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# “We have to say no to coal<sup>1</sup>”: Facebook framings of the Egyptians against Coal movement

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**Abstract**

The study aims to explore and analyze the core collective action frames that were developed by the environmental movement of ‘Egyptians against Coal’ to raise the public awareness about the dangers of coal and mobilize action. The framing theory is used as the main theoretical approach in this study. The study relies on a qualitative content analysis of the Facebook page of ‘Egyptians against Coal’ and interviews conducted with the page creators and activists. The study revealed that by using Facebook, the anti-coal movement managed to make salient new meanings of coal as part of a wider social problem, rather than an ‘economic panacea’ to Egypt’s industry challenges and to phrase frames that resonate with shared political and economic grievances and dominant cultural values in Egypt. In this regard, it was found that the Facebook page constructed four prevalent frames in order to shape public discourse: coal as an environmental disaster, coal and health risks, coal and environmental injustices and socioeconomic costs, and fossil fuel versus renewable energies.

**Zusammenfassung**

Die Studie untersucht die thematischen Rahmungen, innerhalb derer die Umweltbewegung „Egyptians against Coal“ das öffentliche Bewusstsein für die Gefahren der Kohlenutzung schärfen und zu kollektiven politischen Aktionen mobilisieren will. Dabei verwendet die Studie die *framing*-Theorie als zentralen konzeptionellen Ansatz. Sie stützt sich auf eine qualitative Inhaltsanalyse der Facebook-Seite der Initiative sowie auf Interviews, die mit den Urhebern und Aktivisten der Seite geführt wurden. Die Analyse ergab, dass es der Anti-Kohle-Bewegung durch die Nutzung von Facebook gelang, die Nutzung von Kohle als Teil eines umfassenderen sozialen Problems und nicht als ‚wirtschaftliches Allheilmittel‘ für die Herausforderungen der ägyptischen Industrie zu definieren. Überdies konnten thematische Rahmungen formuliert werden, welche die politischen und wirtschaftlichen Missstände und die vorherrschenden kulturellen Werte in Ägypten aufgreifen. In diesem Zusammenhang wurde festgestellt, dass die Facebook-Seite mit vier zentralen *frames* arbeitet, um den öffentlichen Diskurs zu gestalten: Kohle als Umweltkatastrophe, Kohle und Gesundheitsrisiken, Ungerechtigkeiten und sozioökonomische Kosten im Zusammenhang mit Kohle und Umwelt sowie fossile Brennstoffe im Vergleich zu erneuerbaren Energien.

**Keywords** Egypt, anti-coal movement, framing theory, Facebook

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## 1. Introduction

The objective of this study is to use frame analysis as an analytical framework for investigating the Facebook communication of a specific environmental movement in Egypt. I examine how the ‘Egyptians against Coal’ movement has been using Facebook to frame issues related to reintroducing coal as an energy source in Egypt and mobilized a large base of supporters. Investors, economic developers, politicians, and government officials alike claim that coal as a cheap energy source holds the key to stabilize the Egyptian economy. Newspaper headlines and television programs herald the ‘economic profits’ of coal, and that it can be cheaply burned and used with little environmental impact. However, the ‘coal rush’ rhetoric has been assuaged by critics who opposed the introduction of coal as a cheap energy source (Elgerzawy 2018).

These critics relied on Facebook (along other social media platforms in order to shape counter discourses and garner public support (Zayed and Sowers 2014). While friction and struggle are characteristic of the pursuits of material interests (Chong 1997), they also reflect that energy development is intertwined with other societal and political factors and, for this reason, is a debatable issue that could be interpreted differently. While the supporters of coal positioned their narratives of coal as the future of Egypt’s industry in the state-owned mainstream media (Zayed and Sowers 2014), the social media – in particular Facebook – offered a space for coal use opponents, who have less access to the mass media, to voice their narratives that question the ‘coal rush’. In this light, the significant contribution of this study is its focus on Facebook as an epistemic tool that was used by activists to construct their own story of struggle and shape counter frames.

The first section starts with the literature about Facebook potentials and limitations for contentious politics. The second section provides a chronological description of the ‘Egyptians against Coal’ campaign and its main development cornerstones. The third section reviews frame theory and presents an analytical framework, which is to guide analysis of the empirical data. The fourth section presents the results of the analysis. The fifth section provides a possible explanation of the prevalence of certain frames and how these frames hit on deeper political, cultural and economic contexts in Egypt.

## 2. Facebook and contentious politics

According to Khodair and Khalifa (2014), Facebook paved the way for the outbreak of the 25 January 2011 revolution and since then it has become a vital platform for political activism and a driver for social change (Tohami 2017). Recent statistics show that Egypt stands as the biggest national market for Facebook in the Arab region, with 40 million daily users in 2019, which accounted for 38.9% of its entire population (Thottathil 2019). According to Tohami (2017), youth between 18 and 34 years old represent about 65% of the total active Facebook users in Egypt. A survey that was done in the wake of the Egyptian revolution about the usage of Facebook among activists in Egypt revealed that Facebook is used primarily by activists to raise awareness within their countries about recent political and social transformations and challenges (31%), spread information to the world about important issues and events (24%), and organize activists and actions (22% and 30%). It has become a commonplace that social movements’ organizers and adherents rely on Facebook to publish their plans, ideas and opinions. Therefore, Facebook provides a social movement scholar with an enormous amount of information that is retrieved from posts and comments. This information is quite similar to the data that can be collected from focus group discussions (Lukashina 2013). One major implication of Facebook for environmental politics is its usage to build local and global environmental campaigns (Hodges and Stocking 2016). There are some particular features of Facebook that potentially alter how environmental controversies are presented and communicated, and how audiences make sense of these controversies.

In the first instance, Facebook allows instant sharing and transferring of information among a huge number of users in various forms, such as text, image, and audio visual (Naaman et al. 2011). This multi-sensory representation of a certain environmental problem can transport audiences into ‘virtual’ reality, where they can experience, for example, a polluted river, a toxic dumpsite, or a deforested land (Hendriksa et al. 2016). Second, Facebook provides an interactive medium where an audience can easily write and comment in favor or against a certain environmental cause (Abdu et al. 2017). Thirdly, Facebook has deliberative capacity, with features such as ‘The Wall’ and ‘Groups’ allowing users to make comments, read each other’s comments and hold ongoing argumentative discussions before large audiences (Masip et al. 2019).

Fourthly, Facebook provides spaces for ‘informal talk’ where people relate their daily lives with wider political and social concerns, and therefore it has the capacity to sustain more creative ways of political expression, such as story-telling, posting photos and videos (Hendriksa et al. 2016). Finally, using Facebook requires merely Internet access and typing skills, and these low-cost barriers in comparison with producing alternative media forms and managing the filters of the mainstream news media have propped everyone to easily and instantly voice their opinions (Storck 2011).

