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THE ANATOMY OF OBAMA'S "YES WE CAN"

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Abstract

Situations arise when people and groups are exposed to seemingly insurmountable, intractable challenges, and take them on, often against the prevailing "not doable" public opinion. Such an example was Barak Obama's presidential campaign in 2008, when people united around the slogan "Yes We Can."

This article analyzes the significant prerequisites for opening minds so as to perceive challenges as achievable. It reviews the psycho-social parameters (minority-influence, complexity thinking), the neuroscience of brain plasticity and creativity, the role of joy and the properties of social networks which support the propensity for perceiving intractable challenges as doable.

It concludes that if the presented prerequisites are fulfilled, this sort of opening of mind becomes an option, both for individuals as well as for groups, communities and societies.

"We shall overcome
We shall overcome
We shall overcome, some day
Oh, deep in my heart
I do believe
We shall overcome, some day…"
Originated by Louise Shropshire[1] and sung and
disseminated by Pete Seeger and Jean Baez.

Introduction

Pete Seeger's song "We Shall Overcome" became particularly popular in the 1960s during Martin Luther King's movement in America. In 1963 it was recorded by Joan Baez[2] and became a major anthem of the Civil Rights Movement.

President Barack Obama quoted "We shall overcome," at the 50th anniversary of the infamous 'Bloody Sunday' (at the Edmund Pettus Bridge in Selma, Mississippi). He had already used the "Yes We Can" slogan in his 2008 presidential campaign, supported by a the "Yes We Can" song cited in his speeches:

"It was a creed, written into the founding documents
That declared the destiny, of a nation - yes we can
It was whispered by slaves and abolitionists
As they blazed a trail toward freedom - yes we can, yes we can
It was sung by immigrants as they struck out from distant shores
And pioneers who pushed westward against an unforgiving wilderness - yes we can
It was the call of workers who organized
Women who reached for the ballots…"[3]

It is interesting to understand what makes individuals and groups come to the conviction at some point that even intractable challenges are realizable – especially when the prevailing attitude at that time is "it's undoable," "why should I get involved in a hopeless undertaking," or "let someone else tilt at windmills."

Of course, there are problems obviously achievable or obviously unachievable; however, between the two extremes there is a spectrum in which people evaluate the realisability of any one problem differently.

There seems to be a specific mechanism controlling the level of conviction that challenges are doable or undoable. This is different from self-efficacy – one might have great confidence in one's own abilities yet still perceive a challenge as undoable. Nor is it simply optimism. One can believe that good ultimately prevails over evil and still perceive a specific challenge as impossible to accomplish.

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1   See: https://blavity.com/songwriter-who-wrote-we-shall-overcome-finally-gets-credit-for-her-work?category1=news
2   YouTube: www.youtube.com/watch?v=nM39QUiAsoM
3   YouTube: /www.youtube.com/watch?v=jjXyqcx-mYY

This trait seems to be a distinct human quality for perceiving what others think to be intractable, insurmountable challenges as being achievable – a trait that, when applied, produces extraordinary power. Barak Obama's social movement supporting his election is similar to the power of the Civil Rights Movement.

To capture this specific trait, we coined the term "possibilitivity," echoing the pronunciation of "realisability" or "creativity." *Possibilitivity* means the propensity for evaluating intractable challenges somewhere on the spectrum between the two extremes: "it is obviously undoable" and "it is obviously doable." Civil Rights Movement activists had a very high level of *possibilitivity* despite the police violence and arrests. A huge national movement supporting Barak Obama's election joined many individuals in the conviction that "Yes We Can," indicating that their possibilitivity level was also high. Similarly, 10 million people joined the peaceful Polish underground Solidarity movement, despite tanks on the streets during Marshall Law, because it was their conviction that it was possible to create their own, independent society.

We will analyze the mechanisms which either suppress the tendency to perceive problems as solvable, or drivers augmenting the inclination to perceive them as achievable. We will analyze the psycho-social mechanisms; we will tap into neuroscience to see the way our brain supports attitudes toward challenges; finally, we will consider the influence of the way social networks are structured.

