

Regime Change in the 'Arab Spring' is a System Change

- What influence have 'social media' on the development, progress or obstruction of revolutions in Iran, Tunisia and Egypt? - Version:3



Jaap van Till, journalist and professor emeritus telecommunication & internet. written on Friday, February 4, 2011, the "Day of Departure 'in Egypt.

Introduction Governments of nationstates in the world have a problem. They see with surprise that mature and self-conscious people using networking suddenly gather and flock because something is bothering them collectively. About the how, why and the desirability of these revolutions, I do not express myself in this article. I just describe what I think is happening and how / why it WORKS. It is not an opinion whether that is good or evil.

The situation The Civilians (the public) can, alongside the state and enterprises, using Internet and cellphones, establish itself as a third power factor. 'They were that already in a democracy', you may say. Indeed, in that form of government, citizens can express their views on policy and choose who will govern them, every so many years. But what we recently see demonstrated shows speed, organization, scale and content depth and outspokenness of the demands and desires of the public, through social media, is unprecedented. These recent weeks we see that demonstrated in what is called "Arab Spring". But that suddenly sticking to each other via networks to get something done what I call "flocking", in analogy with flocks of birds or schools of fish, has been occasionally appearing for years elsewhere too, see [1]. One of the most recent example being the election campaign of Barack Obama by volunteers and

independently organized via the Internet. That is also when many people were taken by surprise, not least his opponents, who thought they also had a website and a Facebook page. Yes, our ministers are tweeting as well? Which brings me to my first proposition.

(1) Social media are no media in the sense of information distribution, but primarily a tool for social networking (SN) of a community/ group of people through intense&fast P2P mutual communication to achieve something together. And these communities are no longer local or national.

People in Tunisia, triggered by the suicide of an unemployed young man, clearly suddenly were tired of the stagnation, corruption in the failing regime, and dared to rebel, especially because they knew that their messages (via Twitter and Facebook) and videos, uploaded to YouTube, now could be seen abroad and the worldwide media among others. Al Jazeera among others returned these videos to a wider audience with Dish TV's all over their country via Satellite broadcast. This chain of communication helped the young people to step over their fear and the passiveness instilled on them for decades.

And people in powerful countries that see the footage will put pressure on the dictator and his regime to behave and liberate. In itself, the Internet penetration there is still not very high, but this transparency for what is done in those countries by the regime, that was not at all necessary. The simple fact that the whole world watches what you do is enough for most dictators.

(2) Even more strong than the quick consult with each other and organizing the insurgency through social networks, is the fact that the people and the outside world gets to watch is an important power of social media. Violence and repression can no longer be obscured by the dictatorship, nor can it still keep telling (filter, spin, dictate) what the world is allowed to see.

What has been called rather romantic "The Jasmine Revolution" is in fact a tough confrontation over the Internet to get it "televised" for sure. Promptly the Tunisian state has tried to fish for Facebook account info in the datastreams in order to identify the persons and then to stifle these streams of P2P communications. But Facebook did take immediate countermeasures to prevent this. And it is becoming known that Twitter, as simple as it is, continues to work despite blockades through many parallel network paths. The Government of Tunisia has blocked a number of websites, telecom- and Internet connections, but was unsuccessful since the rebellion was already successful. We can continue to follow it through Twitter #siddibouazid (named after the Tunisian town with the first clash with state power).

Facebook- and Twitter Revolution?

Many Tunisians were quite angry because the revolution abroad suddenly was called the "Twitter or Facebook Revolution", while in that country they had not seen or used these cellphone&internet tools and because the following is much more important to them: *The design, implementation and success of the uprising against the dictator and his family is a signal of pride, dignity and wisdom of the Tunisian people, that will deserve the respect of the world for ever. Those who for decades*

have felt humiliated have now put that injustice right, and not the Western Internet. And they're right.

Internet is not yet very well penetrated in Tunisia but a very large proportion of the population has mobile phones. Mass texting, photographing and filming with mobile phones did have a decisive role in the Tunisian Revolution as I have described. With a few essential Internet digital channels these digital messages and images were sent upstream and then put on television channels like Al Jazeera (together with a live stream Internet weblog) and EuroNews (“no comment” on the video stream to our cable TV).

There was and is a lot more done with these network technologies to bypass blockades, but it is not sensible to reveal any of those here, even if I knew them, because the opposition to the rebels in these countries are not sitting ducks and also have smarties in their service who are very focused and harshly interfere on these communication channels and do result in severe human interventions. As it was done by Iran for nearly two years.

