

Department of Political Science Major in Politics, Philosophy and Economics

Chair of Nudging: Behavioral Insights for Regulation and Public Policy

THE DARK NUDGE ERA

Cambridge Analytica, Digital Manipulation in Politics, and the Fragmentation of Society

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"Instead of standing in the public square and saying what you think, you are whispering into the ear of each and every voter." Christopher Wylie, former Cambridge Analytica employee

INTRODUCTION

Nowadays, the world we live in has become inevitably intertwined with technology.

Everything we do, from buying a new printer to arranging a high school reunion, from deciding what we want for dinner to finding a potential partner, at one point will inevitably go through the internet. It is time-wise, effortless, and for a greater part of us, completely natural.

In our eyes, the *black mirrors* in our lives are neutral tools: we only wish for them to show us our reflection.

The human being has always been a self-centered creature, and digital devices contribute to the consolidation of the cult of the *I*. Most of us use our phones and laptops as a diary, a sort of complete history of us we can access whenever we want. It must be noted that this conception is not specific to this decade, but rather a universal one. The only dangerous side of these devices is the value we give them, the carelessness with which we disseminate our data through them, and our blindness to their actual role in our lives. Smartphones are not evil: humans are.

This dissertation holds for an aim the one of re-weighing the internet and social networks and, hopefully, of showing a little bit of the power hiding behind them.

In actual fact, we are walking with time bombs in our hands: we get tired of reading through terms of service, accept cookies and disclaimers on websites without even knowing what they are, and sign up everywhere with our Facebook login info because "it is faster that way".

Every single action we do, unfortunately, has a weight. Social networks are not neutral: they are built and used by humans. There is always someone on the other side of the cable, even when we are not able to associate a face to them.

There are researchers who, every day, get a little bit closer to perfecting robots and artificial intelligence; we are astonished when watching Sophia the Robot carry through an entire conversation with United Nation delegates, nod when she agrees to what they say, make jokes, and speak about her weaknesses.

The reality of things is computers have been doing psychology for a while.

There is such powerful potential hiding behind the encounter of nudge theory, digital development and electoral interests, one we are not completely able to grasp yet.

Our behaviors can be predicted, controlled and channeled towards performing certain actions instead of others. *Microtargeting*, or analyzing data to predict the behavior, interests, and opinions held by specific groups of people to serve them the messages they are more likely to respond to (Chen and Potenza, 2018), is a reality.

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As internet users, we all have rights, the greater part of which we ignore, either for outright ignorance or even laziness. But we cannot afford to do this anymore: every passing day, people make a heavier use the internet and, like they would do with a plant, water their digital personas by liking posts, sharing pictures, sending articles to their friends. Facebook alone has been open to the public since 2006; this means that there are people who have thirteen years of their life tracked. As the years go by, it is evident how the potential of detaining and buying such information grows exponentially: it allows for more and more accurate predictions. Politics are getting more polarized, and it seems as if different groups are not able to understand each other's arguments anymore: this trend is not casual. This dissertation will analyze the role that dark nudging, companies like Cambridge Analytica, social networks and fake news had in the effective fragmentation of our society, what our governments are doing to protect us, and what we ought to do if we wish for a different future.

I. THE THEORETICAL BASIS

1.1 Tradition: Nudging for the Better

Every single day, as citizens, we are inevitably required to make a number of decisions. In the last decades, the relationship between this active decision-making process and policymakers has been the subject of countless studies, experiments, and books. The discipline of nudging (or "gently pushing") was born among behavioral economists and psychologists as a way to understand, explain and, ultimately, redirect such process for the greater good. Choice architecture is today regarded as one of the most influential, behind-the-scenes operations that a government or a private can perform on a certain population or group of people. Often, this phase is referred to as the "last mile", namely one where all other obstacles have been removed, and human psychology is left (Soman, 2015).

The term was brought to international prominence with the publication of Richard Thaler and Cass Sunstein's 2008 book "Nudge".

A *nudge* can be defined as any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives (Thaler and Sunstein, 2008). The very idea of nudging contains a fundamental concept: when operating choice architecture, one must not prohibit or ban the alternatives; rather, he or she must work out a way of presenting the information such that the individual is nudged, or gently pushed, to prefer the better, healthier, sounder alternative.

It is clear, then, how the concept of nudging has been, since its very start, conceived as something positive, a "split-level ontology of the human mind" (Barker, 2018): it was meant, essentially, to help the single citizen act in the best possible way, even if he or she seemed to be oblivious to it. It is from this idea that libertarian paternalism and, in particular, soft paternalism were born. As Cass Sunstein affirmed in his "Why Nudge? The Politics of Libertarian Paternalism" (2014), "soft paternalism" would refer to actions of government that try to improve people's wellness by influencing their choices without performing an imposition of material costs on those choices. Consequently, soft paternalism and nudging are in this phase meant to be considered synonyms.

Researchers have long been debating about what makes a nudge an act of libertarian paternalism, and if the definitions can be interchangeable as suggested in the paragraph above.

Traditionally, nudges were seen as a way to reach the actor's goals for the bettering of society, a corporation, or a group of people. For instance, a government which is nudging corporations could have the goal of getting taxes paid or papers filed on time, compliance with workplace safety regulations, or improvement of the number of sign-ups to a particular service by making it an on-line

process. Similarly, when thinking about nudging patients, a doctor would look at ways to improve their health by eating foods of better quality, get them to exercise more, encourage frequent checkups, or remember to take useful medicines (Soman, 2015). The key concept here is the absence of banning or excluding the unhealthy option, avoiding charging the negative choice of a significant cost for the person who is choosing. The work is instead performed on the "positive" or advisable choice, by employing a series of behavioral strategies.

Countries in all corners of the world are displaying interest in the actuation of behavioral techniques and nudge theory in order to make society better; indeed, the attractiveness of such operations lays in its requirement of few economic resources, and in its virtually universal application.

1.2 Nudging Throughout the World

The usefulness of behavioral psychology and choice architecture in designing public policy is undeniable. Think tanks around the world, from Japan to the United Kingdom, from Germany to the States, have constantly been shaping the way information and choices are presented to us.

Governments are looking for simple and efficient regulatory solutions to promote more effective results without recurring to sanctions or bans. The mapping of behavioral trends by OECD, the World Bank, and the European Union was able to give shape to an ever-widening knowledge base. The World Development Report, laid out in 2015, was centered on the application of behavioral insights to development policy (OECD, 2015).

The World Bank pointed out three main principles that are meant to be used during the process of implementation of new developmental policies: thinking automatically, thinking socially, and thinking with mental models. These guidelines are virtually universal, and must be kept in mind when approaching the issue. The outlooks of different countries on behavioral science and nudging deserve to be briefly analyzed and compared, as they will serve as a basis for further projection below.

As for the United Kingdom, the government set up an organ called the Behavioural Insights Team, which cooperates with a variety of actors, from businesses to NGOs (Bell, 2013). A series of experiments were conducted in order to grasp the underlying truths of British society, and the Team's findings, together with their application to policy making, managed to save as high as £300 million, and was also summoned by other governments (Australia, New South Wales) for behavioral insights (Ly and Soman, 2013). The United Kingdom has since then made public its intention to make its Behavioral Insights team a private entity, in order to potentiate its commercial power and contribute to the total revenue.

The American government, after observing an increase in the popularity of nudging across the pond, set up the Social and Behavioral Science Team. The most pressing challenges for behavioral

scientists in the US seem to be childhood education (targeting primarily low-income households), health and regulation, and nutrition (Ly and Soman, 2013).

As for Scandinavia, research and study are being brought further every day, even if there are no centralized units specifically created for the scope. However, networks like the Danish Nudging Network and the Swedish Nudging Network contribute to keeping up the discussion and represent a chance for behavioral scientists, academics and students to exchange knowledge on the topic. Highlighting the role played by journalism, scientific articles, forums and social networks in the spreading and enriching of literature is fundamental: for example, Copenhagen-based website *iNudgeyou* offers a range of news, papers, and publications which can be the starting point for further research.

Other countries, such as Singapore, New Zealand, and the European Union are using principles from behavioral science to construct more effective policies.

The impact of nudging on policy-making is worldwide, and its implications are inevitably global: it is one of the fastest-growing areas in public policy, and few governments are ignoring this matter. As this is such a geographically meaningful issue, it is important to understand what comes in the way of people making the best or most rational choice by themselves.

1.3 How Do We Make Decisions? A Two-system Brain

When trying to explain the complex process of choice-making, all factors must be taken into consideration: first of all, that every single person is subject to a set of heuristics in order to make a certain choice, even when rationality would suggest a different one. These "filters" may be described as intuitive shortcuts that come to mind during this phase.

Two of the most common heuristics would be representativeness and availability.

Representativeness works by going back to the mental categories we detain and making a comparison with the information we are offered at the moment. Mental representations, especially the most engrained, are hard to demolish and easy to control, as we will later see.

