A Web for all Seasons:
The Arab Web as a Biotope for Change

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Abstract

In an attempt to understand the role played by Web technologies in the social and political 'Arab spring' , this paper tries to combine several interdisciplinary observations to explain that political seasons do not obviously synchronize in time and space with the social transformation produced by Web actors. New Orientalism and prescriptive language are too often used to give the Web a determinist role in these events. This paper proposes to de-synchronize the time of adoption and the time of action to put forward the idea that the Web impacts society in a separate dimension: The Web, in all its complex shapes and usages is an ecosystem, a biotope for change.

Keywords: Arab Society; Web; Social transformation; Web players; Temporalities; Online territories; Online communities; Arab Blogosphere.

شبكة لكل الفصول:
الشبكة في العالم العربي كموئل للتغيير

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الملخص

يرتكـز هـذا البحث على مجموعـة من المشـاهدات العلمية في محاولة لفهـم تأثيرات الشـبكة العنكبوتيـة في صنع الربيع العربي ليخلص إلى أن التطورات السياسـية لا تتوافق في الزمان والمكان مع التغييرات الاجتماعية التي شـارك في صنعها مسـتخدمو الشـبكة. وبالرغم من أن عدداً كبيراً من المستشـرقين الجدد يعمد من وحي تجربته الغربية إلى توصيف الشـبكة كعامل حاسم في صنع هذه الأحداث، يقترح هذا البحث فصل التزامن ما بين الوقت المطلوب للتأقلـم والوقت المطلوب لإحداث التغيير ليبيّن أن الشـبكة تؤثر علـى المجتمع بتدرج زمني مختلـف: إن الشـبكة بمختلف أوصافها المعقدة واستخداماتها تمثل نظاماً حيـاً متكاملاً وبيئة محفزة للتغيير.

الكلمـات المفاتيح: المجتمـع العربي؛ الشـبكة؛ التحولات الاجتماعية؛ لاعبو الشـبكة؛ الزمان؛ المناطق الإلكترونية؛ المجتمعات الإلكترونية؛ مدونات العالم العربي.

Introduction

In our contribution for the 2nd ACM Web Science Conference[1], we proposed a contextualized and interdisciplinary vision of the reality of the Web in the Arab Middle East. One of the focus points of our statement was to demonstrate that observing the macroscopic impact of the Web on society should not be approached with prescriptive tools. Choosing Web Science was meant to provide social science new vantage points: following the clarion call made by Halford et Al. at the same conference in their Manifesto for Web Science[2], we tried to gather evidence of mutual shaping of society and technology in the Arab world. Since then, some Arab societies have turned against their authoritative regimes in what is now known as the "Arab Spring"[3]. Web applications, like social media platforms, blogs and online communities played a key role in providing structures and framing process opportunities for the revolts[4].

The present paper will try to explain how the Web, as a social machine, as a biotope for change, nurtured Arab society to provide conditions for the success of mobilization and political uprising. Our position is to refute the affirmation that the Web, as a technology, was the main vector of the Arab Spring: the Arab society did not wait for Facebook or Twitter to be able to mobilize and overthrow the oppressive regimes in place. This position follows Clay Shirky's statement[5]: "The more promising way to think about Web technologies is as long-term tools that can strengthen civil society and the public sphere. In contrast to the instrumental view of Internet freedom, this can be called the environmental view".

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(1) Bazan, Varin. "**Web Science in the context of the Arab Near East**". (Proceedings of the WebSci10: Extending the Frontiers of Society On-Line, April 26-27th, 2010, Raleigh, NC: US).

(2) Halford, Pope, Carr. "**A Manifesto for Web Science**". (Proceedings of the WebSci10: Extending the Frontiers of Society On-Line, April 26-27th, 2010, Raleigh, NC: US).

(3) The term "**Arab Spring**" was first coined in 2005 by several authors in magazine's editorials (Christian Science Monitor, Der Spiegel, Foreign Policy). Dominique Moisi was the first author to entitle a column with "An Arab Spring?".

(4) Kelly. Protest in an information society: A review of literature of movements and new ICTs. In: **Information, Communication and Society**, Vol. 9, N.2, Apr. 2006.