These features and others reshaped the communication of environmental issues by introducing new ways of making sense of policy controversies, and by presenting them in appealing ways to the citizens (Hendriksa et al. 2016), however, the implications of these features for environmental communication should not be overstated. This is due to some challenges that are associated with the architecture of Facebook and how it is designed and operates (Pasquale 2015). One of these challenges is the incompatibility between the commercial interests behind Facebook’s design, and the human need to enforce meaningful interaction that sustains social change (Corettia and Pica 2015).

Also, there is an increasing evidence that Facebook communication protocols do not encourage the formation of strong ties among users, rather weak ties of communication, which hinder solidarity (Corettia and Pica 2015). In addition, it is hard to decide whether and to what extent information can be considered as accurate or truthful within Facebook pages (Daniels 2014). This emergent epistemological challenge is closely related to structures in who acts as gatekeepers and how content is developed and distributed through Facebook (Schou and Farkas 2016). The communication protocols of Facebook introduced features that prevent some voices from being fully heard through, for example, the ability of a Facebook page administrator to moderate comments and filter out unruly voices (Schou et al. 2015). This way of communication reinforces asymmetrical power relations between those who create and control content and those who respond and interact with it (Lillqvist et al. 2015). In addition, the digital divide remains a challenge for the use of Facebook. The main issues of the digital divide are no longer matters of computer or Internet access. Rather the digital divide implies matters of social media skills, usage opportunities and abilities to learn

and master new media technologies (van Dijk 2013).

In the light of the above-mentioned, Facebook’s role in contentious politics is widely investigated through various theoretical lenses. Some studies are criticizing Facebook’s affordance for political engagement (Passini 2012). Other studies are concerned with the positive role of Facebook in civic engagement and democracy (Curran et al. 2012). There are studies that position Facebook as an interactive communicative platform that allows people to discuss, co-produce content and share their opinions in a way that fosters a collective understanding of public issues (Oz 2016). The present paper falls within the latter category as it explores how Facebook is used to frame the coal controversy in Egypt in a way that attracts sympathizers and garners public support.

### 3. Egypt’s energy crisis and the anti-coal movement: brief history

In the five years following Egypt’s 2011 revolution and the consequent political turmoil and economic instability, governmental reports indicated that domestic supplies of oil and gas were insufficient to cover the needs of industry and household consumption (Egypt Network for Integrated Development 2015). Out of concern about public discontent over blackouts and the possible destabilizing political ramifications of household energy rationing, the government opted to reduce gas supplies to energy intensive industries. As a result of energy shortages, production at cement plants decreased by 11% in 2013 and thus industry representatives argued that a decline in cement production could deliver a disastrous blow to the Egyptian economy by depressing housing and infrastructure development (Zayed and Sowers 2014).

A rigorous lobby led by cement companies and businessmen has formed to pressure the Egyptian government to compensate shortage in natural gas by coal imports. This pressure has been reinforced in the Egyptian Cabinet by the ministries of industry and electricity (Reuters 2014). In addition, numerous human rights organizations, environmental activists, nature conservation organizations formed a coalition that is called ‘Egyptians against Coal’. This coalition aimed to raise the public awareness about the environmental costs of creating a coal infrastructure, given Egypt’s ineffective regulation of industrial pollution. The coalition began publicizing energy and

governance and taking these concerns about importing coal to the public, arguing that the costs associated with coal use would overshadow any benefits that might be attained by allowing the cheap but dirty fuel into the country (*Mada Masr* 2015).

Also, Environment Minister then, Laila Iskandar, had strong anti-coal stance, arguing that coal can be replaced with renewables whose environmental impacts are incomparable to the adverse impacts that coal burning causes (*Eastman* 2016). Despite the opposing opinions in the government and the visible discontent with the decision of importing coal, the Cabinet voted in 2014 to lift a long ban on coal imports for industrial use. The law was amended again in 2015 to allow coal-fired power plants provided that compliance with environmental regulations is assured and required environmental impact assessments for the coal supply chain are put in place to mitigate emissions (*Mada Masr* 2017; *Sarant* 2017). Throughout this period, discourse among coal protagonists and antagonists has been imbued with various perspectives and imbedded meanings. Protagonists touted coal as the only viable solution to stabilize the economy and prevent further deterioration in the energy supply. However, opponents maintained that the only beneficiaries of the decision to import coal are the owners of major industrial factories – the same people who benefited from subsidized energy in the past and are now pursuing another cheap alternative, subsidized by the health of Egyptians’ and their futures (*Zayed and Sowers* 2014). The way in which the ‘Egyptians against Coal’ rallied via Facebook to challenge the government’s decision to import coal is relevant of what *Castells* (2001) named a ‘networked social movement’ of the Internet age. This networked social movement unfolded around common objective (stopping coal imports) and was a seamless and spontaneous collective action supported by the Internet and wireless communication (Facebook) (*Sarant* 2017).

#### 4. Theoretical approach: frames, framing and collective action frames

An important idea underlying the notion of framing is that actors sponsor a specific interpretation of an issue in such a way as, to quote *Entman’s* influential work on frames, to “promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described” (*Entman* 1993: 52). *Reese* (2001) explained

two ways in which frames are ‘organized’ – cognitively and culturally. Cognitively, media lead the audience to perceive certain social phenomena in a certain way by selectively emphasizing some aspects over others. Culturally, frames are more strategic and are related to audiences’ sets of values and norms. However, both cognitive and cultural ways show active characteristics in the framing process.

*Gitlin* (1980: 7) described frames as “persistent patterns of cognition, interpretation, and presentation, of selection, emphasis, and exclusion, by which symbol-handlers routinely organize discourse”. For *Entman* (1993) and *He* (2010), frames are built by the presence or absence of certain keywords, catchphrases, stereotyped images, depictions and sentences that provide articulation or presentation of problems in a way that helps message receivers to make sense of certain social phenomena.

In this context, the way pieces of information are constructed and presented gives power to framing and, particularly in complex situations, communicators, such as politicians, commentators and journalists, aim to exercise political influence by proposing interpretations that advance their interests or goals (*Vladisavljević* 2015). By this way, framing is fundamentally a way of practicing and capturing political power (*Reese* 2001). Likewise, frames that lend an impetus for social change and legitimize activism activities are prerequisite for creating social movements (*Davis* 2009). These are referred to as “collective action frames” (*Snow* 2004: 384). These ‘collective action frames’ respectively elucidate how “social movements organization and their agents assign meaning to and interpret relevant events and conditions in ways that are intended to mobilize potential adherents and constituents, to garner bystander support, and to demobilize antagonists” (*Snow and Benford* 1988: 198).