Gladwell is wrong

The repression of the uprisings proceeds largely by taking part in these social networks, so that disinformation is spread, people are identified and tracked, after which they are arrested, tortured and sometimes executed. So this is not a social game for the naive. The strength and power of social network tools is proven (A) already of this extensive counter-effort by governments in some Arab countries and in Iran. They do not block for no reason almost completely their external Internet and international telecom connections for nothing as was done in Egypt last week.

So Malcolm Gladwell is wrong, with his claims, [2, but also previously expressed] that all revolutions that he knows of and these in Tunisia and Egypt are not done with social media, and could and can be done without these tools. These were not used in Eastern Europe and were taken down in North Africa since last week, he says. No, that's not true. Inside the USSR and the countries of Central Europe, and with the outside world, there have been many loopholes with all kinds of email- and telephone links using modems. Also CB radios and university networks played an important role. And now messages and videos in Egypt continue to appear on our screens, despite arrests and blockades of networks and the news links. Another proof (B) that Gladwell is wrong is given by the fact that in almost every textbook to organize (or stop) an uprising is stated as step 1 or 2: "Make sure you cut off all telecom (formerly it was telephony) and occupy all radio- and TV stations. So only you can broadcast and distribute information that you want to distribute. And that is precisely what is circumvented by using social networking. What the team of young smart people of the “April 6” youth-movement in Cairo did was to setup a very robust communication system of their own using social media techniques. And they learned a lot (during Skype sessions (C) with them) from the experiences of earlier insurgencies like the successful toppling of Milosevic by young people in Serbia. One of their main lessons to the April 6 group was to tightly control the demonstrators to act non-violently, even when provoked. And yes, when also cellphone and internet was brought down inside Egypt, they sent members of their team to be on the various locations and

communicate in person. So even the Revolution 2.0 guys and girls can fallback to physical presence.

(3) Electronic communication channels, such as telephone and TV in the past, and now social media, do accelerate, strengthen and help to scale up the communities of people that make revolutions happen; like they are also support the renewal of business, research, education and spreading of innovations. They sometimes are a ‘disruptive game-changer’. I have presented that last year in a video interview[4]. People who did discard the power of social networks have been proved wrong [5]. QED.

Young men and women do empower their team and many others with the help of these electronic tools

That puts rulers of authoritarian regimes in a dilemma. If they block the networks to the external world, and sometimes even domestic (as in Egypt), they also damage their own economy which uses these same networks: stock market trading, distribution of food, fuel and other goods and their economic development and knowledge. And without TV and internet demonstrators are even less willing to go home!

In Egypt the developments in Tunis, as far as they were visible, worked as a trigger. The fall of dictator Ben Ali did free the rebels in Egypt and elsewhere in the world from their fear and apathy, which for years had been imposed on them all kinds of physical violence, humiliations and restrictions on their freedom. According to Mona Eltahawi [3] an online group of young dissidents [14] has helped to evaporate the fairytales of fear of decades. The blogs, Facebook updates, notes and more recently Tweets formed an opening to self-expression, in which one could build self-confidence. As I mentioned 'freedom', 'respect' and 'dignity' are key to this "Arab Spring", real eye openers not in the least for young women in some of those countries. Besides putting their own "I" identity on the map, it also helped the social media activists to make connections with the rest of the people. So cooperative relationships formed, between old and young from all walks of life, including people with a *diversity* of religious and cultural backgrounds. And they wanted that Egypt will mean something in the world again, see [3]. The quick spreading out of the P2P relationships with the help of social media and face-to-face can be described as "*viral*", which is often called "the butterfly effect". Wael Ghonim said it as follows just after he was released: "It started as the Revolution of the Young on Internet, then the Revolution of the Young of Egypt and then it became the Revolution of All of Egypt".