Psycho-social Mechanisms

Our environment plays an unquestionable role in shaping our potential to perceive challenges as achievable or not. The way we are influenced either by the majority or by minority groups has an impact on our openness to the new and the challenging. Also, our ability to accept a 'complexity way of thinking,'[4] and the many inconsistencies of the surrounding world, is a significant factor.

Majority-minority influence

First and foremost, we are under the influence of the majority and have a tendency to conform to the majority's view (Haun et al. 2013). This is why, for example, we follow fashion trends, join political groups, form hobby clubs or are fans of a sports team.

The tendency to comply with the majority is called the *majority influence*. We simply want to be liked and sharing beliefs similar to those held by others increases the likelihood that we'll win their approval and acceptance. Solomon Asch's conformity experiment in the 1950s was one of the most convincing studies. Researchers proved that people, even if they disagree, tend to comply with the majority (Asch 1956). To conduct his research he assembled groups of seven to nine individuals in a classroom and told them they were participating in a simple experiment in visual distinction: there were several lines drawn on the board; all but one were clearly equal in length to the standard line, and one clearly differed. Participants were asked to indicate which of the three lines were equal in length to the standard line. In each group, the first respondent seemed to get it wrong, pointing to a line that was incorrect. Then, disturbingly, others in the group would make the same incorrect choice.

The "trap" was that all but one of the participants in each group were covert experimental assistants. The unwitting participant watched in astonishment as person after person picked the wrong answer, and in doing so began to doubt his or her own conviction and, in most cases,

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4   A caption from one of the titles in Axelrod & Cohen's book (2000).

ultimately went with the group. Torn between the need to belong and the need to be right, subjects went against their own better judgment in favor of the majority opinion.

Repeated many times with different groups proved that in about 74% of the cases, the final subject chose the same wrong line, following what their predecessors did. Some optimism is delivered by the 26% who, against the majority's pressure, chose the correct answer.

This iconic Asch experiment shows how the majority has the power to shape our opinions. And, because the "no go," "can't be done," "unrealistic" opinion usually prevails, most of us keep our *possibilitivity* level as low as the majority's.

Another powerful drive that compels us to think as the others do is the need for group identity, delineated by Abraham Maslow as one of the five basic human needs (Maslow 1943). It's quite common for people, especially those lacking self-confidence, to shape their own identity through affiliation with a group. However, to belong, one must match one's own behavior to that of the group's and subsume into the group's identity.

For example, for people who feel lost, such belonging can boost self-esteem, especially if the group engages in healthy activities such as outdoor adventure, music, or advocacy. If, however, the group supports its own image by denigrating others, the self-image shaped from participation might be quite destructive (Cialdin & Goldstein 2004; McLeod 2007). In that vein, people rather give up their convictions that dreams are achievable, keeping their possibilitivity level as low as the group does.

On the other hand, as pointed out by "the bubbles theory," (Nowak & Vallacher 2005; Vallacher & Nowak 2007) the minority's influence may open us up to the new. Using the metaphor of gas bubbles forming in water as it heats, research described "bubbles of new" that appear and diffuse in the "sea of old." At the beginning, one observes a nucleus of small "bubbles of new," which connect together, grow in size, and become large, full-blown bubbles that eventually break through the surface. Bubbles may be interpreted as forerunners of change in societies undergoing transition. As the change progresses, islands of "new" gradually expand at the expense of the "old."

Minorities influence majorities by casting doubt, and by presenting a cohesive stance, adamant commitment, and strong evidence. By finding smart ways to engage the attention of the majority and coherently express alternative views, the minority can reinforce its own identity, gaining strength and unity through the process, and making a strong impression on the majority members (Moscovici 1976; De Drue & De Vries 2001; Nemeth & Goncalo 2005).

The process of minority influencing majority opens the mind to alternative ways of thinking, consolidating individuals around the convictions that challenges, even if prevailingly seen as "impossible," are perceived by the minority followers as "possible."

Consistency of thinking

We have a need to explain the world around us, both to ourselves and to other people. We do it constantly. Highly motivated to assign causes to our own behavior and that of others, we construct reasons for the events we see or hear about. In social psychology this tendency is called *attribution*. Not only do we try to explain everything, we also make huge efforts to keep all of our attributions, attitudes and beliefs in harmony (Jaspars & Fincham 1983). It was Leo Festinger who, in the 1950s, proposed that we strive for internal psychological consistency in order to function harmoniously in the real world (Festinger 1957).