Collective action frames serve three core framing tasks (*Benford and Snow* 2000). Diagnostic frames are used to define the origin of a problem and articulate what *Gamson et al.* (1982) refer to as ‘injustice frames’. Also, there is an attributional component of diagnostic framing, which implies identifying some events as problematic, as well as attributing blame or causality (*Snow and Benford* 1988). Prognostic frames serve to define how the policy problems should be dealt with and how the solutions for the problem could be articulated (*Gray* 2004). Identification of the problem significantly affects what solutions are available



to movement actors (Cress and Snow 2000). Another constraint of the prognostic framing is that it takes place within a multi-organizational field consisting of numerous actors such as the movement’s advocates, opponents, media, and bystanders (Benford and Snow 2000). Thus, it is not surprising that a movement prognostic framing activity typically includes efforts to cast doubts on the opponents’ claims, rebut their version of reality and undercut the effectiveness of the solutions proposed by them (McCaffrey and Keys 2000).

Lastly, motivational frames provide a “call to arms” or a “prod to action” (Snow and Benford 1988: 200, 202). Since agreement about the sources of a given problem and its possible solutions does not necessarily generate corrective actions, it is important to put forth a rationale that galvanizes individuals to engage in collective actions (Benford and Snow 2000). However, the ability of social movements to mobilize advocates is determined by the extent to which the values adopted by the movement are framed in ways that resonate with existing values in the targeted audience’s larger cultural narration and belief system (Snow and Benford 1988; 1992). The construction of social problems is facilitated when actors underline its political and social ramifications in a society during a particular period. When frames bring a given cause within the ‘sphere of moral concern’ people are likely to act collectively to defend their moral and ethical convictions and not only direct personal or collective gains (Jasper 1999; Lowe and Ginsberg 2002).

In this study, the movement against coal is seen as a collective action frame and it is sought to explore and analyze the core collective action frames that were employed to garner support for fighting against the introduction of coal as energy source in Egypt.

## 5. Eliciting the frames: methods and analytical framework

Given the objective of this study to elicit the frames about coal I chose to apply qualitative research methods as they help to gain insight into the processes underlying the meaning-making, as well as the interpretation of meanings that are important for the social construction of reality and lived experiences of the research participants (Atkinson 2017). Thus, the study combines a qualitative content analysis of the Facebook page of ‘Egyptians against Coal’ and in-

depth face-to face and online interviews with the page creators and activists in the campaign. Data for this study was derived from the Facebook page ‘Egyptians against Coal’ between early 2014 and end of 2016. This time period was selected because the debate about coal use for industrial purposes intensified since 2013 and culminated in 2014 due to high energy prices and longtime of blackouts since summer 2013. Data was gathered over a period of three years which is argued to provide deep insight into the development and articulation of compelling counter frames packed to resist investment in and development of coal.

The total number of activists was 31, including 15 females and 16 males. All of them have significant digital skills and extensively use social media for a variety of purposes, managing either the websites of their NGOs, administering the Facebook pages and Twitter accounts of their NGOs or other Facebook pages or even their own personal blogs. It is worth mentioning that a great part of the respondents extensively use the Internet (on average 14 hours per day), which indicates significant digital competencies and active online activism. The interviewees were selected using snowball sampling, which is used mostly for doing qualitative research, mainly through interviews (Hendricks et al. 1992). In this study, an initial set of respondents was identified and interviewed who served as initial contacts for other respondents, whom they think would be willing to be interviewed, on the basis of their relevant knowledge of the research subject (Voicu and Babonea 2011). Findings from a snowball sample can’t be generalized (Kirchherr and Charles 2018). However, the intent of qualitative studies is not to generalize to a population, but to develop an in-depth and contextualized exploration of certain phenomena (Creswell 2005).

All the interviewees belonged to different environmental NGOs that are located in Cairo and Alexandria – the major cities that witnessed the emergence of the coalition of ‘Egyptians against Coal’. The activists who are based in Cairo were interviewed face to face, while the activists in Alexandria were interviewed via Skype. The interviews were carried out between March and July 2016. The average time of each interview varied from 60 to 90 minutes.

I relied on open-ended questions conducting the semi-structured interviews. In-depth interviews provide a flexible platform for the researcher to tap into the knowledge and opinions of the informants on a par-

ticular topic of interest (Berry 1999). In this regard, the interviewer elicits answers fully from the perspective of the study participant, and attempts to gain a greater understanding of the context and meaning of those responses through various forms of probing (DiCicco-Bloom and Crabtree 2006).

As a first approach, I decided to perform a qualitative content analysis of the Facebook page of ‘Egyptians against Coal’. The qualitative content analysis is a method frequently used by researchers in order to investigate what is in a text and to uncover latent or underlying meanings embedded within a text (Krippendorff 2012). All sorts of contributions in the Facebook page including posts, comments and articles that were available online from early 2014 to end of 2016 and addressed the coal issue have been selected and written down for analysis. The qualitative content analysis of the Facebook page of ‘Egyptians against Coal’ was the starting point in the data analysis; it enabled me to identify what framings do occur, which arguments are dominant, which assumptions they grounded in etc. This study first examined the initial messages posted by the page creators. It then examined comments by Facebook users in response to the Facebook posts.

I coded the Facebook posts and responses of users starting from early 2014 till end-2016. Each post and comment is given a code based on Snow and Benford’s (1992) three collective action frames: diagnostic, prognostic and motivational frames. Based on this analysis, I expected that certain types of argumentations would be dominant in the interviewees’ discourse. However, coding was not limited to pre-existing categories or frames, rather other categories that emerged during the interviews were taken into account. In this regard, all interviewees’ statements were closely read and transcribed, and all of the arguments were coded in light of the predefined typology of frames. The statements were also contrasted with one another, and frame categories were developed from the patterns observed.

## 6. Results

The study produced a mixture of expectable and fairly surprising results. The Facebook page of the ‘Egyptians against Coal’ crafted and articulated four main frames: coal as an environmental hazard, coal as a health risk, environmental and socioeconomic

injustices and fossil fuel versus renewables. These frames were often constructed to conjure up to the most compelling arguments in the form of declarative statements, or claims, with empirical evidence or logical coherence. In this regard, much effort was made to systematically correlate how the coal use would endanger environment, jeopardize people’s health and aggravate current economic and social injustice. Here I begin with explaining the underlying content of emerging frames. Then I discuss the frames within their wider political and social context both nationally and internationally.