(5) Shirky. "**The Political Power of Social Media**". (Foreign Affairs 2011).

The Temporalities

We consider that there is no synchronicity between the Arab Spring and what we describe as the "Spring of the Arab Web"[6]. Our proposition is to separate two related but distinct times. Temporalities can mix and observing one of them (politics) doesn't mean that other dimensions do not exist, in the same context, in the same place. Arab Society is very complex and densely structured. Nevertheless, its influences and evolutions are often measured with a classic political science approach, where technologies are integrated in a temporal succession of event with diachronic principles. Web Science changes the point of view: The Web is not the engine of change. It's the biotope, the environment.

The Evaluation

Colliding disciplines is at the heart of Web Science. Humanities and Social Science usually have great difficulties in considering the Web as an object in permanent evolution. If they recognize the fact that the Web, as a technological reality, has a direct impact on society, they do not approach it in all its dimensions especially because they see it as a finalized technology, a reified object. Digital humanities, on one hand, do not only see the Web as a complex set of protocols, languages and hypertext documents identified by URLs, but are able to evaluate its influence on human activity. But as Halford et Al. say, "the reification 'trick' is that we 'see' the Web and not the networks that work to hold its shape"[7].

The exact same statement could be applied to the contextualized set of Web usages that shapes the Arab Web. It is there, but it doesn't exist as long as we don't name it, as long as we don't see this informational structure where "humans create content of Web pages, link them and form emergent patterns in the Web at a macroscopic scale". And if these human interactions are "governed by social conventions and laws", then the Web is deeply integrated into society

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(6) The concept of « **spring of the Arab Web**" was proposed in a seminar in 2011 at Saint-Joseph University's CEMAM research center by Bazan, Varin and Gonzalez-Quijano. It was used in the title of Gonzalez-Quijano's book "Arabités numériques : Le printemps du Web arabe".

(7) Susan Halford, Catherine Pope, Less Carr. "A Manifesto for Web Science". In **Proceedings of the Websci10:Extending the Frontiers on Society On-Line**, April 26-27th, 2010, Raleigh, NC:US.

and follows its deepest evolutions. Computer Science has, on the other hand, a tendency to weight the societal impact of the Web with quantitative values from data sets or abstracted models which do not reflect the fine details of human activity, especially when this activity is recorded in unknown territory. Distortion augments with distance and the emergent patterns at a macroscopic scale do not reflect, in the end, the subtlety of what the word "people" means in a specified context.

Some examples of this prescriptive design of data sets analysis can be found in Gladwell's commentaries on the usage of Twitter in Moldova or in Iran during recent popular revolts: the reality behind the observed set of patterns on the role played by Twitter in the Iranian revolution is far from obvious, especially because most of the tweets were sent from outside Iran. Another example is given by Shirky[8]: "The challenges of Freegate and Haystack demonstrate how difficult it is to "weaponize" social media to pursue country-specific and near-term policy goals: The instrumental view is politically appealing, action-oriented, and almost certainly wrong." The Syrian Revolution provides today another example of the dubious nature of data provided by both sides.

The Web Actor

If we try to combine profound knowledge of a specific environment, in terms of social structure, political system, economic situation, with the dynamic observation of how links, networks, macrostructures of information form on the Web, a lateral approach is mostly needed. As Hendler et al.[9] wrote it, "The Web is different from most hitherto-studied systems in that it is changing at a rate which is of the same order as, or maybe greater than, our ability to observe it." Synchronized and non-coordinated actions performed by actors in a very short period of time have immediate consequences, in terms of shapes of collaborative knowledge. Permanent content creation on microblogging, Content Management System or collaborative platforms produces an infinite number of micro-interactions between users, creating a meta-network of awareness, at

(8)   Shirky. "**The Political Power of Social Media**". (Foreign Affairs 2011).

(9)   Hendler, Shadbolt, Hall, Berners-Lee, Weitzner. "**Web Science: An interdisciplinary approach to understanding the World Wide Web**". (Communication of the ACM 2008)+.

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different levels. This involuntary synchronicity of the "Actor Web"[10] gives it a collective identity that produces common actions. The chaotic and non-harmonic construction of a common decision on the Web emerges under the play of highly complex forces. Tufekci[11] explains that this "permanent fight for the control of the time of action" has a direct influence on repressive government decisions in periods of civil unrest.