When our attributions about the world and ourselves are cohesive, it makes us feel good. However, when they clash, or a discrepancy arises, it evokes a state of tension known as

cognitive dissonance. The experience of dissonance is usually unpleasant, so we're motivated to eliminate it by any means and reclaim our lost harmony. In Festinger's words, we strive to *reduce the cognitive dissonance*.

We do this either by modifying parts of our cognition, or by adding new elements to it. Another option is to actively avoid social situations or contradictory information that could increase the cognitive dissonance.

For example, if heavy smokers hear evidence that smoking is harmful, they try to "harmonize" their habit with this new information, saying that "smoking calms me down when I am stressed or upset," "smoking helps me concentrate better," "smoking is an important part of my life," or "smoking makes it easier for me to socialize." Others apply risk-minimizing beliefs: "the medical evidence that smoking is harmful is exaggerated," "one has to die of something, so why not enjoy yourself and smoke," or "smoking is no more risky than many other things people do" (International Tobacco Control (ITC), Fotuhi et al. 2013).

All these efforts diminish the encountered contradictions so as to keep the internal cognitive system cohesive. In other words: they are taming and domesticating the new in order to somehow "glue" it to the old.

This becomes a habit, a "second nature," to cover all the outstanding pieces of information. In that vein, the new challenge, if it doesn't fit the general convictions, becomes rejected as "undoable."

On the other hand, Johann Wolfgang von Goethe said "what we agree with leaves us inactive, but contradiction makes us productive." Friedrich Nietzsche also indicated that "One is fruitful only at the cost of being rich in contradictions." This would mean that contradictions may be advantageous!

For example, a startup founder said that the success of a new venture might be dependent on a willingness to embrace inconsistency and contradict oneself.[5] Jeff Bezos, the entrepreneur, investor and computer scientist best known as the founding CEO of Amazon, has said that consistency of thought is not at all a particularly positive trait. He encourages leaders to challenge themselves with ideas that contradict previous convictions.[6]

A respected American psychology professor, Mihály Csikszentmiháyi, interviewed dozens of leading innovators from diverse disciplines. One of his conclusions was that creative individuals have contradictory characteristics which he called "antithetical traits" (Csikszentmihalyi 1997: 58-76). For example:

- They have a great deal of physical energy, but are often quiet and at rest.
- They enjoy and practice playfulness, but also impose strict discipline.
- They alternate between imagination and fantasy at one end and a rooted sense of reality at the other.
- They merge opposite tendencies on the continuum between extroversion and introversion (which is unusual, as psychologists hold that being either an extrovert or an introvert is a stable personality trait).
- They are remarkably humble and proud at the same time.
- They have both a rebellious streak and a strong culture of basic (traditional) points of reference.
- They are passionate about their work and objective about it as well.

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5   See: https://buffer.com/resources/the-habits-of-successful-people-be-inconsistent
6   See: https://signalvnoise.com/posts/3289-some-advice-from-jeff-bezos

All these traits indicate that living in a universe of contradictions probably keeps the mind in a specific mode of readiness to jump to alternate points of view. While cognitive consistency is and will remain the default and dominant trend of our minds, admitting inconsistencies and opening our thoughts to complexity, chaos, jumps of thought, and paradoxes could be, in part, what enables us to see what is perceived by others as weird, unrealizable or impossible as being utterly attainable. Inconsistencies may be one of the keys to the Yes We Can attitude.

Simple-complex

If we think in a traditional, A to B, B to C, C to D way, we may be lost in the contemporary world, which requires a complex way of thinking (Axelrod & Cohen 2000). This means accepting feedback loops (A influences B, B interacts with C and C, in a feedback loop, enforces A), sudden jumps (e.g. the Black Swans on the market – unexpected appearance of some new entities which become key players) (Taleb 2010).

This may come as a shock to many, as we've been trained to think in a traditional "linear" way. But to enter the emerging world of complexity science (Dooley 2009), we need to completely change our approach, envisioning multiple formal and informal connections, hidden potential, latent tendencies, leverage points for initiating the chain-of-change, etc. (Praszkier 2015).

