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Media, Technologies, Cooperation – Rethinking Publics and Publicness in the MENA Region

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1 Introduction

In December 2010, a young market trader set himself on fire in protest in front of the governor's palace in Tunisia. This event marked the beginning of mass protests, which within 6 weeks led to the resignation of the Tunisian government and to the departure of the president. Subsequently, protests against unpopular governments spread to neighbouring countries throughout northern Africa, and to additional countries in the Middle East. A number of governments were overthrown, and in Syria a civil war is still raging today. Hundreds of thousands of people in the Mena region have lost their homes and are now on the run, and most countries are now considered politically unstable. These political developments have been described under various labels, such as, the *Arab Spring* and the *Arab Revolution*. In the early days of this protest movement, these developments were framed in mainstream media as 'Facebook's Revolution' or 'Revolution 2.0'. Beneath these headings and framings is the assumption, or rather the thesis, that the rapid spread of the protests and the uprisings would not have been possible without the intensive use of social media such as Facebook and Twitter. To put it bluntly, there was (and perhaps still is), the assumption that these social media made the Arab Spring and the revolution possible in the first place.

Indeed, shortly after the uprisings in Tunisia, initial studies have shown that social media played a central role in the mobilisation of mass protests and in communication among protesters. This was, however, not the only role played by social media, as findings from research suggest that there is an interplay between new social media and old mass media (e.g., in this case is Aljazeera), which has also contributed to mobilisation successes (Wulf et al. 2013). In the past 10 years,

the transition societies in North Africa and the Middle East have received a considerably high attention, also in research areas such as Human Computer interaction, ICT for Development, or Computer Supported Cooperative Work (CSCW) and Collaborative Computing. In particular, recent studies have examined media practices that characterize users in disruptive contexts, such as refugees who organise their flight and keep in touch with their relatives (Almohamed and Vyas 2016); political activists who are threatened by persecution and live underground (Daffalla et al. 2021); people who try to gain attention and generate publicity for grievances, human rights violations and emergencies (Azer et al. 2019). In addition to the so-called social media, mobile technologies play a central role. A common feature of social media use in these transition societies is the government's attempt to prevent media use (Shah 2021). There is often a race between official restrictions on access to individual apps or the internet on the one hand, and innovative workarounds and ad hoc solutions by users on the other (Bjørn and Boulus-Rødje 2018).

The transition societies in the Maghreb (Morocco, Tunisia, Algeria, Libya, Egypt) and the Middle East form a regional base for many researchers to study media practices of people in unstable political and economic conditions, and in situations of persecution, displacement, restricted citizenship and human rights. Transition societies are unique in terms of constantly undergoing rapid changes (e.g., Aal et al. 2019; Abokhodair and Vieweg 2016; Howard and Husain 2013). In this context, mobile technologies, access to the internet and social media platforms enable communication and forms of cooperation that would hardly be conceivable without technical tools and infrastructures.

It was assumed in transformation research for the so-called tiger economies in Southeast Asia in the 1990s, that technological progress and new technologies played a central role in the transformation and restructuring of societies and economies. However, the role of ICT and new, web-based media in the current transformation processes in the Mena region does not seem to play such a clear role as a driver of progress. Instead, we often see improvised solutions to the problems of everyday life among the citizens (i.e., the users). It is in fact not technologies in and of themselves, that solely change life practices, but rather life practices change as a result of political and economic developments (e.g., conflict, civil war, displacement) in society as a whole. In the course of these societal changes and disruptive living practices, new technologies have gained the role of offering solutions to challenges and providing new opportunities for new practices (Wulf et al. 2022). This includes, for instance, keeping in touch with friends and family, replacing information from mass media, communicating warnings and alerts, sharing escape routes, organizing resources and food, coordinating distribution, as well as enabling new forms of mutual aid, cooperation and collaboration (Weibert et al. 2019).

Although there are similarities and comparably disruptive conditions in North Africa and the Middle East, it is obvious that fundamental differences exist between individual societies, countries and nation states. The political situation in the individual countries was already very different before the events of the Arab Spring - and it still is today. These fundamental differences (e.g., culturally, religiously, economically, geographically, historically, and socio-demographically) do not permit simple comparisons. The situation in the Maghreb states is difficult to compare with the situation and social developments in Iraq, for example, or in Syria or Iran. Comparative or generalized studies of the entire region of North Africa and the Middle East, for example on the basis of quantitative surveys, are not fruitful in our view, as they do not do justice to the fine-tuned and rich differences across these local and contextual circumstances. On the other hand, case studies which are ideally conducted in situ and on the ground, with ethnographic means in the respective countries are strong at capturing these rich details and allow directly affected actors in these countries to have their voice (e.g., Wulf et al. 2013). Even if such case studies may lack supposed representativeness and generalizability, these explorations in the field promise crucial first-hand insights into context-based and very practice-relevant, concrete media practices.