Availability, similarly, counts on something pre-existing as a term of comparison but, in this case, essential is the ease with which something comes to mind. By making an issue persistent in the news, even if statistically it is rather trivial, can widely increase the chance that the general population will feel threatened by it, or will widely overestimate the impact that it has on society and their welfare. The works of Kahneman and Tversky show how we all take these shortcuts and how biasing they can

be, although completely internal and unlearnt.

To better describe what goes through a person's brain during his or her decision-making process,

Daniel Kahneman outlined two main systems according to which our brain completes these actions: System One, or intuition-based (automatic thinking), and System Two, or reason-based (reflective thinking).

Pointing out their separate characteristics and modalities will serve as a basis for this dissertation's main scope: demonstrating that one of them is more susceptible to dark nudging and therefore, more prone to manipulation and persuasion.

System One, writes Kahneman, is the one that the operator accesses automatically and quickly, with little or no effort and, more importantly, no sense of voluntary control. Essentially, what this first system does is originate feelings, impressions that make up the starting point for the rational System Two to operate.



This distinction is of paramount importance, for it is during this early phase that gut reactions and impressions originate and, as will be shown later on, many of them may become granite-like and indestructible in a citizen's mind, despite all facts pointing to another direction. Playing on attention-catching techniques and immediate emotional response is the strategy employed by many private agencies, such as Cambridge Analytica, in an attempt to influence the results of political elections. Understanding the impact of this first segment is functional to what this dissertation aims to uncover. "System 1 is designed to jump to conclusions from little evidence - and it is not designed to know the size of its jumps" (Kahneman, 2011).

It is important to observe that such strategies are not simply the product of marketing tools, but rather stem from behavioral science, nudging, and psychology principles combined. Most of the times, the images are created in an elector's brain without him or her being even slightly aware of it, to the point that the subject will often believe the ideas to be very personal, and will adopt a defensive attitude towards them; what matters most is the playing of the subconscious and instinctive part of our brain with a cold, calculating approach performed by entire departments or private units in what is, after all, a quite intelligently thought-out, white-collar manipulation.

Those responses which are sensory are faster to respond to things; they are 'instinctual', habitual – and if advertisers, marketers, propagandists can activate those, they are on a winner (Barker, 2018).

II. DARK NUDGING AND THE DIGITAL CENTURY

2.1 The Neutrality of Nudging

With such academic dedication and purpose as a basis, nudge theory has evolved in the last decades, and it keeps evolving to this day. Years are passing, technology is evolving, and what people care about, believe in, and value is inevitably changing.

After revising the traditional concept of nudge, Hansen put out a thought-stimulating definition of the discipline:

"Nudge is a function of any attempt at influencing people's judgment, choice or behavior in a predictable way that is made possible because of cognitive boundaries, biases, routines and habits in individual and social decision-making posing barriers for people to perform rationally in their own declared self-interests and which works by making use of those boundaries, biases, routines, and habits as integral parts of such attempts." (Hansen, 2016).

The reader will notice that, in this conception, there is no sign of the words "good" or "welfare". For the sake of this argument, the preferred definition of nudging will be the one above: it renders the neutrality of this set of operations, which is then generally turned into a positive outlook when employed by governments.

As Richard Thaler once declared, "nudge for good", more than an expectation, is meant as a plea (Thaler, 2015). However, one must think that whoever possesses a certain knowledge of behavioral psychology and economics, together with the means to elevate it and make it large-scale (such as the internet, social media and, of course, money) is virtually able to nudge, for whatever scope, even a traditionally "negative" one, a smaller or bigger part of the population.

Consequently, the turning points of this conception are three: the application of nudging principles and theory to reality; the systematic, large-scale collection and observation of a population's habits, beliefs and likes through social networks; and, finally, the biasing aspect of such operations, namely the monetary financing behind them aimed at turning a certain political ideology into the dominant one.

The first purpose of this dissertation is to revisit the traditional concept of nudge, and offer the reader the possibility to outline its various declinations, even when these seem to have an objective that is distant or, even, divergent from the one that its founding fathers had in mind. Accepting nudge theory as neutral is the first step required to have a panoramic of its different uses and implications in the real world.

2.2 Social Networks, the Modern Money, and Personification

In modern society, social networks are not only the main platforms through which people communicate, but also very powerful tools to collect data. This feature, even if ignored by the greater part of the population, rebalanced the power games and equilibriums in favor of a different set of actors: private agencies, hackers, statistics researchers, and political consulting firms. These are the new protagonists, interacting in a digital arena that imposes completely different rules from the ones of traditional political and social communication. In the last decade, political discourse has become more and more of a ready-to-use, immediate feature in the lives of people. Since the opening of Facebook to the general public (whoever had an email address) in 2006 (Phillips, 2007), our digital identities have gotten richer and richer. This ethical process deserves more attention now than ever before, because social networks providers now own more than a decade of our likes, beliefs, and social connections.

Social networks have witnessed our growth, the changing and evolution of our taste in whatever, from pop music to poetry, from political orientation to traveling, and acted as a (more or less) silent confident for our frustrations and joys in the making of a digital persona. It is difficult to know if these agents were able to actually foresee how powerful the possession of this enormous set of data would become, but that it gives way to tons of behind-the-scenes operations at the moment is a fact. In our society, it can be affirmed that data essentially is the "modern money": a precious asset that allows those who possess it to be in power, and control the course of events. It is not a new concept that detaining power is the driving force behind most professional interactions.

What needs to be changed in the collective mind is the apparently passive role of these platforms: they are not passive at all, but created by people, and made better every day by more people who work in headquarters anywhere in the world but that are able to affect our lives very directly. Personification of social networks and the minds behind them is essential to the well-functioning and fairness of our society and, moreover, to the construction of a healthy personal relationship with the internet. We need to disclose the faces and names of the people that play such a big part in our everyday life, and one of this dissertation's aims is to point out some of these characters and the reasons behind their actions to encourage a more accurate analysis of recent events.

2.3 The Regression Model: A Behavioral Analysis of Electorates Through Demographics

When combined, behavioral science and data analysis can offer powerful insights on the correlations of voting patterns with factors such as age, gender, ethnicity, location and more. As early

as in the 1940s, sociologist Paul Lazarsfeld and his colleagues were finding differences and similarities in the background of Republican and Democrat voters. They clustered these schemes into four main categories which, according to them, were of great help in telling a Republican and a Democrat apart: socio-economic status, occupation, residence, and religious affiliation (Lazarsfeld et alia, 1944). A fifth, age, was briefly dealt with as well.

These findings were, at the time, ground-breaking in their nature: it was indeed possible, and also quite easy, to create prototypes of a typical elector for the biggest parties. Knowing one's electorate is the starting point to perform socio-behavioral observation and correctly readdress one's next political campaigning; only the means used are different: for sociologists like Lazarsfeld, in the mid-forties, statistical studies and assumptions were the main source of information, while in the twenty-first century's digitalized society, data collection by a social network like Facebook can be combined with nudge theory to obtain an explosively effective mixture.

Among the strategies to try and grasp the link between voters and voting behaviors, some only require the collection of statistical data and observation of the same.

One of the most common models that describe this relation is the Regression Model of Probability. What data analytics companies do make accurate predictions is employ models fitted to one group of people to infer the preference of others. The figure below, for instance, links British voters' age to their probability of voting "leave" in the Brexit referendum. Age and will to leave the European Union are displayed here in a directly proportional relation with, for example, a typical 22-year-old having a 36 percent probability of wanting to leave, while a 50-year-old would statistically have a much higher one (Sumpter, 2018).



Figure 5.1, Page 46 - Sumpter, David (2018) "Outnumbered: From Facebook and Google to Fake News and Filter-Bubbles - the Algorithms That Control Our Lives", Bloomsbury UK. Data from 2016

It is true that regression models encounter some biases and errors, such as inconsistencies of overestimation, but they generally still offer great insights on voting behavior. Alone, a factor like age would lead to minor findings but, if crosscut with other qualitative or quantitative variables, the predictive power of analysis grows consistently. Taking Brexit once again as an example, when finding out that a younger person with a university degree living in the capital and working a white-collar job is likelier to vote "remain", an agency aimed at finding the right target group for its campaigning would not focus on him or her, but rather move the focus onto a working-class, middle-aged person that lives in the countryside. A difference is made working on small numbers and individual dimensions: they will add up eventually.

As already stated before, the only difference between the 1950s poll studies and the work of Cambridge Analytica lays in the way the data serving as a basis is acquired. Today, social networks serve a dual purpose for this kind of maneuver: they undoubtedly are a data collection tool, but they also represent "feeding platforms"; after data is analyzed, conclusions are drawn and political messages are tailored to the individual, the latter need to be fed to the public, and what better platform than the one where it all started?

The link between the collection of data aimed at dark nudging and social networks is getting stronger every passing day, and those who control the platforms' strings are also holding all the cards.

