George Orwell, 1984 and totalitarianism

And I believe that totalitarianism, if not fought against, could triumph again.

- George Orwell

In order to understand Orwell's political opinions, platforms and his desire to unveil the truth about certain governments, we must analyse his past: his experience in Burma, Spain, and England. It was through these experiences that involved propaganda and totalitarian regimes that Orwell came to develop his views on sovereignties which he later compiled in his satirical novel 1984. Though this allegorical story has an interesting "surface" tale, it must be analysed on a deeper level in order to fully understand the author's purpose. It is through a more intense investigation of the novel that the reader comes to recognize 1984's verisimilitude. It has become apparent that 1984 is not an anachronistic representation of a past totalitarian society; it has become a timeless book.

George Orwell was born under the name Eric Arthur Blair in India in 1903, his father working for the Civil Service at a time when England's imperialism was peaking. At the age of fourteen Orwell entered Eton School in England. It was at Eton that Orwell first became exposed to totalitarian leadership under the watchful eyes of his schoolmasters who "used kicks and caresses to keep the boys in line." Once graduated from Eton, Orwell decided to work for the British Government in Burma as a member of the Imperial Police. There Orwell was exposed to many executions and other developments that resulted under imperial rule. It was at this points that Orwell "had already made up his mind that imperialism was an evil thing." Therefore Burma was seen as a point of change for Orwell: in Burma Orwell established a hatred for the superimposition of the British Government upon the Burmese. Yet while this developed Orwell's opinion of such governments, his experience in Burma was only the beginning of what would come to be an extensive political resumé of experience.

Following his work in Burma, Orwell felt "obligated to expose the truth," as he had fully come to recognize that "totalitarianism was a basic evil." His further experience strengthened his opinions. After returning from Burma, Orwell wasted away as a poor beggar for several years and then went to Spain to fight in the Spanish Civil War. In part, it is believed that this was done because Orwell felt indebted to the world for his actions in Burma. To "equal" himself with others, he felt it necessary to "reduce" himself on a social level. Moreover, Orwell wished for an experience where he was considered to be a commoner, since the class system in England was far too restrictive for this to happen. Orwell himself said: "the class system- it hit you like a stone wall." In Spain Orwell fought with the Republicans and there recognized that it was "impossible to fight for any side without recognizing it as an unjustifiable tyranny." While Orwell had originally thought that Spain would be a rejuvenating experience, he quickly came to learn that even the side he was fighting for was in arms with itself. That is, the Americans, British, and Communists fighting Fascism were themselves in dispute. It was as a result of Orwell's dissatisfaction in this incident that he almost came to be slain by a group of Communists. In Spain Orwell suffered injuries and later returned to England where he worked for the BBC. Concurrently the Second World War was under way, and Orwell familiarised himself with the Russian situation. Having just felt the frustration of the Spanish War, Orwell was once again outraged that the Russians as a people and the rest of the World were not truly recognising Stalin's oppressive ruling. He took the stage and pointed out the truth. The fact was that little was known about Russian life behind the iron curtain: information was limited to government agency reports that only published the good news while inside sources mysteriously contradicted one another. It was as a result of these experiences that Orwell came to develop his views as expressed in the novel 1984 and Animal Farm.

Through his political experience, Orwell was not only inspired to write, but he made his goal in writing to reveal the faults of a totalitarian system:

"Every line of serious work that I have written since 1936 has been written, directly or indirectly, against totalitarianism and for socialism, as I understand it."

And so, the world was given 1984 and Animal Farm where Orwell criticized the totalitarian governments of the world for their platforms. Collectively, his works came to reject the governments which sought a utopia that Orwell had, at an early age, recognised to be impossible to achieve. It was through his writing that this ultimate prophesy was established. Orwell matured as an experienced man whose young and adult exposure had opened his eyes to multitude of political clashes. It was through these trials in Burma, Russia, and Spain that Orwell began to develop a disapproval for totalitarian ruling forces and an admiration for socialism. Moreover, through leaders such as Russia's Stalin, identified as "the greatest," Orwell found many flaws. Consequently Orwell set on a mission to expose the truth to the world; to save it's countries from futile attempts to create utopian states far too idealistic to be reality. In his life and work, Orwell was truly dedicated to being a beacon of light in the totalitarian night!

Face recognition

What is it? What is a face recognition system?

In the classic novel 1984, George Orwell described a totalitarian society where each room had a built-in camera and where Big Brother, the government, conducted surveillance on its citizens.' In the last few years, face recognition technology, a computer enhanced video surveillance system, has been developed as the security method to help identify known terrorists and criminals. While this technology has the potential to help increase security in public venues to deter criminals and to make our lives more safe, commentators have been quick to point out that this advance could be nothing more than the next step in implementing a society not much different than that envisioned by George Orwell.

A facial recognition system stems from a purpose-built combination of high-end hardware components and efficient software to automatically identify or verify a person from a digital image, as required in several Security and Surveillance installations. The identification process is done by comparing the facial features extracted from an image with those previously stored in a facial database.

When did it begin?