### 6.1 Coal as an environmental disaster

The environmental disaster frame was the most likely to be employed in debating the coal issue by the both the Facebook page and the environmental activists involved in the anti-coal coalition. It was composed of claims primarily accentuating coal as ‘the most polluting of all fuels.’ From coal extraction, importation to burning to disposal, coal emits significant amounts of carbon dioxide into the atmosphere, which is the leading cause of climate change (Participants 3, 4, 7, 19, 30, 31). It was explained that “coal combustion releases many toxic elements that have dangerous impacts on the natural environment and the people. While air is usually polluted during the extraction and burning of coal, water and soil are polluted during the process of mining or in disposal of waste products, that are mostly toxic chemicals and heavy metals (such as mercury, sulfur and chlorine and fluorine)” (Participant 9). One of the participants drew a relationship between national resistance to coal and the global environmental justice movement saying: “All countries that are characterized by high levels of air pollution are relying on industrial coal burning. For example, coal burning in China is the biggest source of both air pollution and greenhouse gas emissions. Similarly, Poland has some of the most polluted air in the European Union due to burning coal for industrial purposes. All these countries undergo strong mobilizations against coal with a common goal which is environmental justice particularly for the marginalized and the poor” (Participant 14).

Another argument for coal refusal is that pollution of the environment can also occur through windblown dust during transportation, where coal is washed and at export ports. One of the respondents emphasized this point saying that a “quarter-million lorry trips

are required each year to supply the cement plants. We all see lorries on highways, which never take into consideration the safety measures, release coal dust into the atmosphere” (Participant 11).

The Facebook page ‘Egyptians against Coal’ featured also the coal fired power plants’ impacts on the water supplies. One post on the page reads as follows: “Coal power plants use huge volumes of water for cooling. The more power plants are built the more water would be lost for the energy sector, depriving millions of people from clean drinking water. In particular, plenty of these power plants are built in areas that are already in high water stresses”. One of the interviewees explained, “fresh water is used to extract, wash, and sometimes transport the coal; to cool the steam used to make electricity in the power plant; and to control pollution from the plant. Furthermore, wastewater is discharged into the sea which raises water temperatures, endangering coral reefs, a valuable touristic asset in Egypt” (Participant 9).

Another significant argument developed by the Facebook page users to garner public support against coal was organized around its impact on climate change. For instance, one of the interviewees asserted that “the coal-fired power stations are potent emitters of greenhouse gases and are important contributors to climate change” (Participant 27). This opinion is featured several times in the ‘Egyptians against Coal’ Facebook page. For example, one post implies that coal contributes more to climate change than any other energy source. Burning coal is the dominant source for carbon dioxide (CO<sub>2</sub>) globally. It was mentioned that 5% of CO<sub>2</sub> in the world is caused by the emissions of the cement factories and the cement industry releases 10% of the total CO<sub>2</sub> in Egypt. Thus, fueling cement industries with coal will double these figures.

## 6.2 Coal as a health risk

The health risks frame was constructed primarily to convince the audience that fueling cement factories with coal does not only have negative environmental impacts, but it has also disastrous public health impacts. All the interviewees emphasized that the Egyptians are bearing the brunt of the cement industry due to its proximity to populated areas and the inefficient environmental regulations. For instance, claims were made by one of the interviewees that “cement factories are actually culpable in causing detrimental

health effects to those living in the vicinity of the factories in Helwan. Those people are heavily susceptible to health risks from inhaling polluted air and many of them suffer from respiratory system infections and pulmonary diseases, including lung cancer” (Participant 29).

In the same context, the Facebook page posted a statement of the manager of the poison center of Cairo University entailing that “air pollution from coal negatively impacts the respiratory, nervous and cardiovascular systems, and is particularly dangerous to the elderly and children”. In addition, the Facebook page presented compelling evidence of sweeping health risks on people at the global level. For example, it is mentioned that about 23,000 early deaths are yearly counted in the EU as a result of air pollution resulting from coal combustion. These deaths happen in the EU where the regulatory authorities ensure that coal-fired plants comply with the best environmental guidelines. In countries like Egypt where people are suffering from high rates of air pollution and lax enforcement of environmental guidelines for coal use is pervasive, the health burden is expected to be even much worse. Another post indicated that shutting down coal fired power plants in certain regions in China resulted in improving the learning skills of children and reducing toxics in newly born babies.

According to one of the interviewees, “lending a blind eye to those adverse health effects does not support the government’s pursuit to earn the legitimacy imperative”. He further elaborated: “While the government has claimed to make legitimate decisions based on justified claims that coal is the remedy to ‘energy poverty’, it failed to address public concerns regarding coal health risks” (Participant 16). According to one of the respondents, “this casts significant doubts on the government’s position on coal as ‘good for all’ and it is disappointing that the government is bending its environmental policies and pays no attention to the Egyptians’ health to buttress the interests of the large corporations and the market interests” (Participant 28).

## 6.3 Coal and environmental injustices and socioeconomic costs

With respect to this frame, the respondents criticized the government conceptualization of the coal as ‘an economic panacea’. In this regard, one of the respond-

ents mentioned that “one of the challenges faced by those who wish to curtail coal use in cement factories is that there is no political consensus on tackling this issue” (Participant 4). Another respondent explained that “the government realizes the environmental problems in Egypt, but they have other more immediate priorities: reducing unemployment, paying salaries, providing an attractive environment for investments by large cement corporations.” She added, “it seems pointless to expect the government to comply with our demands as they are highly concerned with growth for its own sake, bend the knee to cement industries when they demand breaks and subsidies, and are reluctant to embark on renewables” (Participant 13).

Most of the respondents considered the capitalist market economy culpable in accelerating the rate of using fossil fuel reserves and depleting a lot of natural resources to power economic growth. Moreover, the majority of the respondents made reference to inability of the market-based economy dominated by large cement corporations to address deep wealth and income inequalities. A related post on the Facebook page explains: “although the cement industry claims that the lack of natural gas has adversely impacted their production capacity and that coal must be imported to reduce the deficiency in production, the profits of Suez Cement Company significantly increased in 2013”. Another post portrays how the cement industry achieves tremendous profits as it makes use of the cheap labor that suffers from deteriorating working conditions and is especially vulnerable to the detrimental health and environmental impacts of burning coal. In this regard, the discrepancy of wages internationally was stressed as an indicator of economic injustice. For example, one comment on the Facebook page indicates that, “while the wage for a factory worker in South Korea is \$ 25 per hour and in Turkey is \$ 13 per hour, it is estimated by only \$ 3 per hour for the Egyptian worker”.