2.4 Dark Nudging and The Cambridge Analytica Case: An Overview

What is the impact of secretly funded political campaigns on democratic processes? To what extent is it possible to speak of a "dark nudge era" and of effective manipulation? Many are the questions that arise when dealing with digital nudging. The issue started being tackled in the recent past, after scandals arose from the interaction of a series of actors (Facebook, Cambridge Analytica, AggregateIQ, Strategic Communication Laboratories, Global Science Research) with the public via social networks, with the primary aim of influencing elections. One of the issues is certainly how secret these operations are and have been: how do these companies describe themselves? For instance, and worryingly enough, SCL labeled itself as a "global election management agency" (Barker, 2018), while its offshoot Cambridge Analytica opted for the more neutral "political consulting firm".

Nudge theory, affirms Barker, even though it comes from a supposedly positive track record, was here turned into the "dark art of persuasion". Of course, it is based on behavioral science and psychology, but it is still "dark" in its connotation, obscure because of its oblivious nature, and its public façade. It raises ethical questions, and ontological ones.

Cambridge Analytica was founded by conservative manager Robert Mercer in 2013 as a company that combined political consulting, communication, and data analysis. It took part in a series

of presidential campaigns, like Ted Cruz in 2015 and Donald Trump in 2016, to offer insights on data analysis. Moreover, it played a role in the political campaigning for the VoteLeave party in the months before the Brexit Referendum.

The individuals who are central to the narrative and conduction of Cambridge Analytica's operations are a few: Robert Mercer and his family, in their continuous efforts to reinforce the Republican conservative ideology; political adviser Stephen Bannon, who mentioned being "intrigued by the possibility of using personality profiling to shift America's culture and rewire its politics" (Rosenberg, 2018); business development director (turned whistleblower) Brittany Kaiser; CEO Alexander Nix, who claimed he could use collected data to understand different audiences and the messages appealing to each; psychologist and academic researcher Aleksandr Kogan, who was approached by SCL back in 2014 following his Mechanical Turk data collection operation1. These people and many more gave way to a chain of events that forever shaped the future of our politics, our society and the way we relate to the internet and privacy.

Thanks to the combined effort of people coming from various departments and backgrounds, Cambridge Analytica created an analytical tool to make sense of today's interaction process characterized by data over-availability and passive actors, whom Byung-Chul Han calls "the swarm", a group which might be influential, but has no effective power, because it lacks the ability to mobilize (Han, 2017).

A great part of the information we have on Cambridge Analytica's strategies, internal divisions, and jobs comes from the declaration of former CA employees such as Christopher Wylie and Brittany Kaiser.

In the case of Wylie, for example, The Observer journalist Carole Cadwalladr firstly collected his anonymous testimony and wrote an article about it, and then insisted for a year, until Wylie decided to come forward and speak to the public.

The political consulting firm used two approaches towards data gathering: first, the collection of information, likes and interest through a quiz-like Facebook app developed by Kogan and, in a second moment, the systematic typifying of results and their relation to "digital footprints of human behavior", using as a basis the model developed by Cambridge graduate Michael Kosinski (Rokka and Airoldi, 2018).

The effectiveness of Facebook algorithms in typifying and clustering users into a number of categories was proved by mathematician and researcher David Sumpter in his book "*Outnumbered*"

¹ Kogan collected data for his scientific research on an online crowd-surfing marketplace called Mechanical Turk, where respondents could choose to grant researchers access to their Facebook profile (and their friends' location data) in exchange for cash. This led to Kogan and his colleagues gaining access to the data of more than 280,000 people, with only 857 participants.

(2018). In particular, he decided to conduct an experiment using *principal component analysis (PCA)*, a statistical procedure that employs orthogonal transformation in order to convert a set of observations of allegedly correlated variables; these are referred to as principal components. In this case, the first principal component was the public vs private dimension, while the second one was workplace vs culture.

Applying PCA to his Facebook friends' data, Sumpter found out that the algorithm grouped them according mainly to these two dimensions. Applying a further clustering technique to his findings, the system also included people's distance from each other along the principal dimensions, and the division proceeded into three main categories: squares, or those who use the social network primarily to focus on their private lives; circles, or those who are vocal about their work and work-related lifestyle; and crosses, mainly those who like to comment on wider events in society (Sumpter, 2018). The relevance of such findings is that, if employed wisely, Facebook data can constitute a largely valid analysis and prediction tool: by finding a common component among all our likes, researchers are able to actually define a definite number of dimensions useful to classify all of us, the so-called *one hundred dimensions of you*. Being the relation strictly mathematical, computers encounter far less biases and stereotypes, thus finding more subtle relationships than humans. Consequently, their added value to behavioral analysis is significant.

After describing how the underlying patterns in our personalities are found, this dissertation will now proceed to the description of three case studies, in an attempt to pinpoint the effectiveness of dark nudging and the actual impact that Cambridge Analytica and social networks had on the current political scene.

III. DARK NUDGING IN PRACTICE: THREE CASE STUDIES

3.1 The US Presidential Elections

The US was one of the pioneers in behavioral science research and the leading country in the establishment of nudge theory; one must notice that most researchers in the field were academics either born or living and working in North America (Richard Thaler, Cass Sunstein, Daniel Kahneman, Amos Tversky, etc.)

Former US President Barack Obama also embraced the trend by creating a nudge unit to assist the White House in governmental matters and the implementation of public policy (McSmith, 2018).

It is noticeable, thus, how much attention nudging has been receiving in the country, and how much of its tradition it owes to American academics and researchers. It is not an exaggeration to state that nudge theory and US policy-making are indeed intertwined.

Looking for ways to benevolently "control" people's decisions, even if with their best interest in mind and a libertarian paternalistic approach, evidently resonates with the country's culture and political history, which oftentimes treats the electors as if they were young children, or makes it almost impossible to actually cast a vote.

Looking at voter turnout in the last elections, a worrying fact emerges: participation rates are consistently low. This may be caused by a variety of factors, first of all the registration barrier; in Georgia, for instance, the voting requirements were so complicated that they caused 10 percent of registered voters not to be able to vote; Georgia's "exact match law", requiring the information written on the registration applications to be exactly the same as the one on people's driver licenses, led to the impossibility for more than 50,000 people to get stuck; unsurprisingly, as high as 70 percent of these citizens were African-Americans, and many were newly naturalized citizens (Lynch, 2018). In 2016, only 64 percent of eligible Americans were actually registered, while in Canada and the United Kingdom 91 percent of the voting population was able to cast their vote. In Scandinavia, similar percentages to the latter were reached.

The over-complicated US electoral process did have an effect on *how many* could vote, but Cambridge Analytica effectively controlled *how* people cast that vote.

When Cambridge Analytica was first employed to work in the "Trump for President" campaign, the staff was puzzled: there was no database of record, no control and division of tasks on poll sampling, a variety of data sources, and no proper digital marketing apparatus (Lewis and Hilder, 2018). Strategically speaking, they were doomed.

As a consequence, the Cambridge Analytica team carried out a plan that can be summarized into two main phases: data collection and Facebook target advertising. The first thing to do was acquiring data, and researcher Aleksandr Kogan was put in charge of that. He created a survey made up of personality profiling questions, and put it on *Qualtrics*, a third-party online survey vendor which pays participants a few dollars. After the first participants agreed to participate, they were asked to grant the platform access to their Facebook data and likes. Shockingly enough, Kogan managed to also access the likes of the respondents' friends, as allowed on Developers by Facebook. Friends of the respondents who did not change their privacy settings gave access to Kogan by default; this was not to be intended as a data breach, since consent was given and users "accepted" those privacy settings. (Rathi, 2019). This notably increased the user pool and, logically, the data pool. Considering that the strength of this campaign lays in the immense volume of data collected and its relevance all over the country, this move put Cambridge Analytica and the Trump administration at considerable vantage.

The personality test with which most data was collected was a rather simple one; it was largely based on the Myers-Briggs Type Indicator₂.

Users were given a score on five main personality traits: *openness, conscientiousness, extraversion, agreeableness, neuroticism.* These five characteristics were known as the OCEAN personality model.



Source: Cambridge Analytica

After knowing who to target and how, they needed to do so with the use of custom commercials; the main way they managed to carry out the second part of the plan was by setting up Project Alamo. Brad Parscale, the mind behind the project, bought Facebook ads spending an amount of about 20 million dollars.

² The Myers-Briggs Type Indicator is an introspective self-report questionnaire based on the theories of Swiss psychiatrist Carl Jung. Its main aim is to offer insights as to people's different perceptions of the world, and the way they make decisions. This was obtained by positioning them anywhere on a spectrum, depending on their scores on four main psychological functions: sensation, intuition, feeling and thinking.

Brittany Kaiser revealed that they did not target every voter equally (Liptak, 2018): the greater part of resources went into targeting those whose minds they thought they could change. These voters were called the *persuadables*.

