een protestbeweging als tijdig geïnformeerd zijn over een protest. 17 diepte-interviews met 'geïnformeerde Bersih-sympathisanten' worden afgenomen, waarvan een deel ook daadwerkelijk aan een Bersih protest deelnam, maar waarvan een ander deel dat niet deed, meestal omdat de risico's te groot werden geacht. Na de interviews nam ik bovendien een landelijke survey af om de verschillende hypotheses op een meer systematische wijze te toetsen. In tegenstelling tot de eerste en de tweede stap van de mobilisatie-keten, blijkt internetgebruik verrassend genoeg in de derde stap nauwelijks een mobiliserende rol te spelen in Maleisië. Het merendeel van de onderzochte hypotheses komt voort

uit studies over de Arabische Lente, maar bleken weinig verklaringskracht te hebben in de Bersih protesten. Informatie over de te verwachten opkomst was bijvoorbeeld onbelangrijk bij het overtuigen van Bersih aanhangers om de straat op te gaan, en dramatische video's of foto's net zo min.

Het enige mechanisme waarvoor ik (wat) bewijs vind voor een mobiliserend effect van internetgebruik in stap drie, is via stimulerende sociale media netwerken. De 17 diepte-interviews laten zien dat de verhoogde zichtbaarheid van protest-sympathisanten via sociale media de bereidheid om deel te nemen aan een protest beïnvloedde. In sommige gevallen wilden de Bersih-sympathisanten trots laten zien op hun sociale media accounts dat zij deelnamen aan het Bersih protest, in andere gevallen waren zij bang voor negatieve reacties wanneer zij niet deelnamen aan het protest. In beide gevallen hadden stimulerende sociale netwerken zo een positief effect op de motivatie om deel te nemen aan een Bersih protest.

Mijn studie wijkt af van de meeste onderzoeksopzetten waar regressieanalyses (hoofdstuk drie) gecombineerd worden met een casestudie (hoofdstuk vier-zes) door de bevindingen van de casestudie Maleisië weer mee 'terug' te nemen naar de regressieanalyse en verder te exploreren in meerdere autoritaire contexten. Met individuele survey data test ik in hoofdstuk zeven de Maleisië bevindingen uit hoofdstuk vier in 25 andere autoritaire regimes. De externe validiteit van de Maleisië-resultaten uit hoofdstuk vijf en zes worden onderzoek ik door middel van secundaire literatuur.

Hoofdstuk zeven toont aan dat een asymmetrische controle over communicatie- en informatiestromen, welke cruciaal was in het verklaren van de verminderde steun van Maleisiërs voor hun regering, geen noodzakelijke voorwaarde is voor een positief effect van internetgebruik op anti-regime sentiment. Een kwantitatieve studie van 25 autoritaire regimes (2010-2015) laat zien dat zelfs in staten met een meer symmetrische controle over informatie- en communicatiestromen, waar het internet op het eerste gezicht dus niet meer vrijheden biedt dan de traditionele media, internetgebruikers toch negatiever over hun regering denken dan niet-internetgebruikers. Twee verklaringen hiervoor zijn mogelijk: Ten eerste is het mogelijk dat ondanks meer online repressie, autoritaire staten toch niet in staat zijn gebleken om de circulatie van alternatieve informatie te voorkomen in cyberspace. Met andere woorden, een (op het oog) symmetrische controle over informatie- en communicatiestromen (weinig on- and offline vrijheden), zou in werkelijkheid nog steeds asymmetrisch kunnen zijn. Een tweede verklaring is dat autoritaire regimes het internet wel meer konden controleren, maar dit bewust niet deden omdat enige vrijheid in cyberspace het regime waardevolle informatie kan opleveren over de wensen en ideeën van burgers, alsmede over het functioneren van lokale overheden.

De claim uit hoofdstuk vijf dat sociale media cruciaal waren in het informeren van protestsympathisanten over een aankomend protest in Maleisië, is naar alle waarschijnlijkheid alleen van toepassing op andere autoritaire regimes met relatief milde staatsrepressie. In meer repressieve contexten daarentegen, is het minder waarschijnlijk dat internetgebruik mobiliserend werkt bij het informeren van protest-sympathisanten, aangezien mensen in die omstandigheid vaak geen informatie over het protest durven te delen op hun eigen sociale media accounts, omdat er onvoldoende vertrouwen is in protestbewegingen zelf, alsmede omdat meer repressieve regimes het volledige internet of specifieke websites kunnen afsluiten wanneer het te heet onder hun voeten wordt.

De bevinding uit hoofdstuk zes dat stimulerende sociale netwerken in Maleisië de motivatie om deel te nemen aan een anti-regering protest verhoogden, is naar alle waarschijnlijkheid ook van toepassing op andere autoritaire regimes waar protestsympathisanten hun steun aan een protest durven uit te spreken op sociale media. De overige hypothesen, waar geen bewijs voor werd gevonden in Maleisië, kunnen nog steeds relevant zijn in andere autoritaire contexten, maar kunnen ook over-generalisaties zijn van bevindingen die voortkomen uit studies naar de Arabische Lente protesten.

In het laatste hoofdstuk bespreek ik alle bevindingen gezamenlijk en reflecteer ik op de implicaties hiervan op het voor het voortbestaan van autoritaire staten. Aan de ene kant waarschuw ik voor teveel optimisme. De bevinding dat internetgebruik anti-regering protest faciliteert, betekent namelijk niet automatisch dat deze protesten ook een bedreiging zijn voor het zittende regime. Echter, aan de andere kant laat ik zien dat de mobiliserende rol van internetgebruik wel het voortbestaan van autoritaire regimes kan bedreigen. Niet alleen door anti-regering protest te faciliteren, maar ook door de politieke ideeën van mensen zo te veranderen, dat ze niet langer de zittende regering steunen tijdens verkiezingen.

Tot slot geef ik op basis van mijn bevindingen drie aanbevelingen aan civil society. Ten eerste betoog ik dat Facebook en Twitter – hoewel vaak hevig bekritiseerd - een belangrijke rol kunnen spelen in het verminderen van informatie-schaarste in autoritaire regimes, omdat zij minder makkelijk dan andere websites gecontroleerd kunnen worden middels staatsinterventies. Ten tweede stel ik dat het inzetten op (de bescherming van) digitale rechten altijd onderdeel moet zijn van een bredere strategie die streeft naar het verbeteren van burgerlijke rechten, en vrijheid van meningsuiting en toegang tot informatie in het bijzonder. Ten derde is het belangrijk om bij het evalueren van het succes van internetgebruik in autoritaire regimes een lange-termijn perspectief te kiezen, welke in ogenschouw neemt of internetgebruik heeft bijgedragen aan het verminderen van de informatie-schaarste en die ook langzame veranderingen in de politieke ideeën van mensen op waarde weet te schatten.