The core functions of Social Media

What are/are not the effects of social networks and these new media techniques? First of all, they result in a huge mob of 'on the spot watchers', bloggers, tweeters and photographers that complement the few ordinary journalists, photographers and camera people that have not been stopped, immobilized in their hotel or arrested. After which that crowd forwards their observations as described. And second, small lateral groups of "insurgents" can use mobile mutual communications to co-ordinate actions that can outmaneuver police groups controlled by much slower central command

levels as was visible on and around the 'Liberation' = Tahrir Square. The government response was very violent, but rather classic, by stopping of most known communication channels, including SMS; arrests of journalists, finding bloggers to disable their network technical abilities and by arrests and attacking people in the area involved in the demonstration that could play an active role like for instance members of the 'human right watchers' (reporting on freedom of speech and press) and Amnesty International. It makes no sense here to describe all that happened by volunteers in still further detail because it is an accumulation of small actions by both sides in which new actions are invented, learned and implemented on which the state agents sometimes reacted with varying success. It looks a bit as if a huge anthill of hundreds of thousands of ants is disturbed by stabbing sticks in it. But as is described in the literature, ant hills can show sudden collective and emergent behavior, without any apparent central or hierarchic control, based on massive numbers of peer-to-peer (scent) messages, as is now studied as part of the science of "network dynamics of complex systems". Also in Egypt very quickly small volunteer neighborhood security groups were organized to prevent looting and crime, and was arranged for volunteer food distribution and medical aid to the wounded on the square etc. It is very impressive to see how passionate and unselfish these people did and are doing these specialized functions.

The civilians in Egypt say that their outlook on life has changed in the sense of hope and now they dare to express themselves and dare to help & support complete strangers. Nonviolent and with a visible inner fire. The whole nation is irrevocably changed, as in the Prague Spring and the 'Fall of the Berlin Wall'. This also means a change in the structure of that society. More about that below. First a list of the main "effects" that social media have in such situations, see also the TED video of Shirky [6]:

- a. It is a tool in the hands of many people, that works as an "amplifier" of forces. But just as you can do with a hammer: you can build things up but do damage as well. And will be always a race between command&control and rebels.
- b. People can use it to report things they see happen in front of them unfiltered as citizen journalists to each other and discuss it peer-to-peer (P2P) mutually, judge and recommend it to others; on the basis of that shared "view" they can very quickly on the spot take action together. All without any longer being dictated from above what to see and what they have to think about that. Broadcasting vision of the state or those of higher authority or any priests of a religion or any other "mono-ism", no longer work. The "wired" civilians do think, talk and do across many mental and physical borders. Nor can the lateral communication network be stopped totally by censorship or shut down completely.
- c. It makes things that were internal-confidential openly visible by transparency. You know by now what Wikileaks did with such secrecy. But it is also visibility in both directions. Big Brother vs. the "little brothers".
- d. It makes things possible that previously could not be done, bounded as they were in distance and in time, like upscaling coordination to large numbers of participants, to millions of people.
- e. It perhaps enables a rather sudden transition from an autocratic dictatorship to be democratic 'open society' with free and responsible citizens who participate in decision-making through elections and other mechanisms.

A bit deeper analysis

The latter transition e. is often successful, as happened during the fall of dictators and their regimes in for instance the Philippines (Marcos), Greece (Colonels), Albania, Indonesia (Suharto), Spain (Franco), Romania, Portugal, Poland and Serbia. So it is maybe not so unique that we may see it happen now in the Arab Spring. Is it simply their turn to transit to a new and better system? But revolutions sometime fail, as it did in Iran and Algeria. And as we have noted "democracy" is MUCH more than just having elections!

So we must dig a bit deeper. If we really want to understand what during these 'revolutions using networks' as a phenomenon happens, we must look at what drivers are under it, not just at the symptoms that usually analysts and commentators dish up.

Prof. Tom Stonier has in 1983, about ten years before the falling apart of the Soviet Union (USSR) and the fall of the Berlin Wall, predicted these [7]. Based on empirical research, fueled by the annual statistics of the ITU (then CCITT) in Geneva. He found that when nationstates hit a certain limit (20%) in the number of fixed telephone lines per 100 inhabitants, a dictatorship no longer be sustained. Then there is a sudden and unstoppable system transition (sometimes triggered by a military defeat). He has described in detail the transition in Greece during the so called "Colonels regime". "Game Over" for the dictator and his regime in Egypt, as protesters stated on the boards they raised on Tahrir Square. Then Stonier could from the yearly ITU graphs of "teledensity" (number of fixed telephone lines / 100 inhabitants of a country) versus the national income per capita (GNP per capita of a country) predict when and where revolutions (governing system changes) would be likely to happen. And in the case of he USSR his prediction turned out to be very accurate.