Among this group of people, those that really mattered for the campaign were the ones residing in the so-called "swing states": Florida, Michigan, Wisconsin, Pennsylvania. States were broken down by precinct, with the mechanism being the following: if they managed to target enough persuadable people in the right precincts, there more states would turn red (conservative) instead of blue (liberal), and the conservative candidate would be elected (Kaiser, 2019). Cambridge Analytica was able to exploit the fallacy in the defective electoral mechanism of the US, which has been widely criticized before, and turn it to its clients' advantage.

After identifying these people, most personalized content was designed by the team to especially trigger them, by constantly bombarding them on all platforms until they changed their minds.



High Neuroticism and Conscientious

Closed and Agreeable

Source: Cambridge Analytica

The three categories that were targeted the most by Project Alamo staff were idealistic white liberals (mostly Bernie Sanders supporters), young women, and African-Americans living in an urban context (Lindholm, 2017). The focus was put on imagery to evoke instinctive, System One reactions: overall, the Trump campaign displayed about 5.9 visual ads, while Clinton only had 66,000.

Pieces of information were carefully constructed to grasp the attention of each group and make opposing candidate Hillary Clinton look miserable in their eyes, discrediting her reputation.

Black individuals, for instance, were tirelessly presented a (clearly overblown) quote pronounced by Clinton in 1996, in which she called African-Americans "superpredators".

Young white females, similarly, read all over the internet that the candidate's husband Bill Clinton was a recidivist sexual predator with no respect for women, and Florida (a swing state) inhabitants of Haitian descent were outraged when being messaged about a controversial hospital project in Haiti (Lindholm, 2017) after the 2010 earthquake.

What set apart Project Alamo from its predecessors was its systematic organization and use of regression models, which determined its success, combined with the accuracy of Facebook's ad circuit, which links ad relevance to the users and commercials.

This typifying process was characterized by an extreme precision, which could only be given by the analysis of really specific data gathered through a carefully constructed personality test.

Cambridge Analytica created for the Trump administration a highly functioning mechanism, product of a spot-on analysis of the country in question, its social and cultural patterns, and the way its users approach the internet; all these measures brought to Donald Trump eventually winning the election, and to history being changed forever.

3.2 Brexit And Leave.Eu

When the United Kingdom decided to leave the European Union in the 2016 referendum, the whole world was shocked. Former Prime Minister David Cameron summoned the referendum in June 2016, wishing for a way to give a strong signal to anti-EU factions, but the results proved him wrong: 17.4 million people manifested their wish to leave the EU, while 15.1 million voted to remain. The consequences of Brexit have been catastrophic, from strengthening anti-immigration parties throughout Europe to sending currency markets in turmoil. The entire country's economic growth was slowed down because of the great uncertainty in which the final state of things would be.

In the face of such chaos, a question arises: who voted in favor of Brexit?

Once again, electoral demographics prove to be the best ally in voter analysis. For Brexit, there were factors which had a big impact on the decision to leave or remain in the Union. Summarizing, the most impactful variables were nationality and ethnicity, geographic location, age, gender, and education. A 60-year-old male respondent born on British soil, with a high-school diploma, using the internet infrequently and residing in the Lincolnshire countryside would have a much greater chance to vote Leave than an Asian female respondent in her twenties going to grad school and living in Chelsea.



Once again, grasping the magnitude of the impact that Cambridge Analytica and Global Science Research had on the referendum was not a piece of cake, until former CA employees decided to speak out and reveal the company's inner workings. Unlike with Trump, a contract was seemingly never signed with the Leave.EU team (although Arron Banks, its co-founder, had declared otherwise), but the physical presence of CA business development director Brittany Kaiser at their launching conference back in 2015 speaks for itself. The Guardian calls the successful interaction between Cambridge Analytica and Leave.EU a "lesson in institutional failure".

The Facebook-Cambridge Analytica scandal was firstly exposed in 2018 by an Observer journalist, Carole Cadwalladr, who investigated the role of Leave.EU front man Nigel Farage and the CA team, also implying that he received a part of his funding from the Russian Government.

Firstly, the company helped the official Leave.EU campaign circumvent campaign financing laws during the Brexit referendums (Martin, 2018), as we will see below.

The campaign was carried out by the Leave.EU team, which proved to be very much informed on behavioral science and nudging techniques. They effectively "branded" Brexit as an appealing outcome, but how did they obtain such a result?

In this matter, the Cambridge Analytica team showed once again their deep regard for the connections between popular culture, local habits and values, and the way they relate to voting behaviors and political parties.

The direct, polarizing approach used with American audiences would have not been a winner here; CA needed to face the more indirect and polite nature of the British, besides their more cohesive social pattern.

That was the reason why indirect news spreading was preferred, and why they avoided openly condemning the external enemy menacing to ruin their country if they did not leave the Union (e. g. "Turkey entering the EU will destroy its stability", or "Migrants are a threat to born-and-raised Brits in search of a job"). These sentences would have worked across the pond, but not in the United Kingdom. Thus, the attention was put on ideas, such as "social justice", for instance by saying that "EU protectionism puts African farmers at disadvantages" or that "you need permission of 27 other Member States to get rid of the Tampon Tax".

By presenting issues in a more theoretical, principle-driven kind of light, they effectively nudged millions into thinking that the only possible solution to get rid of a constraining relationship with the other countries was to leave the Union.

Additionally, Leave.EU made sure they were not seen as racist and included in their team black and brown-skinned people to maintain such a façade. Once again, the strategy was not breaking with the opposition and polarizing parties₃, but "inviting in" a part of that opposition by showing a respectable reputation.

Incidentally, a group of young people working for Leave.EU set up another group, BeLeave, characterized by a strong knowledge of social media marketing techniques.

BeLeave was targeted to younger liberal individuals, and its communication undertones were progressive in their nature. Their contribution was enormous in targeting that particular group: the attention was re-focused on external victims, instead of external enemies, and the sympathetic part of the spectator was played upon. The only villain in this story was the European Union, with its thirst for power and disregard for any other country in the world, especially the most vulnerable ones.

³ Which, on the contrary, is essentially what CA did in the United States because of its two-front politic history.



Source: BeLeave, The Guardian

When sponsors were eager to fund them, they set the group up as a separate organization, but behind the scenes was Leave.EU effectively deciding where that money would go. Drawing conclusions, the two groups were never separated, but acted together, and BeLeave never saw any money on their bank account. Buzzfeed even wrote an article about it back in 2016, called "Why Did Vote Leave Donate £625,000 To A 23-Year-Old Fashion Student During the Referendum?".

Seleave #

For decades EU policies have driven African farmers deeper

Now we know why.

So, where did that 1 million pounds go? To Canadian data analytics firm AggregateIQ, one of Cambridge Analytica's associates.

Similarly, data from Facebook users was then gathered and used to target electors. Officially, Leave.EU never employed CA, but they were "happy to help" (Cadwalladr, 2017) because of Nigel Farage's friendship with CA's principal investor, multimillionaire Robert Mercer.

The issue is one of transparency: such services, for the Electoral Commission, need to be declared as a donation if the amount is over $\pounds7,500$. However, in Brexit's case, it was never declared.

Drawing conclusions, it is possible for a foreign billionaire to influence elections or referendums without this influence being apparent, no matter how scary this reality may sound.

Furthermore, one must check back with the general British population to see if speaking of a manipulation is possible, or if they now see facts more clearly, without the influence of Cambridge Analytica.

In January 2018, ComRes conducted a survey on the matter, interviewing more than a thousand Great Britain citizens. The results of this survey are at least interesting: while the majority declared they did not think a second EU referendum was needed, when summoned on the actual choice, 55 percent of them said they would vote "remain" (Armstrong, 2018).

This would invert the original result of 52% to 48% obtained in June 2016.



How would a second Brexit referendum play out?

It seems as if many of those who voted for the UK to leave the Union would now think twice before choosing this alternative again, and one must wonder why.

3.3 The Trinidad And Tobago Elections

As a third case study, this dissertation will analyze the impact of Cambridge Analytica on the 2010 elections held in Trinidad and Tobago. One can say that the company's intervention in electoral contexts of smaller countries was probably used as practice for the bigger arena that would be offered to them some years later.

As with its other clients, CA first analyzed the country, and tried to grasp its inner workings; in the case of Trinidad and Tobago, society was split into two socio-cultural majorities: Indo-Trinidadian and Afro-Trinidadian voters, represented by two contending parties which were competing in the elections. Cambridge Analytica was employed by the former.

Younger voters were identified as the variable characters: if they managed to bring them to one side, the election would be easily skewed. There was one major cultural difference between the two ethnic groups: young Indians had, ingrained in their culture, the respect for the elder and family members, to the point that they would be ostracized if going against a parental figure; on the contrary, teenagers and young adults of African descent displayed this feature considerably less.

Consequently, what Cambridge Analytica did was creating a political movement of dissent called "*Do So!*". Videos of the protests were spread on every social network, and the movement even got national television coverage: it became a big thing. Youngsters were called into action, to fight for their future and take back their right to go against corrupt politicians. How? By not voting. Abstention from ballots was certainly a strong message, and if they did not show up to cast their vote, the government was forced to listen.