In the same context, one of the respondents indicated that, “while the electricity prices are highly subsidized for industrial purposes; the electricity prices are more costly for the residential purposes. In particular, while the residential tariff is 67 piasters for 1KW/h, the government charges only 33 piasters for 1KW/h for the factories. And ironically while the negative impacts of coal cannot be reversed, fueling cement industry with coal will increase its consumption of subsidized electricity” (Participant 24).

#### 6.4 Fossil fuel versus alternative energy

Within this frame, the activists construct the coal problem as a struggle or fight between bad (fossil fuel) and good (renewable energies). Moreover, this way of framing provided a potential solution or remedy to the controversy at hand. Actually, all the interviewees were very critical about investing money and efforts into finding technology to make a dirty and polluting coal less so and they supported the investment in true clean energies such as solar and wind energies. In this regard, one of the participants said that, “the goal of our campaign is to explain the story of coal dangers at a moment in history when, arguably, the story should be shifting from is coal harmful to our health, environment and economy to what should we do about it? Can we imagine a future that is cleaner, greener and sustainable – one that avoids climate change? The answer is that it will not be impossible, but it is feasible if we make the right choices and opt to multiple renewable clean energies – and start making them sooner not later” (Participant 22).

One of the primary ways the Facebook page articulated this frame was to stress the accelerating pace at which alternative energies were being developed and the environmental and economic benefits that are derived from these clean energies. The results of the content analysis revealed that the Facebook page ‘Egyptians against Coal’ presents many success stories of countries that opt to alternative energy sources. For example, one post reads: “Renewable energy has for the first-time surpassed coal in supplying the UK’s electricity for a whole quarter in 2015”.

Another strategy of developing this frame was to clarify that renewable energies are becoming price competitive with pollution subsidized fossil fuel. It was particularly emphasized that cost reduction and solar irradiation present a great opportunity for energy transition in Egypt. Also, this frame ensured that conversion to renewable energy would also eliminate external costs associated with health risks, water and air pollution and climate change. In this vein, comments on the Facebook page argued that while the government insists to import and burn coal as it is cheaper than other fossil fuel sources, its full costs are not reflected in its market price. A comment in this regard indicates that, “if we calculate coal impacts on human, climate and environment in general, we are paying a much higher cost in the long term. In fact, cement factories receive preferential treatment



from the state and benefit from tax breaks and cheap leases of public lands, while the externalities caused by using coal are borne by the public in form of medical bills and low quality of life”.

## 7. Discussion: understanding frames of the anti-coal movement within their wider context

The diagnostic frames of the anti-coal campaign attribute blame to the government and the corporations that seek economic growth at any cost. Interestingly, the coal framing did not only involve the articulation of the joined issues of the cause, but also possible solutions to this disastrous scenario (the development of renewable energies). According to *Snow and Benford* (1988), the successful frames feature clearly articulated diagnostic and prognostic components, emphasizing what the controversy is about (diagnosis), and how it ought to be fixed (prognosis). Moreover, effective frames have also been found to point to clear injustices (*Polletta and Ho* 2006). Thus, it could be said that the framing of the anti-coal movement is a successful one.

One of the most prevalent frames that featured the Facebook page to fight against coal was constructed around its disastrous environmental impacts. This finding suggests that people in Egypt are becoming more aware of environmental problems and are willing to take an action to stop environmental violations by large corporations. This result is in contradiction with the outcomes of a study conducted by *Rice* (2006) who found that ‘activist behavior’ was the least observed among citizens of Cairo.

Interestingly, within the environmental costs frame, climate change was found to be perceived as one of the most visible environmental impacts of using coal. This finding is very interesting as political debates on the scientific legitimacy of climate change tend to overlook the tremendous effects of relying on fossil fuels (including coal) for the majority of energy production (*African Development Bank* 2010). Within the Egyptian context, it is true that the energy efficiency has recently taken a prominent role in Egypt’s energy strategy. However, this policy change is due to the government’s recognition that energy efficiency should be pursued as the only way to reduce the demand-supply gap as well as the financial burden on fiscal resources (*Citron* 2014), not as a way to combat climate change.

Moreover, by pointing the finger publicly at cement factories and other heavy industries as the main culprits of air pollution and climate change and describing them as ‘greedy’, ‘irresponsible’, and ‘profit-seekers’, the anti-coal frames contribute to stigmatize the heavy industries and to strip them off their social license (*Conner and Rosen* 2016). Likewise, *Feinberg and Willer* (2013) and *Green* (2018) argue that frames that appeal to moral imperatives such as ‘protection from harm’, ‘preserving the right of living’ are more likely to have deeper resonance and have great potential for mobilizing people.

In this regard, the anti-coal movement’s defense of the planet against the climate change (i.e. ‘coal destroys our planet’ and ‘coal kills the Earth’) associates the local battle against coal with a dynamic international movement against global warming and a big dream of a sustainable world. This unification of local and global targets is a powerful framing strategy which reflects the notion of ‘think globally, act locally’ (*Cheon and Urpelainen* 2018).

Framing the coal in terms of public health risks magnifies the framing impact by focusing on issues that are closely connected to personal experience such as health and personal safety. Moreover, this way of framing makes the impacts of coal more intuitively wrong and more likely to evoke feelings of indignation among target groups (*Green* 2018). The redundant use of words such as “health threatening”, “coal kills”, and “chronic and acute diseases” arguably have strong potential to achieve resonance and motivate targeted groups to take immediate actions. Moreover, the frame emphasized the localization of the coal issue – where the most affected are the most vulnerable populations who live proximate to the cement factories – and the non-political nature of participation. This way of framing eliminates barriers related to polarization and thus civic participation and community engagement can be spurred among a wide range of people, not only ‘activists’ or ‘environmentalists’ (*Nisbet* 2014).

The environmental injustices and socioeconomic costs frames indicate that while the use of coal will mainly benefit the wealthiest cement factories owners, the resulting environmental and health costs will fall disproportionately on the poor and vulnerable workers. The environmental injustice frame is quite effectively used by activists to bridge the social justice concerns, social inequality, corporate behavior, and dispropor-

tionate effects of environmental hazards with working-class concerns like workers’ health rights and rights in a safe working environment (Taylor 2000). Once that connection is made, the magnitude of the problem is expressed, the environmental message is asserted such that people can resonate with it, and this would extend the environmental message to appeal to potential supporters (Snow et al. 1986).