It is wise however to look a bit closer at the story of the late prof. Stonier. In the first place the graph, see [10, sheet 25]. If you chart the two things, teledensity and GNP of the countries, on both axes (both logarithmic) you will see a very strong correlation, which means that through the positions of the dots of the countries, almost a line upwards can be drawn. There are only a few a little above or below that line. For telecom suppliers and operators, this was always a reason to pronounce that getting more telephone extensions would make your country richer. But the correlation can also work the other way: that if people in a country are rich they can afford a telephone extension. All we can say is that teledensity and prosperity interact. But how? Stonier wrote about that in breaking the 20% threshold in a country a new 'caste' of well-connected knowledgeworkers with PCs appear in the cities. We would translate that now in 'wired urban creative class, basis for the Civil Society'; more about that later. Stonier wrote to that teledensity with fixed telephones is only one measure for the tools of the knowledgeworkers. Now we would be much more relevant to measure the density of Internet addresses and mobile phone users in a country / city region to chart when these leap / transition with reform happens.

It is also important to note that the distribution of both teledensity and wealth is very unequal (differs orders of magnitude) between countries and that teledensity is absolutely not uniformly distributed *within* countries. Between capital cities, regional centers and rural areas there is a huge difference in Internet connections and mobile

coverage. This is evidently the case in Russia, China and Iran. The reform actions do therefore will not appear everywhere at the same time except in the capital and the big cities within the countries.

The above 'effects' of social networks a. to e. can catch on then with high enough teledensity, especially those of b. It is important to note that Stonier nowhere in his article mentioned "democracy" but only talked about " an (autocratic) dictatorship is no longer sustainable". Those two things are not necessarily the same as we now know, and as I indicated in e. A lot more is needed to build a Civil Society, in which a democracy may be one of the ingredients. What His Royal Highness Prince Hassan bin Talal said on CNN [8] in response to the crisis in Egypt is very striking: "What we see is a sudden waterfall appearance of the Civil Society as a force BESIDES state power and the power of private enterprise," he said.

This remark corresponds exactly with my model of The Trias Internetica [9] that I have presented for years at university lectures, which highlighted the emergence of that third force: that of the value creating middle class citizens-volunteer groups. On the basis of the use of Internet connections and cell phones functions in society change and roles shift and rearrange themselves.

If all goes well reinforce three poles (usually represented by three clusters of political parties) of State, Civil Society and Business reinforce each other, like the cylinders of a motor. Civil Society (for details, see [9]) does not replace the State or Business. Neither State nor Market can or should do everything, as we may have learned recently. Each of the three poles has a basic role and a number of tasks must be rearranged or sometimes even rigged up from the ground up to contribute in such new system. For the State it means that institutions must be (re) established based on equality before the law; such as: ensuring 'law enforcement' and justice, governance, education, human rights, finance, infrastructure (physical and infra for basic networking), in the general and long-term interests of the people. Crucial for the Civil Society is the Freedom of choice. Not only every x years, but all day long in every aspect of life. And the other side of that coin: taking personal responsibility for a pledge to do something. Key of wealth creation in the Civil Society is Trust that people keep their promises, since it lowers transaction costs in the Network Economy. Here the importance of telecom, networks and social networks do kick in!!

All three poles must therefore recognize and take into account the impact of social media and telecommunications. This is much more than having a Twitter account. Young people around the world know this and are really living all day in cyberspace. For them, the combination of the development of a specialized and respected "I" & be acknowledged and respected for their specialized contributions and referrals/recommendations[13] in different physical or virtual "GROUPS" (tribes), is the main driver. This is the fingerprint of the Civil Society, which include co-operatives and other modern 'commons'. In our country we can see that in action via for instance Hyves. And how fast and powerful it is could we see during the 'Moerdijk Fire' in a chemical storage factory. Through the community of Amber Alert with help of Hyves and other online media, soon situational info was gathered by people to spot and shared to form a picture what was going on and what the consequences for local residents it could have. Very fast, while government officials still where fighting over who had the competence to say or not something to the

public. And when they did it was not very accurate and partly conflicting. So with Amber Alert we could see P2P citizens networking (operation of b.) in action, as an important addition to services and agencies of government and industry.

So the good news is that a certain density of knowledge workers with social media an irreversible transition occurs. Less good news is that then a whole new social system with ditto roles and responsibilities need to be built and cultivated by organic growth. The EU has experience with this like what was done in Poland not long ago. It takes a while but is also the source of prosperity and empowerment in a pluralistic society. Only one thing counts there: if it WORKS via relationships and connections!

What is still to come ?