On the day of the elections, Afro-Trinidadian young voters stayed home, while the Indo-Trinidadian ones obeyed their parents and went to cast their vote which, unsurprisingly, was for the Indo-Trinidadian candidate. Finally, this candidate won the elections.

Once again, Cambridge Analytica employees found a small cultural quibble typical of the country, built a strategy against it, and used social networks to nudge target voters into doing as they pleased.

3.4 The Exception to the Rule: Nigeria

However, there was a case in which Cambridge Analytica's tactics did not work out completely: the biasing of the 2015 Nigerian presidential elections.

Before the election, Cambridge Analytica was hired by a billionaire seeking to reinforce Christian values in spite of the Muslim minority.

The strategy was, this time, rather direct and practical: they sought to influence the election by using graphically violent imagery. The goal was portraying the Muslim candidate, Muhammad Buhari, as a supporter of Sharia law, and paint him as the torchbearer for all negative Muslim-related stereotypes. It was suggested that Bihari would go as far as brutally suppressing dissenters and negotiating with militant Islamists (Cadwalladr, 2018).

All this was done by editing and making viral a video. The video's only intent was intimidating voters and pushing them to unconsciously look for any other alternative, in fear of violence and punishment. Muslims were portrayed as primitive and violent beings to keep clear of, and the anti-Islamic undertone was evident. It must not be forgotten that this operation was founded behind the scenes by a Nigerian billionaire, attempting to promote a Christian candidate and discredit the Muslim opponent and what he represented.

The video portrayed an almost dystopian, Hollywood-like future where Sharia is imposed to the general population, dissenters are silenced with death, and all women are forcefully veiled. Conspiratorial links between Buhari and Boko Haram are hinted at, but the viewer is offered a possibility to escape this nightmare: voting the other candidate. The human dimension of this type of propaganda is at least disturbing; a former CA employee describes the atmosphere in its headquarters during the campaign: "It was voter suppression of the most crude and basic kind. It was targeted at

Buhari voters in Buhari regions to basically scare the s**t out of them and stop them from voting. People were working on it in Cambridge Analytica's office. They'd be sitting there eating their lunch and editing this incredibly graphic and disturbing material."

In the end, Buhari ended up winning anyway. But, even if the manipulation was less successful in this third case study, it is still quite unsettling how a country can be struck by hateful underlying messages by means of the media, that flourish and get shared by a huge number of people in a matter of seconds.

The issue of dark nudging and digital manipulation is a global one, as the narration of all these case studies attempted to show: its victims can be the citizens of small as well as huge countries, divided or socially cohesive, with more or less corruption in their politics. As careful as one can be, there is no escaping it.

IV. THE FAKE NEWS CRISIS: A GLOBAL ISSUE

4.1 The Post-Truth Era

In the last decade, the way we collect information has been witnessing a shift.

With the spread of social networks throughout the globe, and the dramatic increase in the number of users active on these platforms, the way we approach news pieces also started to take on new nuances. No internet user can say they escaped the influence of so-called *fake news*. The Cambridge Dictionary defines them as "false stories that appear to be news, spread on the internet or using other media, usually created to influence political views or as a joke". Therefore, it is evident how this dissertation could not avoid tackling such an impactful means of political manipulation.

Some have said the 2010s can indeed be called the Post-Truth Era, namely a period of time during which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief (Oxford English Dictionary).

The times when students only searched physical libraries and encyclopedias for sources are long gone: today we are exposed – like it or not – to a flow of information coming from the most disparate sources, and checking these can be an almost impossible job.

Then, what grasps a reader's attention and makes the difference among such overexposure? Pieces of news that have leverage on our emotions, shock us, exaggerate. It is a rather simple psychological mechanism: this type of news has the power of going viral in a matter of minutes, will be shared with ease, will resonate with a huge number of users, and will expand through word-of-mouth.

It seems as if facts and evidence have lost their appeal in favor of often fabricated or over-exaggerated news, just because the latter are more convenient, in line with our principles, or show a world we desperately want to see.

There are multiple kinds of fake news: the straight-up fake ones, constructed to look like actual news and disguise the reader; the satirical ones, which make a parody of respectable newspapers or sites sharing exaggerated information; the biased ones, which present a fact with a particular perspective meant to sway the reader's opinion and bring him to one side; and the clickbait ones, which always have misleading headlines or titles which trick the reader into clicking on the website and providing profit. Fake news is not only a threat to our independent thinking, but also a concrete danger.

One striking example of such dangerousness is the *#Pizzagate Conspiracy* which happened, unsurprisingly, during the 2016 US electoral campaign.

Some days before the election James Alefantis, the owner of Washington DC pizza restaurant Comet Ping Pong, started receiving thousands of notifications on social networks: people started to out-ofthe-blue threaten him, saying they would "get him", "kill him with their bare hands" and so on. Most of these threats arrived on Instagram, Facebook, and Twitter. Scared for his life and the ones of his employees, the man searched the internet to look into the matter and, to his disbelief, found out that news were spreading that his restaurant was a hidden base for Hillary Clinton's kidnapping, molesting and trafficking of children together with political consultant John Podesta (Kang, 2016). The theory was reinforced by Podesta and Alefantis having been in a relationship years earlier, and by the modern art paintings on the restaurant's walls, which were overanalyzed to the point of finding possible references to pedophilia symbols.

Of course, none of this was true, but a range of well-known online articles started writing pieces on the alleged business, and the news spread virally.



Source: The New York Times

Fake news and conspiracy theories caused the owner and his forty employees, real people with lives and jobs, to live in constant fear for their lives, and of their workplace being burned to the ground, for weeks.

The then-President Obama warned people that we are "in an age where there's so much active misinformation and it's packaged very well". One must also think about the fact that, as absurd as it may seem, there are millions of people who blindly believe in fake news, even crazy ones like the

one above. The public opinion can and *is* being shifted towards one candidate in an election by manipulating people's emotions, people's System One brains, and redirecting them in favor of an innocent victim (in this case small children) and against an evil character (in this case presidential candidate Hillary Clinton). This operation is known as news engineering, and its consequences are scarily real.

When looking at demographics, the phenomenon is not a homogeneous one: a 2016 study by Science Advances shows that there is a correlation between sharing fake news posts on Facebook and variables such as age and political orientation. Among their respondents, they found out that identifying as a Republican increases the possibility of a user sharing such posts (18.1 percent of Republicans versus 3.5% of Democrats). Moreover, the findings suggest that older Americans, especially those over 65, share three to four times as many fake news links as their younger counterpart. This category is probably the most vulnerable one, since their knowledge and experience with technology is lacking; this is confirmed when, holding other variables like education and place of residence constant, the age effect remains statistically significant (Guess, Nagler and Tucker, 2019). However, since the study was conducted during the US presidential campaign, the entity of the data is probably maximized by the enormous volume of pro-Trump fake news pieces that were coming out at the time.

Still, this issue is problematic for society as a whole, because it can have an impact on our minds and beliefs as well as the lives of the people who get caught up in it.

4.2 Trump on Twitter: Fake News as a Weapon

Fake news is a global phenomenon, and a two-dimensional one: there is the fake news *genre*, such as the deliberate creation of pseudo journalistic disinformation, and the fake news *label*, namely the exploitation of such term in order to discredit news media (Egelhofer and Lecheler, 2019).

With the spread of fake news, and the justified growing alert of internet users towards the phenomenon, such term became a weapon in the hands of political actors who attempt to discredit and attack a variety of news media.

This development is a rather dangerous one, for it overturns the issue, making virtually every piece of news "unbelievable". Thus, its effect on democracy is detrimental. A distinction is needed between misinformation, the accidental spread of incorrect information, and disinformation, its deliberate dissemination (Bakir and McStay, 2018). Typical of this political era is the latter, with its every intention of nudging the readers into either believing crazy theories or discrediting valuable and serious media sources.

One example of the latter case is President Donald Trump's twitter account: it is packed with "fake news" accusations. From the beginning of his campaign in 2015, he tweeted over 17,000 times. Since he became president, these tweets are to be kept as official statements of the president of the United States (Landers, 2017).

The president has the habit of publicly mocking newspapers such as the Washington Post and the New York Times, accusing them of reporting "fake news" whenever he dislikes their headlines.



Donald J. Trump

The Fake News is working overtime. Just reported that, despite the tremendous success we are having with the economy & all things else, 91% of the Network News about me is negative (Fake). Why do we work so hard in working with the media when it is corrupt? Take away credentials?

♡ 110K 1:38 PM - May 9, 2018
♥ 77K people are talking about this
> Source: Twitter

The Post respondent Owen Churchill said that "the US president's recent actions and statements amount to giving license to any authoritarians who want to silence critics and coverage".

In Trump's twitter, the words "fake news" appear 684 times.

It seems like the label "fake news" is being used by politicians to discredit the sources they benefit from silencing, instead of for its original purpose: warning citizens to think with their own minds.