Actually, the framing has evolved to cultivate opposition for capitalism as a whole. Through the use of arguments like ‘capitalism invades the world to destroy our nature’, ‘large corporations make use of labor force to maximize their profits’, and ‘cement companies rely on cheap energy to maximize profits’, the anti-coal campaign managed to look beyond the Egyptian situation and highlight the workings of the capitalism within a global context. This frame pins the blame for environmental hazards at the door of large corporations as a whole, rather than on individual or unintentional practices (Conner and Rosen 2016). The anti-coal portrays capitalism as a universal troublesome system whereby corporations are engaged in deliberate actions that harm the environment and perpetuate economic and social injustices. This way of framing has a great potential to generate public opposition (Keck and Sikkink 1998) as it attributes problems to intentional unsustainable practices of corporate capitalism (Wright and Nyberg 2014), rather than framing them as a byproduct of economic growth or as an unintentional side-effect of the everyday dynamics of the market (Green 2018).

Interestingly, the anti-coal campaign did not only focus on the negative impacts of using coal, but also emphasized alternative solutions such as investing in renewable energy and encouraging the government to accelerate a ‘green transition’ of the energy systems in Egypt. The campaign warns that unless the government rethinks the ways in which the current environmentally destructive economic system is organized and controlled, the problems will endure and even worsen. The notion of tackling the root cause of ecological catastrophe lends the anti-coal movement a symbolic power that is much needed to attract adherents and advocates (Cheon and Urpelainen 2018). Interestingly, instead of adopting the overused, outdated and ineffective fear or doomsday framework in framing environmental problems (Painter 2014), the anti-coal movement implied more positive statements, such as ‘100% clean energy’, ‘greening of the energy sector’. These messages were meant to send

more ‘hopeful’ messages for raising public awareness on problems such as global warming and motivating public engagement than a narrative of crisis or burden of environmental hazards (Moser and Dilling 2007; Kenix 2008).

This desire to increase renewable energy production resonates precisely because it embodies universal social ideals or aspirations that go beyond the mere generation of electricity or heat from renewable sources. These universal ideals include reinforcing local self-determination, empowering local communities and achieving equitable distribution of benefits and, as a result, can overcome current conflicts between energy “haves” and “havenots” (Byrne and Toly 2006: 2).

## **8. Conclusion: framing not only coal but much more**

This analysis shows that the Facebook framing of coal use has two main characteristics: 1) It denotes the emergence of environmental concern in a country like Egypt which is featured by the rarity of environmental movements; and 2) it unearths a counter discourse critical of the state’s ‘version of reality’ that portrays coal as an ‘economic panacea’.

It was evident that in its pursuit to show that coal is not a mere ecological problem but a manifestation of the current political dynamics and that it is inextricably interwoven with the prevailing economic practices in Egypt, the anti-coal movement was able to create an image dramatic enough to attract sympathizers and question a lot of today’s recognized rules and practices. Constructing the environmental and health risks of coal in such aggravated ways implies that fears are widely recognized and shared, rather than situated in specific social, economic, political, and geographic contexts (Wright and Reid 2011). Moreover, the campaign expanded its framing to cultivate opposition against capitalism as a universal troublesome system that seeks to maximize profits by relying upon evermore ingenious ways of fossil fuel extraction (Wright and Nyberg 2014). By pinpointing that the health risks and environmental harms that result from coal use are inflicted on vulnerable and poor workers, investing in coal becomes a moral dilemma that violates people’s rights in healthy and safe working environment (Green 2018).

Although the anti-coal campaign by using Facebook managed to phrase frames sufficiently persuasive to catalyze widespread resistance against the rein-troduction of coal as an energy source, the campaign did not enforce the inspired institutional and policy changes necessary to stop coal use in the cement industry in Egypt. Still the campaign continues to exist, retain membership and is still using social media to transmit its message to the public and attract sym-pathizers. So, it could be said that the anti-coal move-ment has registered quite a success through offering new possibilities for political action and engagement regarding environmental issues that are usually over-looked offline. Further investigation could be done to understand the relationship between the global climate change movement and local activism against coal in Egypt and how this relationship is material-ized on the ground and influenced local activism ac-tions against coal.

## Notes

<sup>1</sup> Interview with an activist in the anti-coal movement. Source: demanded anonymity

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## References

Abdu, Sh., B. Mohamad and S. Muda 2017: Youth online politi-cal participation: The role of Facebook use, interactivity, quality information and political interest. – SHS Web of Conferences **33**, doi:/10.1051/shsconf/20173300080

African Development Bank Group 2010: The Arab Republic of Egypt: Power Sector in Brief – 2010. – Online available at: <https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/ENERGY%20mpa%20ENG%20Power%20Sector%20Emer.pdf>, accessed 19/09/2019

Atkinson, J. 2017: Journey into social activism: Qualitative approaches. – New York

Benford, R. and D. Snow 2000: Framing processes and so-cial movements: An overview and assessment. – Annual Review of Sociology **26**: 611-639, doi:10.1146/annurev.

soc.26.1.611

Berry, R. 1999: Collecting data by in-depth interviewing. – Brighton: British Educational Research Association An-nual Conference, University of Sussex

Byrne, J. and N. Toly 2006: Energy as a social project: Re-covering a discourse. – In: Byrne, J., N. Toly and L. Glover (eds.): Transforming power: Energy, environment, and society in conflict. – London: 1-32

Castells, M. 2001: The Internet galaxy: Reflections on the In-ternet, business and society. – Oxford

Cheon, A. and J. Urpelainen 2018: Activism and the fossil fuel industry. – New York

Chong, D. 1997: Values versus interests in the explanation of social conflict. – University of Pennsylvania Law Review **144**: 2079-2134, doi:10.2307/3312649

Citron, R. 2014: Criticism of EV battery environmental im-pacts misses the point. – Online available at: <http://www.navigantresearch.com/blog/page/14?page=385>, accessed 27/06/2019

Conner, J. and S. Rosen 2016: Contemporary youth activism: Advancing social justice in the United States. – Santa Bar-barra, California

Coretti, L. and D. Pica 2015: The rise and fall of collective identity in networked movements: communication pro-tocols, Facebook, and the anti-Berlusconi protest. – Infor-mation, Communication and Society **18** (8): 951-967, doi:/10.1080/1369118X.2015.1043317

Curran, J., N. Fenton and D. Freedman 2012: Misunderstand-ing the Internet. – New York

Cress, D. and D. Snow 2000: The outcomes of homeless mobi-lization: The influence of organization, disruption, politi-cal mediation, and framing. – American Journal of Sociol-ogy **105** (4): 1063-1104, doi:10.1086/210399

Creswell, J.W. 2005: Educational research planning, con-ducting, and evaluating quantitative and qualitative re-search. – Upper Saddle River, United States

Daniels, J. 2014: From crisis pregnancy centers to teen-breaks.com: Anti-abortion activism’s use of cloaked websites. – In: McCaughey, M. (ed.): Cyberactivism on the participatory web. – London: 140-154