These decisions mostly consist in anticipative counter-revolutionary events, based on the high cost of individual failure and organization (impossibility of setting up gatherings or great difficulties to communicate among actors). Web Actors exists outside the strict dimension of the time of action, for they would be highly receptive to pressure and their online mobilization would not benefit from the "synchronicity advantage". Undisciplined groups compensate their lack of discipline and order by using the Web link as a way to structure their action. The authoritarian regimes have a hard time with efficient reaction against "wirearchies" and this gives a decisive momentum to online mobilization. Therefore, it could be possible, if we leave the confined dimension of recorded data, to approach the Web actors as agents of change and social transformation in the timeline of political action.

The Spring

"Twitter Revolution", "Facebook Revolution", "Wikipedia Revolution", "E-Revolution", "2.0 Revolution": too many labels trying to qualify the role of Web technologies in the process of social and political transformations happening in the Arab World. Where the Web should be considered as a factor and not a cause, the new determinism of Western Media has a clear tendency to produce prescriptive discourse.

For the first time in the Arab World, political mobilization has the familiar face of globalized protest and the tools and techniques used by protesters to relay information are the same as the ones used in London or Madrid. If the technology is global, the Arab Spring is just another effect of a larger pattern that might reach

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(10) Rheingold. "**Smart Mobs, the Next social revolution**". (Basic Books 2002).

(11) Tufekci. "**Social Media and Dynamics of Collective Action**" – (AUSACE Conference 2011).

other political spaces like China for example. By focusing on politics and by exacerbating the role of technology, new determinist analysis fails at avoiding the traps of a new Orientalism, creates "Lawrence of E-Rabia"[12]. We consider that it's impossible to understand the forces at play in the Arab revolts if we don't try to see what was, in regards of what has not yet been achieved.

To name it the "Spring of the Arab Web" is a direct reference to the performativity of the Web, an influence that goes back to the origins of social transformations in the Arab world, long before the events of December 2011 in Tunisia. It is also a clear differentiation with the concept of Arab Spring: the transformation cycle, initiated by the introduction of new technologies allowing a better usage of the Web in most of the Arab countries, started back in 2000. Following the worldwide trend of virtualization of the economy, Arab countries have heavily invested in high-tech infrastructures. Countries like Egypt, Tunisia, Morocco or the Arab Emirates have provided their populations with increased Internet capacities and democratized access to online connection, through affordable mobile devices. From 2000 to 2010, upload and download speeds have been multiplied by 1000 (from 2k to 2M). Users have taken advantage of these opportunities to level their Web practices with the rest of the connected World.

As Francis Pisani [Pisani, personal communication] put it, the innovative Web user in the Arab World is educated, has an intercultural profile and tends to imitate Web behaviors of the "Western World". Even if the concept of modernity always refers to the central model of the westernized world, it is possible to say that these new opportunities for the Web Actor of the Arab World brought obvious change in Arab societies. For the first time, the Arab Web actor is contributing, is participating and more interestingly, listened to. This evolution can be compared in sociological and political terms as what O'Reilly[13] describes as the adoption of the new Web 2.0 business models in western economies: The web as a platform where immediate, mobile production of content can be uploaded in no time on large and free repositories on the Cloud. When this transformation takes place in a "modern", democratic environment, the main consequences are economic. The first motivation of Web users is not to reconsider the system that gave them these

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(12) Burris. "**Lawrence of E-rabia: Facebook and the New arab revolt**". www.jadaliyya. com, 17 octobre 2011.

(13) O'Reilly. "**Web 2.0 Principles and Best Practices**". (O'Reilly Media 2006).

new innovations. But in societies where access to freedom of speech via free and democratic technologies is considered as a social promotion, or as an access to private environments, far from familial or security constraints, the disruptive effect really defers.