2 Context

The Middle East and North Africa (MENA) is a region of high cultures, plentiful resources but also considerable instabilities and striking conflicts. The region is neighboring Europe and their relationship is characterized by more than three millennia of history of cooperation, conflicts, cross-fertilization, and mutual learning. During the nineteenth century, Europe colonized big parts of Northern Africa and, following WW I., it divided the remnants of the Ottoman Empire. However, in the past 75 years it was mainly the US, and to a lesser extend the Soviet Union and Russia, which predominantly impacted the political landscape in the region. The abundance of petroleum deposits has made MENA a region of strategic importance resulting in massive interventions of foreign powers. Over the past decades, large parts of the region were ruled by suppressive regimes and underwent deep social distortions, such as regime change, uprisings, and civil wars. To this effect, the Arab Spring movement can be seen as a cause as well as a reaction to these destabilizing forces.

The MENA region is highly heterogeneous in geographical, cultural, economic, and political dimensions. However, there are some common challenges that characterizes the MENA region:

- the birth rate is still one of the highest in the world which results in a very young population,

- religiously motivated orthodoxies impact the population's quality of life, specifically of the young generation,
- the political entities are characterized by strong internal divides and conflicts, in ethnical as well as in economic terms,
- the states are run by mostly suppressive regimes which tend to rely on censorship and surveillance,
- the partly colonially defined borders, internal struggles, and foreign interventions which have created a myriad of conflicts between the various states,
- the internal and external conflicts resulting in large number of refugees, both inside and outside of their countries of origin.

In economic terms, the region is rather heterogenous. It is considered to have highly developed economies on the one hand, and war-ridden societies of high poverty levels on the other. Thus, increasing economic and social inequalities characterize most of the countries.

Form a socio-cultural perspective, there are certain paradoxes to be noticed in the MENA region. On the one side, there is a demand for cultural opening, democratization, and social participation; while on the other side, we observe laic traditions being under severe pressure, followed by a turn towards religious values and traditions as well as a strengthening of fundamentalist positions going along with tendencies to cultural closure.

Societies in the MENA region are under strong pressure to modernize themselves. With regard to technical infrastructures, the region leapfrogging generations of technological development. Mobile internet arrives to regions which have not seen telephone landlines before. Consequently, mobile devices and social media become the primary medium for information, communication, cooperation, and political engagement.

Public sphere(s) in the MENA region presents themselves as highly fragmented and regulated by political regimes, religious institutions, ethnic contexts, and tribal as well as traditional family structures. However, social media is enabling the formation of new forms of interregional and international publics, communication and discourse structures, mobilization and community building. Platforms, such as Facebook, Twitter, WhatsApp, Instagram, or YouTube offer different forms of publics or “counter-publics” for collective mobilization and community building. However, these publics are often turned into object of filtering, surveillance, and censorship by regional governments, secret services, and (international) agencies. Therefore, foreseeing these threads and treats and taking precautions when dealing with these interventions, is paramount for people living in these countries, specifically for those who are politically active. However, the problem is that these appropriation and counter appropriation of social media publics typically happen under the conditions of often lacking technological education and competencies.

Given the complicated context the question arises what role Information Technology can play – or asked more precisely in the context of this special issue

– which role can a practice-based IT research community, such as the one on CSCW, play under these conditions. Given the ubiquity of IT use within given social practices specifically in MENA region, we believe that there are three important roles that researchers could play:

- (1) Document empirical social practices related to the appropriation and use of IT artefacts, with a focus on politically or societally important practices, specifically those which are suppressed, hidden, or overlooked could help to clarify the complex living conditions in selected parts of the MENA societies.
- (2) Explore innovative IT designs, specifically those related to problems and opportunities investigated and understood empirically.
- (3) Intervene by introducing new IT artefacts or IT related concepts and investigate empirically into the way they impact given social practices.

The specific contextual circumstances in the MENA region offer many opportunities to expand on a practice-based research paradigm, and thereby contribute to a wide range of domains. This includes, for example,

- Political participation, mobilization and activism
- Labor, employment, and innovation
- Education and learning
- Health and well being
- Refugees and social integration
- Safety under conditions of state suppression and armed conflicts
- Cultural Heritage
- Social relationship and partnering
- Cooperative practices and social networks
- Establishment of new publics, new information channels, communication structures and communities

Nevertheless, this leads to a more fundamental question, namely, which role can research on practice-based computing play in the development of new and/or post-colonial modes of cooperation between the MENA region and northern countries, specifically Europe.