Davis, P.M. 2009: How the media frames “Open Ac-cess”. – The Journal of Electronic Publishing **12** (1), doi:/10.3998/3336451.0012.101

DiCicco-Bloom, B. and B.F. Crabtree 2006: Making sense of qualitative research. – Medical Education **40** (4): 314-21, doi:/10.1111/j.1365-2929.2006.02418.x

Eastman, M. 2016: Eco-flow creating eco-activism in the 21th century. – Online available at: <http://mattheweastman.com/docs/EcoFlow.pdf>, accessed 22/3/2019

Egypt Network for Integrated Development 2015: Solar water pumps: The case of Egypt’s desert. – Online available at: [https://elnidaa.org/app/uploads/2019/07/CS13\\_solar\\_](https://elnidaa.org/app/uploads/2019/07/CS13_solar_)

- water\_pumps.pdf, accessed 15/03/2019
- Elgerzawy, R. 2018. Coal-generated electricity: not clean, not cheap, and is no guarantee of energy security. – Online Available at: <https://eipr.org/en/blog/ragia-elgerzawy/2018/09/coal-generated-electricity-not-clean-not-cheap-and-no-guarantee-energy>, accessed 14/01/2020
- Entman, R.M. 1993: Framing: Toward clarification of a fractured paradigm. – *Journal of Communication* **43** (4): 51-58, doi:10.1111/j.1460-2466.1993.tb01304.x
- Feinberg, M. and R. Willer 2013: The moral roots of environmental attitudes. – *Psychological Science* **24** (1): 56-62, doi:/10.1177/0956797612449177
- Gamson, W., B. Fireman and S. Rytina 1982: Encounters with unjust authority. – Homewood, IL
- Gitlin, T. 1980: *The Whole World is Watching: Mass Media in the Making and Unmaking of the New Left*, with a New Preface. – Berkeley
- Gray, B. 2004: Strong opposition: Frame-based resistance to collaboration. – *Community & Applied Social Psychology* **14** (3): 166-176, doi:10.1002/casp.773
- Green, F. 2018: Anti-fossil fuel norms. – *Climatic Change* **150** (1-2):103-116, doi:10.1007/s10584-017-2134-6.
- He, M. 2010: An analysis of framing in British news media representations of China and the Chinese. Loughborough University. – Online available at [https://repository.lboro.ac.uk/articles/An\\_analysis\\_of\\_framing\\_in\\_British\\_news\\_media\\_representations\\_of\\_China\\_and\\_the\\_Chinese/9480323/1](https://repository.lboro.ac.uk/articles/An_analysis_of_framing_in_British_news_media_representations_of_China_and_the_Chinese/9480323/1), accessed 12/05/2019
- Hendricks, V.M., P. Blanken and N. Adriaans 1992: Snowball sampling: A pilot study on cocaine use. – Rotterdam
- Hendriks, C.M., S. Duusb and S.A. Ercanc 2016: Performing politics on social media: the dramaturgy of an environmental controversy on Facebook. – *Journal of Environmental Politics* **25** (6): 1102-1125, doi:10.1080/09644016.2016.1196967
- Hodges, H.E. and G. Stocking 2016: A pipeline of tweets: environmental movements' use of Twitter in response to the Keystone XL pipeline. – *Journal of Environmental Politics* **25** (2): 223-247, doi:10.1080/09644016.2015.1105177
- Jasper, M. 1999: Recruiting intimates, recruiting strangers: Building the contemporary animal rights movement. – In: Freeman, J. and V. Johnson (eds.): *Waves of protest: Social movements since the sixties*. – Lanham: 65-84
- Keck, M. and K. Sikkink 1998: *Activists beyond Borders: Advocacy Networks in International Politics*. – New York
- Kenix, L.J. 2008: Framing science: Climate change in the mainstream and alternative news of New Zealand. – *Political Science* **60** (1): 117-132, doi:/10.1177/003231870806000110
- Khodair, A. and M. Khalifa 2014: Social media and the public policy process in Egypt. – *Journalism and Mass Communication* **4** (6): 367-378
- Kirchherr, J. and K. Charles 2018: Enhancing the sample diversity of snowball samples: Recommendations from a research project on antidam movements in Southeast Asia. – *PLoS one* **13** (8): e0201710, doi:/10.1371/journal.pone.0201710
- Krippendorff, K. 2012: *Content Analysis: An Introduction to Its Methodology*. – Thousand Oaks, California.
- Lillqvist, E., L. Louhiala-Salminen and A. Kankaanranta 2015: Power relations in social media discourse: Dialogization and monologization on corporate Facebook pages. – *Discourse, Context & Media* **12**, doi:/10.1016/j.dcm.2015.11.001
- Lowe, M. and C. Ginsberg 2002: Animal rights as a post-citizenship movement. – *Society and Animals* **10** (2): 203-215, doi:10.1163/156853002320292345
- Lukashina, Y. 2013: Collective action frames and Facebook fan and group pages: the case of the Russian Snow Revolution 2011-2013. – *Interface: A Journal for and about Social Movements* **5** (2): 422-449
- Mada Masr 2015: Egypt to rely on coal for 25-30% of energy. – Online available at: <https://madamasr.com/en/2015/05/13/news/u/egypt-to-rely-on-coal-for-25-30-of-energy/>, accessed 12/03/2019
- Mada Masr 2017: Egypt eases restrictions on importation and burning of coal, environmentalists warn of implications. – Online available at: <https://madamasr.com/en/2017/04/25/news/u/egypt-eases-restrictions-on-importation-and-burning-of-coal-environmentalists-warn-of-implications/>, accessed 12/03/2019
- Masip, P., C. Ruiz-Caballero and J. Suau 2019: Active audiences and social discussion on the digital public sphere. – *El Profesional de la Información* **28** (2), <https://doi.org//10.3145/epi.2019.mar.04>
- McCaffrey, D. and J. Keys 2000: Competitive framing processes in the abortion debate: Polarization vilification, frame saving, and frame debunking. – *The Sociological Quarterly* **41** (1): 41-61, doi:10.1111/j.1533-8525.2000.tb02365.x
- Moser, S. and L. Dilling 2007: *Creating a climate for change: Communicating climate change and facilitating social change*. – Cambridge
- Naaman, M., H. Becker and L. Gravano 2011: Hip and trendy: Characterizing emerging trends on Twitter. – *Journal of the American Society for Information Science and Technology* **62** (5): 902-918, doi:10.1002/asi.21489
- Nisbet, M. 2014: Framing the media and risk communication in policy debates. – In: Reimer, C. and K. McComas (eds.): *Communication of policy debates*. – Newbury Park: 216-227
- Oz, M. 2016: Facebook as a public deliberative space: Social media, deliberation and public sphere. – *Social Media Studies* **3** (1): 41-49, doi:/10.15340/21473366311009