Nadine Wahab, in Meta Activism, explains this process[14]: « Since the Egyptian government had made the brick-and-mortar world so unfriendly to free expression and the Internet was so readily available to just tweet, update Facebook, or send a quick blog post, it became the obvious space to express your thoughts". Each piece of information produced on the Arab Web will then act like a seed in spring: ideas will grow, spread and perform change. Links will work as the underground rhizomes of the future social and political ecosystem. This process, observed from a western vintage point was understood as follow: the "Spring of the Arab Web" must be nurtured by external forces to gain in vigor and power. The disastrous example of "The Gay Girl in Damascus" Blog is pure illustration of the misconception that external intervention can actually help promote change. Here again, Clay Shirky [4] is right in saying that "despite this basic truth -- that communicative freedom is good for political freedom -- the instrumental mode of Internet statecraft is still problematic. It is difficult for outsiders to understand the local conditions of dissent".

The Disruptive Effect

The transformative forces of the Arab Web have been at work in the Arab society for more than 10 years. Intellectual identities, cultural values have been built online, far from the authoritative structures. A consequence of the time advantage given by the Web technologies, vertical local powers couldn't really anticipate the change: The Web was seen as a commercial tool and local practices were perceived mostly like personal communication or entertainment. Local structures were also stuck in what Briggs[15] calls the "conservative dilemma": "a state accustomed to having a monopoly on public speech finds itself called to account for anomalies between its view of events and the public's". The construction of relations between individuals on web social media creates a disruptive effect in

(14) Wahab. In "**Arab Spring: What did we learn about Tech and Revolution**".
    (www.meta-activism.org 2011).
(15) Briggs. In "**The Political Power of Social Media**". (Foreign Affairs 2011).

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the Arab society, where traditional values are deeply collectivist, if we consider Hofstede's cultural dimensions[16]. The individual dimension of "self" is difficult to apprehend outside the societal structure and the Web creates an original situation: connection, sharing, collaboration, participation encourage autonomous attitudes, individualized actions, in the traditional sphere of relations to "others".

From the underground and hidden "obscure side" of non-authorized relations, the Arab Web actors create a new "karama", a new generosity, where digitalized practices and claims crystallize in a generational mix. This disruptive effect goes way further than just the political transformation that is observed by the Occidental commentator. The spring of the Arab web has created a digital generation, living within new structures, moving the traditional boundaries of identity, religion and culture.

Three examples of this emancipation can be found on the Web itself: - Even the traditional appearance of the Arabic language is altered by the rupture. The immense development of ‹Arabizy›, this new writing where numbers, signs and Latin letters mix to form an easy, fast and international Arabic language on the Web, is a clear example of the construction of a new Arab language at the core of a redefined identity. Here again, Web technologies work as a biotope for experimentation and adoption. Surprisingly, the religious structures of Islam have taken great advantage of their early understanding of the powers of online communication. Cyber-Islam, with leading media figures like Amr Khaled, develops new relations with the believers and creates a new realm of perceptions: the all-powerful political and radical Islamism of the 90's seems downgraded by the new rules, forms and language of cyber-Islam. – If the Arab Web is the place for an individual "coming out", it was obvious that the ultimate taboo of Arab cultures, the "body", would also be used as a weapon of defiance, of personal expression, of individual construction. One of the most blatant examples is the initiative of Alia Al Mahdy, the Egyptian girl who protested with silent pictures of her naked body, published on her blog.

This manifesto is not only a violent expression of destruction of the established rule, but also reflects the passage from an intimate construction of

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(16) Hofstede. G. "**Cultures and Organizations: Software of the Mind**". (Cornell University 1996).

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digital identity to what Lacan called "extimité", or exteriorized intimacy.

Conclusion

The "Spring of the Arab Web" has now the shape of a social palimpsests. The new writings of the social sphere reinvent a reality, without erasing the past. The digital cultural origins of the Arab revolutions lie in the co-constitution of Web and born-again Arabism. The Egyptian and Tunisian cases show the complex relations between virtual spaces and networks, between software and language, between standards and usages. Since 2000, the Arab Web is full of micro-events, where small groups of individuals have sown the seeds of discontent, blog by blog, tweet by tweet, video by video. When Tim Berners-Lee calls for a Web Science that analyses and understands the Web at the various micro-and macroscopic levels, we consider that this kind of microscopic event definitely contributes to a better understanding of the Web ecosystem; of the Web as a "biotope for change".

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