3 Diverse role of new technologies in transformation processes

As indicated above, new technologies and digital media play very diverse roles across the different countries and different contexts of transition societies. In a number of countries in the Maghreb and the Middle East—especially in rural regions—digital technologies are currently functioning as ‘modernization engines’; as powerful devices that can accelerate transformation and progress. For example, the infrastructures in the valleys of the Moroccan High Atlas are only now being developed, whereby internet access is being introduced at the

same time as other basic infrastructures (e.g., transportation, electricity and water supply and mobile phone network (Aal et al. 2018)). In this modernization context, new technologies and ICT media provide resources for progress and growth. They allow the inclusion of previously largely isolated citizens in the public sphere and support more active participation. The increased access to public resources provided by new technologies, extends the opportunities for acquiring new skills and better education; establishing new supra-regional and international relations (e.g., within tourism); as well as developing new business areas and opportunities. In the Israeli-occupied Palestinian territories the increasingly growing number of tech-startups is a manifestation of a new industry that has emerged and that is entirely based on new technologies.

However, in contexts of protest and uprisings of authoritarian regimes, information and communication technologies play multiple and central, yet radically different, roles. On the one hand, these tools serve as mobilization devices; as cooperation medium that provide alternative information and support the coordination of collective action amongst protestors. On the other hand, these technologies also serve as surveillance and control devices used by governments and authorities in conflict regions. This special issue captures and documents diverse and far-reaching interventions in communication technology infrastructures, ranging from state surveillance and individual persecution of political activists. This includes, for instance, restriction or blocking of individual internet access (Palestine), banning of individual software applications and platforms (Iran, China), as well as shutting down entire transmission and reception infrastructures in the country or in individual regions (Syria), as well as using ICT in order to locate and attack fighters. In these contexts, the use of new media for political activism has become a life-threatening activity.

The introduction of mobile network coverage and internet access especially in rural areas—where access to information media and infrastructures has been very limited so far—has entailed an increased access to a diverse range of information and a significant improvement in public participation. Social media platforms have provided them the space to raise their voices, create their own content and share it with others. Thus, it can be said that these new technologies have enabled hitherto informationally underserved groups to participate in public political discourse, articulate and campaign their interests, as well as seek alliances with other stakeholders and establish cooperation networks. The hope that a new and more inclusive public sphere with significantly expanded access possibilities will emerge is, however, also clouded by the observation that digital technologies and new media seem to be leading to the disappearance of our original idea behind a political public sphere and resulting in supporting multiply fragmented and nested (partial) public spheres. Thus, instead of making the voices of individual and structurally disadvantaged groups heard in a large public sphere, modern digital media

is threatening the newly acquired voices by drowning these in a cacophony of diverse clamor and murmuring.

4 Challenges for Collaborative Computing

The selection of studies in this Special Issue follows case-based and ethnographic approaches grounded within the practice-oriented paradigm (cf. Wulf et al. 2022). In addition to ethnographic methods, Action Research or Participatory Action Research are also used in some studies. Case-based research does not take place in the laboratory, or as desk research, but on site, in situ, or on the ground. Although ethnographic methods have long been established in the research domain of CSCW, carrying out fieldwork in a such disruptive circumstances and politically unstable regions, poses different types of challenges. This refers not only to the methodologically sound use of empirical methods, but also to ethical issues. This includes, among others, the intervention of Western scientists in countries of the Global South, issues of neo- or de-colonialization, the potential endangerment of informants or research partners on the ground, as well as issues related to the development and maintenance of trusting relationships.

Other challenges encountered when doing fieldwork in such fragile settings, include language barriers and illiteracy. In these cases, find local and immediate solutions that enable empirical work with the people involved is important. Afterall, close cooperation with local actors on the ground (e.g., local non-governmental organizations, civil society groups, aid organizations, cultural associations) is indispensable. As researchers, we depend on these local actors to help us, among others, contextualize the local and complex circumstance, and enable building cooperation structures. However, local partners are also inscribed in pre-defined established institutional powers and structures, and may sometimes pursue their own interests and take sides in existing local conflicts. It is, therefore, utterly important to always question and reflect on one's own approach and interventions, to review existing relationships on the ground, and to constantly adapt one's own project or methodology (Bjørn and Boulus-Rødje 2015).

Based on a conference we held in December 2018 at the University of Siegen, we have invited colleagues to contribute their insights from case studies in the respective region to this special issue. These case studies include research on the establishment of a computer club in the High Atlas region of Morocco, with a focus on its application for learning purposes and broadening participation in the national public sphere; the situation and development of technology-based start-up companies in the Israeli-occupied Palestinian territories; reflections on decolonization, self-organized resource distribution and food supply in refugee camps in Syria; an approach for a Humanitarian Research Framework with refugees in war zones; and state restrictions and civil counter-strategies on Social Media use in Iran. Needless to say, this is neither a complete nor a representative

compilation of studies from the addressed MENA region. Nevertheless, these studies represent a highly relevant sample of rich, long-term ethnographic studies in the Middle East and North Africa, capturing and depicting media use practices in different life situations in the region concerned. The editors hope that this issue will contribute to the body of knowledge on media use in the MENA region and, where appropriate, also provide evidence of creative, innovative and improvised media use in conflict regions.

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