Consequently, the need for citizens to employ critical tools when approaching news on the internet is more pressing now than ever before: it is time for the *media literacy* era to begin.

Citizens must not take at face value what celebrities and politicians discard as "fake news" and, at the same time, they should try to deal with this "information storm" by safeguarding themselves.

There are many ways readers can research information before sharing it: from looking into opposing views to learning how to tell apart actual news and paid advertising, from looking into the editorial staff to reverse-searching images to check if they belong to the articles, every step towards the debunking of *real* fake news is a contribution to a better-informed world.

4.3 A Satirical Stance: Lercio.it and The Onion

An important part of the fake news debate is played by satirical journals and websites. In Italy, Lercio.it is the most known site, with a following of over 70,000 people on Facebook. It is a satirical website that managed to become a viral phenomenon.

Its headlines are clearly ironical, to the point that they reach absurd undertones; however, the staff behind it are able to make them seem almost possible, leaving the most expert readers with a doubt. Its name and slogan are "*Lercio – lo sporco che fa notizia*", which can be translated as "*Filthy – the dirt that makes the news*". The intent of such publication is not hidden at all but, once again, internet users proved to believe that every single thing they read online is true.

In one particularly funny case, the satirical journal published an article with the following title: "Muslim principal cancels Christmas holidays: students will have to go to class on December the 25th". The absurdity of such a title may be obvious, and reading its content would only strengthen the argument: allegedly, the principal declared he would "kick out of the school every pupil who didn't show up on Christmas day". Sadly, people on the internet proved not to read the articles they share, and an outraged priest from central Italy went as far as mentioning the non-existent principal in his Sunday homily, in front of the whole church, accusing Muslims of being a threat to Christian values.



Source: Lercio.it

While this event may initially cause a smile, it is just the tip of the iceberg: in the 21st century, a lot of internet users not only believe everything they read online to be true, but they also share such

news, without checking their sources or authenticity, with their friends, colleagues and so on, to the point that they cannot even differentiate between a deliberate fake news site and a satirical one. This behavior is dangerous, for it builds some of our social interactions, which are today the main way we form our opinions on things we are ignorant about, entirely on made-up pieces of information: some people go as far as not even reading the articles they share, but only their (often clickbait) titles.

Lercio's American counterpart is called The Onion and, unsurprisingly, some incidents happened with this website too. Two of them are particularly shocking and useful for this argument. In the first case, well-known Chinese newspaper *People's Daily Online* published a 2012 article affirming that the United States had named North Korea's leader Kim Jung Un the "sexiest man alive" for that year (Holland, 2017). Of course, this caused outrage in the population, who was completely oblivious to the fact that the piece was only a transposition of a previous Onion article, with a completely satirical aim.

In the same fashion, also in 2012, Iranian media outlet *Fars* reported another Onion ironic piece, called "Gallup Poll: Rural Whites Prefer Ahmadinejad to Obama", of course without citing the original source.



Source: Fars News Agency (2012)

After the New York Times attracted attention to the matter, Fars did make a public apology, but the public discourse had already begun. The article also included false quotes from US citizens declaring they preferred Ahmadinejad's Islamic pride and integrity to uncoherent Obama.

What is interesting about this kind of satirical publications is their surprisingly strong power to confound fact and fiction, which suggests a great deal about our society and how much more accuracy is needed when approaching online news providers.

Every single citizen is responsible for fanning the flames of hate and misinformation and, in this era of interconnection, we must all keep in mind the ease with which things get blown out of proportion.

V. PRIVACY, DATA BREACH AND THE NEED FOR REGULATION

5.1 Facebook's Role: the Zuckerberg Trial

Up to this point, this dissertation has tackled the impact of nudge theory, behavioral insights, Cambridge Analytica and fake news in manipulating people's minds for political scopes. However, there is still one actor that has not been thoroughly dealt with: Facebook. Founded by Harvard student Mark Zuckerberg and fellow graduates in 2004, but effectively opened to the public in 2006, Facebook is today a company with 2.41 billion monthly active users, 40,000 employees and almost all revenue generated by advertisements. In 2018, advertising revenue amounted to over 50 billion US dollars (Clement, 2019).



It comes as no surprise that Facebook's main source of profit is ads: its advertising system is, as demonstrated above, highly effective and gathered to the individual. And it is this very system that played such an important part in the second set of Cambridge Analytica's strategy during US elections – making sure the right commercials were shown to the right users.

However, Facebook did have an even greater role in CA's data collection process: the company was able to gather data from 87 millions of its users, and to harvest these by means of a quiz app.

Facebook's COO Sheryl Sandberg even boasted about the election being a great commercial opportunity for the company (Davies, 2018).

Big allegations were held against Zuckerberg, who was summoned to trial in April 2018.

Harsh words were used against him, but legitimate ones: most arguments were a matter of ethics.

The use of Facebook pixels was also put into question: these are pieces of code that companies can place on their websites to draw conclusions about ad effectiveness and get in-depth information about visitors. It has been discussed that pixels may be too invasive, and constitute an excessive violation of user integrity.

It is important to note that, effectively, a data breach *was not* committed, although media exposure tried to suggest that: technically, people were informed, had given their consent freely and could opt out every minute. On the other hand, a breach of *trust* between the platform and its users did take place; it is disquieting to realize that our digital souls were, in fact, plundered for mere commercial opportunities, to the benefit of controversial political campaigning methods.

Both Facebook and Cambridge Analytica's CEO Alexander Nix initially dismissed the matter, stating that "If the individuals wish to remain more private then they shouldn't consent to give up their information" and that "Facebook has a clear data use policy that makes it clear how the information people choose to add to Facebook is used" (Davies, 2018).

Back in 2015, Facebook allegedly "asked" Cambridge Analytica to delete all data used for the Trump campaign and the creation of personality tests, and took their word for it.

Nonetheless, Brittany Kaiser, who was summoned to trial herself, declared that the company was still using such data as late as 2016, and there is still no proof that it was deleted.

During his trial, Zuckerberg manifested profound sorrow for the events, declaring that they should have looked into the matter more deeply, and should have made sure that CA had followed through in the deletion of all information.

The most controversial part of the story is related to the possibility for data brokers (and consequently companies like Cambridge Analytica) to not only access the data of people who voluntarily accepted to participate, but also of their Facebook friends, exponentially. It was recognized too late by the company that this passage was not clear at all, and it had to be announced more openly instead of hiding it among pages and pages of agreements.

Blaming users for not extricating themselves through Facebook's cryptic terms of service proved not to be a very successful strategy, and the CEO had to finally take responsibility in what has been one of the biggest privacy scandals in recent history. During his testimony, he said: "It was my mistake, and I'm sorry. I started Facebook, I run it, and I'm responsible for what happens here".

Repentant words aside, it appears that the issue is a core one, since it is engrained in Facebook's identity in the world, and in its value, after all, as a commercial platform that sells ad space to companies. Its advertising system is one of the best in the world, mostly because it provides insights on the public's likes and preferences, and this individual dimension is exactly what attracts its clients. Tow Center research director Jonathan Albright commented on the matter: "This problem is part of Facebook and cannot be split off as an unfortunate instance of misuse. It was standard practice and encouraged. Facebook was literally racing towards building tools that opened its users' data to marketing partners and new business verticals. So this is something that's inherent to the culture and design of the company" (Wong, 2018).

Then, what can Facebook actually do to be better at protecting its users' privacy?

First, it can rewrite its terms of service to be more user-friendly and to finally positively nudge people into understanding which options are most suitable for their privacy preferences.

Zuckerberg also suggested that, following the media scandal, maybe the very essence of Facebook should be reconsidered: he hinted at a future version of the platform with both a free, ad-run version and a paid one which assures the respect of user privacy. Moreover, he defended the role of Facebook as a platform that aims to connect all people all over the world, and that to continue its mission, a free version had to be kept up.

Unfortunately, the main victims of this story were the people, who were used as mere data sources, and sent back and forth between companies like ping pong balls. Internet users need to start requiring more from social network providers, or they will keep being stripped of their most basic rights.

5.2 What Do Governments Say?

In a society where knowledge and sharing information are the cornerstones of economic and social activities, commercial interactions are constantly evolving, taking up new forms.

The protection of individual privacy goes beyond a one-on-one dimension: now more than ever, safeguarding the collectivity means shielding society from becoming a dystopian environment where everything can and will be exploited. We need to find a way to grant people all the positive sides of such huge technological expansion, including the use of social networks as a by now irreplaceable part of their cultural and social development, without having to compromise their values or integrity (Messina, 2018).

Governments hold a fundamental role in regulating these dynamics and protecting citizens from being used. The approach of the European Union to this *dark nudge era*, for instance, is not a homogeneous one, although there are some fundamental shared principles.