The operation and effects of social media in combination of 'groups of people' goes much further, also here. Please note, there is **another transition** ahead from which we can already detect the turbulence. At a higher teledensity in the charts of Stonier, this time of internet services and smartphones, I suppose, another leap will happen. This time from the "Civil Society & Democracy" to the form of society I have called "Syntecracy" as the basis for new value creation, this time with the transsectoral self-organizing computernetworks of the Creative Class as a basis. Much faster and more powerful than what we know today. In the USA and Europe and a number of large city-states in the world this new form of society and its co-operating and fastlearning [11] business enterprises are already apparent. The description of the structures and functioning of these, as an extension of the above a. to e., I have already finished but I have to carefully prepare this material for a publication, hopefully with some funding.

Conclusion Yes, the next open & organically growing societies are in the eyes of old power & control-aholics chaotic, but that is simply how forms of life ARE: messy and alive, but no longer stagnated & dying and no longer in neatly pressed straitjackets. That "game is over" and we see more of the two described sudden networked system changes two more of the networked system. Always associated with yet other high-impact social media tools. Not only in the Arab world but throughout the world. Nation-state governments are not very cheerfully looking forward to that turbulence, but that should not [12] have been a surprise. #

[1] Till, "Technologies of Flocking" Science Guide, July 9, 2009
<http://www.scienceguide.nl/article.asp?articleid=107531>

[2] Malcolm Gladwell "Does Egypt need Twitter?" The New Yorker online, Feb.2 2011. <http://www.newyorker.com/online/blogs/newsdesk/2011/02/does-egypt-need-twitter.html>

[3] Mona Eltahawy "We've waited for this revolution for years. Other despots should quail" - Change is sweeping the Middle East and it's the Facebook generation that kick-started it, [guardian.co.uk](http://www.guardian.co.uk) , Tuesday 29 January 2011
<http://www.guardian.co.uk/commentisfree/2011/jan/29/egypt-mubarak-tunisia-palestine>

[4] Van Till, Video Interview (in Dutch), Netkwesties Video nr.2, recorded on 1 April 2010, <http://www.netkwesties.nl/320/netkwesties-video-jaap-till.htm>

[5] Lee Siegel, "The Net Delusion, Egypt and the Crisis", New York Times, 4 Feb. 2011 <http://artsbeat.blogs.nytimes.com/2011/02/04/the-net-delusion-and-the-egypt-crisis/>

[6] Clay Shirky: "How cell phones, Twitter, Facebook can-make-history" Video on TED.com <http://tinyurl.com/kwf2xd> filmed May 2009, posted on June 2009

[7] Tom Stonier, The Microelectronic Revolution, Soviet Political Structure, and the Future of East / West Relations, "The Political Quarterly, April-June 1983, pp. 137-151.

[8] Prince Hassan Bin Talal of Jordan in a video commentary on the situation in Egypt on CNN, Thursday 3 February 2011.

[9] Van Till, article on "The Trias Internetica", August 14, 2010.: <http://blog.p2pfoundation.net/the-trias-internetica-three-different-roles-in-the-society-of-the-network-age/2010/08/14> The schematic of it is available at: <http://www.vantill.dds.nl/triasinternetica.pdf>

[10] Van Till, "Networks, Social Movements and Self Organisation", Lecture at Wageningen University, March 26, 2010. (graph Stonier = sheet 24) <http://www.vantill.dds.nl/lecturesocialnetworks.pdf>

[11] Douglas Thomas and John Seely Brown; "A New Culture of Learning" – Cultivating the Imagination for a World of Constant Change -; 2011

[12] Martin van Creveld; "The Rise and Decline of the State", Cambridge University Press, 1999. In which he described more than ten years ago the impact of modern information technologies and networks on strategy, policy and structure of nation states.

[13] Natasha Singer; "Why some twitter posts catch on, and some don't"; http://www.nytimes.com/2011/02/06/business/06stream.html?_r=2

[14] David D. Kirkpatrick, "Wired & Shrewd, Young Egyptians Guide Revolt", http://www.nytimes.com/2011/02/10/world/middleeast/10youth.html?_r=2&ref=global-home

Versions:

1. Written in Dutch on Friday, February 4, 2011, the "Day of Departure 'in Egypt.
2. Published online in Netkwesties.nl <http://bit.ly/hTwbnZ> "Sociale media brengen nieuw systeem met "Arabische Lente" (in Dutch) Sunday Febr. 6, 2011.
3. Translated into English with minor additions and updates, and submitted to the participants on the discussion list of Gordon Cook "ArchEcon", Friday Feb

13, 2011, and published on my homepage as <http://www.vantill.dds.nl/arabspring.pdf>