- Painter, J. 2014: Disaster averted? Television coverage of the 2013/14 IPCC's climate change reports. – Oxford
- Passini, S. 2012: The Facebook and Twitter revolutions: Active participation in the 21<sup>st</sup> century. – *Human Affairs* 22 (3): 301-312, doi:/10.2478/s13374-012-0025-0
- Pasquale, F. 2015: The black box society: The secret algorithms that control money and information. – Harvard
- Polletta, F. and M.K. Ho 2006: Frames and their consequences. – In: Goodin, R. and C. Tilly (eds.): *The Oxford handbook of contextual political analysis*. – Oxford: 188-210
- Radcliffe, D. and A. Lam 2018: *Social media in the Middle East: The story of 2017*. – Oregon
- Rice, G. 2006: Pro-environmental behavior in Egypt: Is there a role for Islamic environmental ethics? – *Journal of Business Ethics* 65: 373-390, doi:10.1007/s10551-006-0010-9
- Reese, S.D. 2001: Prologue-framing public life: a bridging model for media research. – In: Reese, S.D., O.H. Gandy and A.E. Grant (eds.): *Framing public life: Perspective on media and our understanding of the social world*. – Mahwah: 7-31
- Reuters 2014: Egypt's cabinet approves use of coal for power generation. Online available at: <https://www.reuters.com/article/us-egypt-energy-coal/egypts-cabinet-approves-use-of-coal-for-power-generation-idUSBREA3117Y20140402>, accessed 22/05/2020
- Sarant, L. 2017: In post revolution Egypt a fierce fight over coal imports. – Online available at: [www.madamasr.com/en/2017/04/25/feature/politics/in-post-revolution-egypt-a-fierce-fight-over-coal-imports/](http://www.madamasr.com/en/2017/04/25/feature/politics/in-post-revolution-egypt-a-fierce-fight-over-coal-imports/), accessed 10/02/2019
- Schou, J., J. Farkas and M. Hjelholt 2015: The double conditioning of political participation: Grassroots Politics on Facebook. – *Conjunctions: Transdisciplinary Journal of Cultural Participation* 2 (2): 29-47, doi:10.7146/tjcp.v2i2.22921
- Schou, J. and J. Farkas 2016: Algorithms, interfaces, and the circulation of information: Interrogating the epistemological challenges of Facebook. – *KOME – An International Journal of Pure Communication Inquiry* 4 (1): 36-49, doi:10.17646/KOME.2016.13
- Snow, D., B. Rochford, S. Worden and R. Benford 1986: Frame alignment processes, micro-mobilization and movement participation. – *American Sociological Review* 51 (4): 464-481, doi:10.2307/2095581
- Snow, D. and R. Benford 1988: Ideology, frame resonance, and participant mobilization. – In: Klandermans, B., H. Kriesi and S. Tarrow (eds.): *From structure to action: Comparing social movement research across cultures*. – Greenwich: 197-217
- Snow, D. and R. Benford 1992: Master frames and cycles of protest. – In: Morris, A.D. and C.M. Mueller (eds.): *Frontiers in social movement theory*. – New Haven, CT: 53-67
- Snow, D. 2004: Framing processes, ideology, and discursive fields. – In: Snow, D., S. Soule and H. Kriesi (eds.): *The Blackwell companion to social movements*. – Hoboken: 380-412
- Spasojević, L. 2017: *Social media as a tool for political change: The uprisings in Iran (2009) and Egypt (2011)*. – Master thesis, Harvard Extension School. – Cambridge/MA
- Storck, M. 2011: *The role of social media in political mobilization: A case study of the January 2011 Egyptian uprising*. University of St Andrews. – Online available at: [http://www.culturaldiplomacy.org/academy/content/pdf/participant-papers/2012-02-bifef/The\\_Role\\_of\\_Social\\_Media\\_in\\_Political\\_Mobilisation\\_-\\_Madeline\\_Storck.pdf](http://www.culturaldiplomacy.org/academy/content/pdf/participant-papers/2012-02-bifef/The_Role_of_Social_Media_in_Political_Mobilisation_-_Madeline_Storck.pdf), accessed 11/05/2019
- Taylor, D. 2000: The Rise of the environmental justice paradigm: Injustice framing and the social construction of environmental discourses. – *American Behavioral Scientist* 43 (4): 508-580, doi:10.1177/0002764200043004003
- Thottathil, M. 2019: *MENA social media usage trends report 2018*. The Arabian Gazette. – Online available at: <https://arabiangazette.com/mena-social-media-usage-trends-report-2018/>, accessed 01/02/2020
- Tohami, A. 2017: *Youth activism and social networks in Egypt*. – Online available at: <http://www.cyberorient.net/article.do?articleId=9815>, accessed 12/09/2019
- van Dijk, J.A. 2013: A theory of the digital divide. – In: Ragnedda, M. and G.W. Muschert (eds.): *The digital divide: the internet and social inequality in international perspective*. – London: 29-51
- Voicu, M.-C. and A.-M. Babonea 2011: Using the snowball method in marketing research on hidden populations. – *Challenges of the Knowledge Society* 1 (2011): 1342-1351. – Online available at: <https://doaj.org/article/92ce3cbe5b74333ab0f96f635e97125>, accessed 13/02/2019
- Vladisavljević, N. 2015: *Media framing of political conflict: A review of the literature*. Working Paper. MeCoDEM. – Online available at: [http://www.mecodem.eu/wp-content/uploads/2015/05/Vladisavljević-2015\\_Media-framing-of-political-conflict\\_-a-review-of-the-literature.pdf](http://www.mecodem.eu/wp-content/uploads/2015/05/Vladisavljević-2015_Media-framing-of-political-conflict_-a-review-of-the-literature.pdf), accessed 10/08/2018
- Wright, W. and T. Reid 2011: Green dreams or pipe dreams? Media framing of the U.S. biofuels movement. – *Biomass and bioenergy* 35: 1390-1399, doi:10.1016/j.biombioe.2010.07.020
- Wright, C. and D. Nyberg 2014: Creative self-destruction: Corporate responses to climate change as political myths. – *Environmental Politics* 23 (2): 205-223, doi:10.1080/09644016.2013.867175
- Zayed, D. and J. Sowers 2014: The campaign against coal in Egypt, Middle East Report No. 271, 29-35. – Online available at: <https://merip.org/2014/07/the-campaign-against-coal-in-egypt/>, accessed 11/08/2018