In Article 8 of the Charter of Fundamental Rights (CFR), which is binding as primary EU law since the Lisbon treaty, the right to data protection is recognized for every individual (European Parliament, 2019). The subject's consent to the use of personal data is crucial. To assure compliance to such principles, the Union instituted the General Data Protection Regulation (GDPR), a legal framework whose purpose is setting guidelines for the collection and processing of personal information from individuals who live in the European Union (Investopedia, 2019).

By doing so, they aim at harmonizing the laws regarding data privacy across Europe, and promoting cohesion among the Member States to combat an issue that has proven to be one of the most pressing in the last decade.

At this point, one must wonder which is the link between Europeans and the Cambridge Analytica scandal; there are multiple. First of all, CA was based in the United Kingdom, a European country. Secondly, of the 87 million Facebook profiles which were violated, 2.7 were of Europeans. The European data protection authorities declared that the scandal was only the tip of the iceberg of a predominant business model, and that counting on the fairness of tech companies would unfortunately not be enough.

The Union also mentioned the need for Member States to start a dialogue with networking platforms, in order to guarantee the support of free and fair elections.



Source: The Conversation (2019).

The European Data Protection Supervisor is in charge of collaborating with other EU bodies to make sure this happens.

Businesses found guilty of not respecting its key principles will face fines of up to 4% of their annual global turnover or €20 Million (Coos, 2018).

GDPR replaced the EU Data Protection Directive 95/46/EC that, after a deep analysis, was found to be lacking and inadequate of keeping up with so many abrupt changes and the digitalization of society. The dual aim is that of raising awareness both the Union's role in protecting citizens, and of what citizens can do to safeguard themselves and be empowered enough to actively control what they wish to share.

Proceeding in such analysis, other approaches to the matter also exist; an interesting take would be comparing the European outlook on data protection with that of the other big country involved, the United States.

The US shifted its regulation from an all-comprising document such as the GDPR to a more specific, sector-based set of maneuvers in policy-making and legislation implementation.

Because of its federal nature, the United States witnessed the implementation of breach notification laws at different stages; for instance, California had one as early as 2002.

The government drafted acts and publications to face the matter, such as the Health Insurance Portability and Accountability Act (HIPAA), the Gramm-Leach-Bliley Act (GLB Act), the Federal Information Security Management Act (FISMA), and the NIST 800-171.



Source: Endpoint Protector Blog (2018)

To find a common front, the EU-US Privacy Shield Framework was born. It was put in place by the European Commission and the US Department of Commerce to facilitate transatlantic exchanges of personal data for commercial purposes between the European Union and the United States (Coos, 2018). However, being the Shield an agreement and not a regulation, it is obvious that the two viewpoints do stand against each other.

The difference lies in what conception the different governments hold of data regulation bodies and their projection of what they will manage to do.

While the European approach seems to be based more on ideals and values, the American one is very practical and commerce-based.

In the EU, privacy is the focus of everything as an inalienable right of every person, and it needs to be defended; what is being messed with is the very personality of human beings.

In the US, the focus is instead shifted on compliance to norms, and the private dimension is forsaken in favor of the public one: the government owns data, which is a commercial tool. It is in charge of protecting data, but its only obligation is actually informing the citizens of data breaches.

Such different approaches offer profound insights on the way governments view privacy, social networks, and citizenship, and this difference is fundamental when tackling the complex issue of dark nudging and digital nudging, for it offers a panoramic and transcendental way of thinking about such topics.

Intuitively, it is wishful that users living in different countries could own this knowledge and adjust their position as data owners also depending on the way their government and society deal with these issues.

CONCLUSIONS AND FURTHER RESEARCH

The issue of data commerce and electoral manipulation through digital platforms is a rather complex one, as this dissertation has attempted to prove.

We are living in a period that some have called a *digital cleptocracy*. Our personal data is inevitably out there in the net, and it is being constantly used in ways we have no idea of.

In the idea of dark nudging there are implications of ethics, privacy and legality. CEOs of social networks declare that their top priority is making the world more interconnected with every passing day, but they are trying to minimize the heavy negative effects of such data globalization. Like everything else, the internet is not an evil place, but the exploiting uses some companies and firms are making of it are posing a direct threat to democracy.

Companies like Cambridge Analytica had the groundbreaking effect of completely shifting the concept of political campaign: they focused on culture and communication, and did not do it publicly. The real key for their success lies in the fragmenting power of their actions, as indicated in the introduction of this dissertation. In today's world, companies are indeed able to "brainwash" citizens, and guide them on personalized paths towards whatever they want people to think. Every careless like or website visit is a dot adding to the map of who we are, and the methods to manipulate us are evolving each day. Although political manipulation and ruthless campaigning have been happening for centuries, there is one important difference between this era and the previous one: the private dimension.

In the past, the public could hear candidates express their thoughts in speaker's corners, radios, television, even in bars or theaters. There was one and only version of political discourse: each individual could agree or not with it, think about it, explore it further, etc. The experience was objective, facts were nearly the same for everyone.

With the advent of psychological profiling techniques, digital identities, and ad-hoc electoral advertising, all of this took a worrying turn: they are indeed whispering something different in the ears of every voter, and making sure what they hear is the most effective thing to reach their clients' goal. If we do not stop this, we will get to the point that society will be completely fragmented, and we will not have any more shared understanding. The basis for a society that functions is living in the same reality and, by splitting it in different levels and feeding contrasting truths to the people, these companies are undermining it at its very fundaments.

Filter bubbles are making sure we are targeted and exposed only to information we agree with, contributing to our ideological isolation: different groups have lost the ability to speak to each other, and political discourse is witnessing its decline.

Such a communication obstacle is not caused, as many like to say, by the fact that we lost the ability to argue, or that we spend more time inside than our predecessors, and not even by the growing importance of social networks in our lives: it is the product the planned attempt to divide us, fragment our society, and make it easier to control.

Most likely, not even the majority of people working for these companies would have been able to predict this turn of events, but the reality of facts is that it is getting more and more dangerous with every passing day.

Governments are trying to find instruments to protect citizens against this misuse, but the evolution of such means is so fast that, at this pace, it is hard to keep up with regulation. There is still no homogeneous strategy, and this absence can only be filled by taking individual measures.

Cambridge Analytica may have been formally canceled, but its employees are already working for similar companies, and one of their next jobs will be the 2020 re-election of Donald Trump.

To protect the functioning of our future society, one our children and grandchildren will live in, we must accept our individual responsibility, as well as our individual impact on the matter.

Everything could happen in the near future: like Zuckerberg suggested, social networks could have both a free, ad-run version, and a paid, ad-free one; we could be able to monetize our data, making the interaction with companies a full-fledged commercial transaction; we could witness the further development of more credible fake news ecosystems and fake news party competition.

Further research on such questions will be essential, together with an even deeper analysis on the role played by our feelings. The problem is, emotions are involved in this affair: surely, a great number of people will look back at Facebook as their very first real social network. Those born at the end of the 20th century, the future ruling class, learned how to do algebra and create a Facebook page at around the same time.

There are no enemies in the Cambridge Analytica scandal, but a lot of victims: first of all, Brittany Kaiser, who revealed she started working for right-wing politicians not because she agreed with their views, but because they offered to pay her, and she needed the money to sustain her family back home.

Can we let our culture, democracy, and beliefs be completely influenced by the richest?

Kaiser now works as an advocate for data protection, and it is with only one wish that this dissertation comes to an end: that we are socially aware of the phenomenon, that we are strong enough to educate ourselves on it, and that we make sure there is a future society in which a shared narrative still exists.

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REFERENCES

Amer, K. and Noujaim, J. (2019) "The Great Hack", Netflix

Armstrong, M. (2018) "How would a second Brexit referendum play out?", Statista Accessible at :

https://www.statista.com/chart/12512/how-would-a-second-brexit-referendum-play-out/

Bakir, V., & McStay, A. (2018) "Fake news and the economy of emotions. Digital Journalism". Sagepub Journals

Barker, M. (2018) *"Rise of the Qualiquants"*, Volume 15, Issue 1, Participations Accessible at : http://www.participations.org/Volume%2015/Issue%201/1.pdf_

Bell, C. (2013) "Inside the Coalition's controversial 'Nudge Unit", The Telegraph Accessible at :

https://www.telegraph.co.uk/news/politics/9853384/Inside-the-Coalitions-controversial-Nudge-Unit.html

Cadwalladr, C. (2017) "Robert Mercer: the big data billionaire waging war on mainstream media", The Guardian

Accessible at :

https://www.theguardian.com/politics/2017/feb/26/robert-mercer-breitbart-war-on-media-steve-bannon-donald-trump-nigel-farage

Cadwalladr, C. (2018) "Revealed: 50 million Facebook profiles harvested for Cambridge Analytica in major data breach", The Guardian

Accessible at :

https://www.theguardian.com/news/2018/mar/17/cambridge-analytica-facebook-influence-us-election

Cadwalladr, C. (2018) "The Brexit whistleblower: 'Did Vote Leave use me? Was I naive?", The Guardian

Accessible at :

to-influence-nigerian-election

https://www.theguardian.com/uk-news/2018/mar/24/brexit-whistleblower-shahmir-sanni-interview-vote-leave-cambridge-analytica_