Moreover, perceiving chaos as a potential source of higher order is often limited by our culture, which trains us to avoid chaos, being understood as a source of disintegration and a synonym for "mess." On the other hand, chaos theory offers a unique perspective, which may improve our understanding of learning and development (Levin 2000). Several positive indications of complexity thinking in organizations have been proposed like:

- A constant balance of counteracting forces, which put organizations in a potentially chaotic situation
- Resulting changes that are usually discrete, manifesting discontinuities and jumps
- Small changes that have big consequences
- Long-term consequences that are unpredictable in a linear "A to B" way (Thietart & Forgues 1995).

This sort of complexity cognition requires a real shift in mindset, opening the mind to the new and unexpected. As a result, we also become open to surmounting insurmountable challenges, even if all the others are nay-sayers.

Barak Obama wouldn't have won without millions of people becoming enthusiastic followers of his Yes We Can catchphrase. He created a whole new milieu, supporting the "minority influence" paradigm, and opening minds to complex and untraditional thinking. His election (as the first black President) had been unthinkable before.

Neuroscience Has Its Say

Our brain may have the propensity to be inflexible and closed, or it can be flexible, and open to new challenges. The pivotal dimension is its plasticity: how much the neuronal system is malleable and ready for fostering new connections?

Brain plasticity

Not so long ago the prevailing belief was that the adult human brain is essentially unchangeable and fixed. Fortunately, contemporary studies contradict this dogma and support the view that the human brain is (or, at least, can be) much more plastic than previously believed, even as we age. Brain plasticity means that the brain has a fundamental ability to rewire itself and neurons and neural connections can change in response to new experiences. In other words, brain plasticity is the propensity for fostering new neuronal connections.

On the one hand, while aging, we have the tendency to rely on proven patterns stored in the brain which facilitate movement, reactions to sounds, colors, certain facial expressions, etc. The toddler has all that open as the brain learns and adapts reactions to newly encountered patterns. Getting older, we tend to use our well-developed "library" of neuronal templates, giving up on establishing new connections.

On the other hand, we may be able to reverse this process (of increasing rigidity), as the brain indeed can change itself. For example, it has been documented that taxi drivers tend to have a posterior region of the hippocampus larger than the same area of the brain of non-professional drivers (Maguire et al. 2006). This part of the hippocampus specializes in acquiring and using complex spatial information in order to navigate efficiently. Because taxi drivers continually search for new routes, their brains change with their experience, provided the experience is long-term.

In another study subjects who had lost their ability to see colors due to disease or injury, took part in an experiment, that used a device to transform colors into sounds (Alfaro et al. 2015). After using this device continuously for eight years, the subjects had marked changes in neural patterns, structural connectivity and cortical topography at the visual and auditory cortex, compared with a control population. The subjects' brains literally changed in order to adapt to new information.

And brain plasticity most likely contributes to *cognitive flexibility*, which is the mental ability to merge different concepts, and to think about multiple concepts simultaneously. (For the substantial role of hippocampus; see: Scott 1962; Rubin et al. 2014).

This tendency or trait is a key driver in our lives, and some people indeed rely on their brain plasticity, especially when facing challenges and seeing things as doable, even if they are commonly perceived as hopeless. It paves the way for a higher level of *possibilitivity*, and the conviction that Yes We Can.

Creativity

Here is one example of a creative individual: In 2016, Karin Strauss from Redmond looked at ways to address the need for more data storage (projected to hit 16 zettabytes in 2017, the equivalent of 4 trillion DVDs). She, together with her colleagues at Microsoft Research and the University of Washington, demonstrated that DNA storage technology could be the solution. Information-dense and durable, DNA is also exceptionally resilient and recoverable. In April

2016, Strauss and her group of computer scientists and molecular biologists captured imaginations when they displayed a novel DNA data storage system.[7]

Creative individuals, such as Karin Strauss, foster new neural bonds that enable more connections between distant concepts. The more connections one has between ideas, the more likely one will be able to deliver new and creative results. Creativity is also defined as blending unrelated and unexpected concepts into one functional unit, a process called *divergent thinking* (Guilford 1950; Runco 2007). And indeed, the idea to blend data storage and DNA might sound a bit weird, but this is exactly the way divergent thinking and creativity work.