The progeny of face recognition technology began in the banking industry with the initial development of video surveillance. First introduced in 1956, video surveillance technology has grown into widespread use in many public venues such as shopping malls, at ATM machines, and in convenience stores. With the dawn of the age of digital imaging, these devices became more effective, less expensive, and more prevalent throughout the country. As with these advancements in video surveillance, the last twenty years has seen tremendous advances in biometric technologies. "Biometrics" encompass "the techniques and methods used to identify individuals based on their physical characteristics. The technology generally consists of four steps: a physical characteristic or trait is scanned, those unique features are converted into a digital code, the code is then stored in a database or another retrievable form, and that database and digital code are accessed to identify the individual at a later time. Technologies currently utilizing biometric identifiers include lie facial imaging, hand geometry, voice recognition, and retinal scans. The benefit of these technologies stem from their ability to accurately identify a person entering a facility through scanning their unique

physical characteristics. This ability is paramount in government and private research facilities that house highly secure items such as weapons, nuclear and biohazardous materials, and top-secret information. Also, advocates of biometric technologies hail these advances as having numerous advantages for consumers, like reducing instances of consumer fraud, speeding lines at airports check-in, and deterring criminals from entering public areas employing the technologies. However, while commentators have found some benefits from these identification methods, privacy advocates have warned of the potential problems of these emerging technologies. While face recognition technology has always been at the forefront of these emerging biometric identification tools, both government and private research in the field has greatly accelerated over the past ten years. Over this span, both university scientists and the Department of Defense have worked hand-and-hand to make face recognition technology a reality.

How does it work?

Facial recognition technology is comprised of two important components, the video surveillance cameras used to obtain a snapshot of an individual's face, and the computer software used to extract and analyze that face for identification purposes. The software uses a variety of pattern matching algorithms to determine if a face is in view of the cameras. Once detected, the human face is extracted from its surroundings and the digitized face is filtered to remove variations, including changes in lighting and facial expression. The program then uses this digital template to measure over eighty nodal points that comprise an individual's face such as the distance between eyes, width of the nose, and depth of the eye sockets. The result of this analysis is a set of numerical data called a faceprint. Note that not every nodal point can be accurately measured based on the template acquired by the captured digital image. Thus, the software is programmed to use between fourteen and twenty-two of the measured nodal points in creating the numerical faceprint. If there are sufficient nodal measurements to create a faceprint, the computer then accesses a stored database of faceprints.

What are its uses?

The use of face recognition technology encompass access control in high-risk areas, residential ones, private and public buildings, and more generally any other context where intelligent association of personal identity and permission rights is needed. Several countries have begun looking toward the technology to aid in banking surveillance, prevent voter fraud, and in increased security efforts in airports. Biometric technology has traditionally been more accepted overseas, with greater use in International Airports.

Face Recognition Technology: The Potential Orwellian Implications

George Orwell once said, “Threats to freedom of speech, writing and action, though often trivial in isolation, are cumulative in their effect and, unless checked, lead to a general disrespect for the rights of the citizen.” Fast-forward to today, where private information captured through advanced facial recognition software could be the new Orwellian threat.

Although there are certainly benefits to the use of facial recognition technology, the costs to civil liberties may be too much for a democratic society to bear.

Face recognition is a double edged sword. Like fingerprints, your face is unique, which makes it a really handy thing to have in any software that needs to identify people. A good example of this is

starting to appear at airports, where facial recognition software is being used to speed people through immigration control. That same technology can also be used to check attendees into events by checking their likeness against a database of images.

The trouble with face recognition software is that unlike fingerprints, your face can be read from a distance and without you knowing.

Face Recognition in Social Media

Facial recognition can be very useful in social media, as demonstrated by Facebook's Moments application. The software identifies people in photos and if they have a Facebook account connected to yours, it'll suggest tags accordingly. Perhaps unsurprisingly, this is raising a few privacy issues and lawyers are having a field day. In some countries, face recognition is disabled for this reason.

Of course, it's possible to opt out of using the technology but that doesn't mean it won't recognise you in someone else's photo. Like it or not, behind the scenes, you are being identified and like it or not, that data isn't just going to go away.

Security Concerns

As is the norm for technology, face recognition software is becoming more accessible. While the really good stuff is currently behind doors and in the safe hands of our "trusted" gatekeepers, that's not always going to be the case. It will soon be available for anyone to use and the cost of implementing will come down too. What that means is that anyone with access to the technology could use it wherever they want. That means it could be applied to any photo or video, online or offline. Your face is now just another piece of metadata.

Conclusion

Face recognition software is advancing very quickly and like most technologies, it's at a pace that the law can't keep up with. Privacy is a real issue, regardless of how useful the technology is. It could help to protect your attendees from terror attacks but it could also raise serious privacy issues for them. For now, we must tread carefully.

Why did i do this project?

My passion for AI and face detection systems altogether with surveillance related hardware and software was born when i watched for the first time a film called "Iron Man". There was J.A.R.V.I.S. , a very intelligent A.I. who can respond according to the users thoughts. It has access to an unlimited amount of resources, devices and programs that he can control and use at his own will. J.A.R.V.I.S. is connected to global information networks and mainly uses holograms as his main interface to communicate with Tony, the main character, and give him access to anything he needs or wants. J.A.R.V.I.S. controls everything in Tony's house, from the computers to the security locks in his house.

When i first saw it i was amazed by how strong and powefull technology can be. That's why i started dreaming of creating something similar to it. I decided to bring only a face recognition system because talking about Artificial Intelligent isn't as easy as it seems and it can't be done in only a few minutes. Moreover, this project is only the start of a bigger project which will be created one day in the future.