Joy

Quite recently it has been discovered that the best environment for enhancing creativity and, in this way, also the feeling of achievability, is simply joy. Serious, gloomy meetings discourage creativity, whereas joyful activities augment innovativeness (Pellis & Pellis 2009).

Obama's election support network was full of young people joyfully volunteering and believing that Yes We Can.

It's not always easy to be creative, deviate from the norm or break from the pack; however, it's been noted that the most creative people are also often the most confident, independent, daring, intuitive and flexible. Creative types often possess the courage to take risks, make waves, challenge traditions and "bend a few rules" – all prerequisites when working with incomplete ideas, where relevant facts are missing, rules are grey, and "correct" procedures are nonexistent (Davis 1993). And it takes this creative drive to see possible solutions where others don't. In lieu of this, creativity supports the Yes We Can attitude.

The Role of Networks

The networks we participate in have a significant influence on the way we develop our attitude toward potential problems. In the past, theorists thought that our global network was made up of a collection of "small worlds," i.e., close-knit circles (family, neighbors, close friends, peers at work) existing in isolation (Barabási 2003). If so, we would be rather adopting the small world's (our small majority's) perspective, not even knowing about other options.

However, over the last few decades analysts have developed a different view of the global network which yes, may consist of small worlds (with strong internal bonds), though these close-knit circles are connected with other small worlds enabling, globally, the flow and exchange of information (Barabási 2003). It is enough for only one person from a small world to be connected with someone from a distant circle, to connect all the members of both circles. This "mixed" pattern enables opening up to new concepts and opportunities.

Strong and weak ties

In the 1960s, Mark Granovetter introduced the concept of strong and weak ties (Granovetter 1973; 1983). Strong ties were the connections inside each small world, while weak ties were those slender bonds between the distant circles. Granovetter coined the idea of the "strength of weak ties," pointing out that it isn't the strong bonds that provide new options, but the distant (weak) connections that are more likely to open doors to completely new opportunities.

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7   Fast Company top 100 leaders shaping business in creative ways, the 2016 list; see: www.fastcompany.com/person/karin-strauss

Strong ties are relationships among people who work, live or play together. They create a *bonding* type of social capital and provide a societal backbone. They help maintain and transmit values and traditions, provide a sense of identity, and serve as reference points in case of disturbances. Weak ties create *a bridge* between strong-tie networks, keeping us open to new connections and opportunities, some of them coming from distant parts of the network. Having too many weak ties may make us feel baseless and cut off from our roots. Too few or no weak ties trap us within a small circle of influence, isolated from new ideas. To open one's mind for the new, especially if the new looks arduous, one has to be well-rooted and well-connected, which indicates striking a balance between strong and weak ties (Praszkier 2012; Joseph 2018).

Vertical, horizontal, diagonal connections

Usually when we think about connections in the workplace, we envision a vertical information flow, with guidance and control coming from the top, and reporting coming from the bottom. In the case of *vertical communication*, adaptation remains on the more superficial obedience-compliance-conformity level. This communication style stifles creativity, and shuts people's minds to new challenges.

Another kind of connection is known as *horizontal* (among colleagues and peers at the same level) and *diagonal* (between different levels and departments). Both types of connection can be efficient in modern business environments, where projects often require the cooperative efforts of more than one department and associates from various levels (Darbellay et al. 2014). Diagonal or horizontal communication allows the nimble sharing of information directly, rather than according to a strict vertical hierarchy, which can slow down the information exchange and gum up the proverbial works. Information is shared through informal discussions, phone calls, social media, casual meetings over the lunch break, and social activity, without being hampered by chain-of-command requirements. The result can be mutual inspiration and new opportunities for unexpected cooperation; and studies document that most novel developments come from diverse and collaborative networks (Nieto & Santamaría 2007).

Accidental encounters

The comparison of two similar pharmaceutical companies showed that the well-managed company where everyone knew their place lost in the competition with the company experiencing turmoil that randomly displaced staff. In the latter case, people met unexpectedly with previously unknown people, mostly from other departments and from different management levels. These random (accidental) horizontal and diagonal connections inspired them with new ideas that resulted in a skyrocketing amount of novel ideas and publications (Lindsay 2014).

Another example: after a decline in productivity following Yahoo's implementation of a work-from-home policy, the new CEO at the time (Marissa Mayer) called employees back to the office, convinced that working solo caused a decline in creativity, whereas random connectivity would stimulate it. To encourage random connections and inspirations, Mayer created a comfortable, centrally located gathering space around the coffee machine, inviting people to linger and exchange ideas. Again, accidental connections across departments and management levels resulted in Yahoo's rapid growth.

Stemming from this experience, the "coffee machine syndrome" (i.e.**,** spending loose time sipping coffee and chatting with others) became a new fashion for Silicon Valley. In that vein,

Google's HR leader Laszlo Bock wrote a book showing the many benefits of a high freedom culture, including "accidental encounters" (Bock 2015). Going even further, the architectural trend at big companies (e.g., Google) provides space for people to accidentally meet, talk and inspire each other (Lange 2016).[8]

Conclusions

Like a lot of Web innovators, the Obama campaign won by bolting together social networking applications. Under the banner of a movement, they created an unforeseen force for raising money, local self-organization, fighting smear campaigns and getting out the vote (Carr 2008). People from different walks of life, especially youth, volunteered, teamed up in groups, had fun and inspired each other with ideas on how to boost the campaign, connected with other clusters around the US. Obviously, this novel way of networking reflected all the best recommendations for opening the mind to Yes We Can: there was a multiplicity of weak and strong ties, organized basically in a horizontal connectivity that fostered multiple random encounters. Moreover, Mr. Obama spearheaded using the Internet to organize his supporters in a way that would have in the past required an army of volunteers and paid organizers on the ground (Miller 2008).

As said before, the Yes We Can philosophy was pivotal not only for Mr. Barak Obama's election, but also for the many other movements (e.g., Civil Rights Movement in the USA, the Solidarity movement in Poland) – where people created bottom-up cooperative networks, supporting multiple successful undertakings. Some examples:

Georgia Gilmore, a midwife, started a secret Club from Nowhere, where ladies baked delicious cakes, and the funds from sales supported the movement. The bus boycott was a success because boycotters (also whites) self-organized a system of carpools in which car owners volunteered their vehicles or themselves to drive people to various destinations. Gloria Gilmore and her Club members were singing:

> *Reach out, it could be better than a fantasy*
> *I keep my eyes on the prize, baby*

Another example (Praszkier 2019): during the Polish Marshall Law people effectively boycotted the government-sponsored TV news. Each evening, at exactly 7:30 p.m., when the government sponsored broadcast began, people left their homes to take walks around their neighborhoods, socializing with other families along the way. This cheerful event lasted until 8:00 p.m. sharp, when the nightly news ended and everybody returned home for dinner. The police were helpless to stop this "protest," given that no one was verbally or physically confronting the regime. However, the collective action, taking place at a specific time, made a powerful impact and sent a strong, albeit *sub rosa*, message. The Solidarity people **had an** anthem **with the refrain**:

> *Pull the bars from the walls!*
> *Tear off the shackles, break the whip!*
> *And the walls shall fall down, fall down, fall down*
> *And they will bury the old world!*

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8   See also: https://www.archdaily.com/41400/google-emea-engineering-hub-camezind-evolution.

Also illustrative is the example of solidarity in Egypt, when Christians spontaneously joined hands to protect Muslims as they prayed during the 2011 Tahir Square protests, and Muslims protected Christians at their prayer.[9]

So the question is: is this sort of Yes We Can approach replicable and teachable?

It seems that it is. Replicable – if only the prequisites arise: the spirit of the minority influencing the majority, the openness of the brain plasticity for novel solutions, and the networks which open people up for the belief that Yes We Can.

Also trainable: there are several methods for enhancing brain plasticity and openness for the new (see, for example, Praszkier 2018). Also the mission of some influential global organizations, e.g., Ashoka, Innovators for the Public (www.ashoka.org), is to make everybody, especially youth, a changemaker.

Therefore, my hunch for the future trend is, that the "Yes We Can" conviction will expand, especially among the younger generation.

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9   See: https://www.dailymail.co.uk/news/article-1353330/Egypt-protests-Christians-join-hands-protect-Muslims-pray-Cairo-protests.html Retrieved Sep. 18, 2019.

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