Cadwalladr, C. (2018) "*Revealed: graphic video used by Cambridge Analytica to influence Nigerian election*", The Guardian Accessible at : https://www.theguardian.com/uk-news/2018/apr/04/cambridge-analytica-used-violent-video-to-try-

43

Cambridge Dictionary, *"Fake News"*, Cambridge University Press Accessible at : https://dictionary.cambridge.org/it/dizionario/inglese/fake-news

Chen, A. and Potenza, A. (2018) "Cambridge Analytica's Facebook Data Abuse Shouldn't Get Credit For Trump", The Verge Accessible at : https://www.theverge.com/2018/3/20/17138854/cambridge-analytica-facebook-data-trumpcampaign-psychographic-microtargeting

Churchill, O. (2018) "Beyond 'fake news': Donald Trump takes steps against journalists that undermine press freedoms around the world", South China Morning Post Accessible at : https://www.scmp.com/comment/insight-opinion/article/2173494/beyond-fake-news-donald-trump-

takes-steps-against

Clement, J. (2019) *"Facebook: annual revenue 2009-2018"*, Statista Accessible at : https://www.statista.com/statistics/268604/annual-revenue-of-facebook/

Coos, A. (2018) "EU vs US: How Do Their Data Privacy Regulations Square Off?", Endpoint Protector

Accessible at :

https://www.endpointprotector.com/blog/eu-vs-us-how-do-their-data-protection-regulations-square-off/

Davies, H. (2018) *"Facebook told me it would act swiftly on data misuse – in 2015"*, The Guardian Accessible at :

https://www.theguardian.com/commentisfree/2018/mar/26/facebook-data-misuse-cambridge-analytica

Egelhofer, J. and Lecheler, S. (2019) "Fake news as a two-dimensional phenomenon: a framework and research agenda", Routledge

Accessible at :

https://www.tandfonline.com/doi/full/10.1080/23808985.2019.1602782#aHR0cHM6Ly93d3cudGF uZGZvbmxpbmUuY29tL2RvaS9wZGYvMTAuMTA4MC8yMzgwODk4NS4yMDE5LjE2MDI3O DI/bmVIZEFjY2Vzcz10cnVIQEBAMA==

Feldman, J. (2019) "*Trump Touts 'Positive' Story, Column in Washington Post: 'NOT Fake News!*", The Washington Post

Accessible at :

https://www.msn.com/en-us/news/politics/trump-touts-positive-story-column-in-washington-post-not-fake-news/ar-AAHl21J#page=2

Guess, A., Nagler, J and Tucker, J. (2019) "Less than you think: Prevalence and predictors of fake news dissemination on Facebook", Sciences Advances Accessible at : https://advances.sciencemag.org/content/5/1/eaau4586.full

Han, B. (2017) "In The Swarm: Digital Prospects", The MIT Press

Hansen, P. G. (2016) "*The Definition of Nudge and Libertarian Paternalism: Does the Hand Fit the Glove?*" EJRR Accessible at : https://www.cambridge.org/core/services/aop-cambridgecore/content/view/16D7A1CBCE9928E3E9ED713BF48C315C/S1867299X00005468a.pdf/definiti on_of_nudge_and_libertarian_paternalism_does_the_hand_fit_the_glove.pdf

Holland, E. (2017) *"The Onion and the geopolitics of satire"*, Tandfon Online Accessible at : https://www.tandfonline.com/doi/full/10.1080/15405702.2017.1397674

Investopedia Staff (2019) "General Data Protection Regulation (GDPR)", Investopedia Accessible at : https://www.investopedia.com/terms/g/general-data-protection-regulation-gdpr.asp

Kahneman, D. and Tversky, A. (2000) "Choices, Values, and Frames", The American Psychologist

Kahneman, D. (2011) "Thinking, Fast and Slow", Penguin Books

Kang, C. (2016) *"Fake News Onslaught Targets Pizzeria as Nest of Child-Trafficking"*, The New York Times Accessible at :

https://www.nytimes.com/2016/11/21/technology/fact-check-this-pizzeria-is-not-a-child-trafficking-site.html?_r=0

Landers, E. (2017) "White House: Trump's tweets are 'official statements", CNN Accessible at : https://edition.cnn.com/2017/06/06/politics/trump-tweets-official-statements/index.html

Le Conte, M. and Waterson, J. (2016) "Why Did Vote Leave Donate £625,000 To A 23-Year-Old Fashion Student During The Referendum?", Buzzfeed News Accessible at :

https://www.buzzfeed.com/marieleconte/vote-leave-donations?utm_term=.pi1AGp2m#.mgDPrnd7

Lewis, P. and Hilder, P. (2018) "*Leaked: Cambridge Analytica's blueprint for Trump victory*", The Guardian Accessible at :

https://www.theguardian.com/uk-news/2018/mar/23/leaked-cambridge-analyticas-blueprint-for-trump-victory____

Lindholm, R. (2017) "Project Alamo, Cambridge Analytica and Trump fake news factory", Semantiko.com Accessible at : https://semantiko.com/project-alamo/

Liptak, A. (2018) "Cambridge Analytica's use of Facebook data was a 'grossly unethical experiment", The Verge Accessible at : https://www.theverge.com/2018/3/18/17134270/cambridge-analyticas-facebook-data-underscores-critical-flaw-american-electorate

Ly, K. and Soman, D. (2013) "*Nudging Around the World*", Rotman School of Management -University of Toronto Accessible at : https://www.um.es/documents/1922922/1973600/Nudging+Around+The+World.pdf/3af04386ba8b-4742-b339-73626bf2be94

Lynch, C. (2018) *"Why Is It So Hard to Vote in America?"*, Foreign Policy Accessible at : https://foreignpolicy.com/2018/11/05/why-is-it-so-hard-to-vote-in-america

Makauskas, N. (2018) "Mapping the Contemporary Articulation of the Society of Control: Big-Data, 'Post-truth'-Disinformation and Network-Imperialism", University of Auckland Accessible at :

https://www.academia.edu/38411675/Mapping_the_Contemporary_Articulation_of_the_Society_of _Control_Big-Data_Post-truth_-Disinformation_and_Network-Imperialism

Martin, D. (2018) "What role did Cambridge Analytica play in the Brexit vote?", Deutsche Welle Accessible at :

https://www.dw.com/en/what-role-did-cambridge-analytica-play-in-the-brexit-vote/a-43151460

McSmith, A. (2010) *"First Obama, now Cameron embraces 'nudge theory'"*, The Independent Accessible at :

https://www.independent.co.uk/news/uk/politics/first-obama-now-cameron-embraces-nudge-theory-2050127.html

Messina, D. (2018) "Il Regolamento (EU) 2016/679 in materia di protezione dei dati personali alla luce della vicenda Cambridge Analytica", Federalismi Accessible at :

https://www.academia.edu/37650200/Il_Regolamento_EU_2016_679_in_materia_di_protezione_d ei_dati_personali_alla_luce_della_vicenda_Cambridge_Analytica

OECD (2017). "Behavioural Insights and Public Policy: Lessons from Around the World". OECD Publishing, Paris Accessible at : https://doi.org/10.1787/9789264270480-en

Phillips, S. (2007) "*A Brief History of Facebook*", The Guardian Accessible at : https://www.google.it/amp/s/amp.theguardian.com/technology/2007/jul/25/media.newmedia

Rathi, R. (2019) "Effect of Cambridge Analytica's Facebook ads on the 2016 US Presidential Election", Medium.com Accessible at : https://towardsdatascience.com/effect-of-cambridge-analyticas-facebook-ads-on-the-2016-uspresidential-election-dacb5462155d

Rokka, J. and Airoldi, M. (2018) "*Cambridge Analytica's 'secret' psychographic tool is a ghost from the past*", The Conversation Accessible at :

Accessible at :

https://the conversation.com/cambridge-analytic as-secret-psychographic-tool-is-a-ghost-from-the-past-94143

Roozenbeek, J. and van der Linden, S. (2018) "*The Fake News Game: Actively Inoculating Against the Risk of Misinformation*", University of Cambridge Accessible at : https://www.cam.ac.uk/files/fakenews_latest_jrr_aaas.pdf

Rosenberg, M. (2018) "*How Trump Consultants Exploited the Facebook Data of Millions*", New York Times Accessible at : https://www.nytimes.com/2018/03/17/us/politics/cambridge-analytica-trump-campaign.html

Scott, M. (2019) "*Cambridge Analytica did work for Brexit groups, says ex-staffer*", Politico Accessible at : https://www.politico.eu/article/cambridge-analytica-leave-eu-ukip-brexit-facebook/

Shankar, M. (2015) "Using Behavioral Science Insights to Make Government More Effective, Simpler, and More People-Friendly", Obama White House Archives Accessible at : https://obamawhitehouse.archives.gov/blog/2015/02/09/behavioral-science-insights-make-

government-more-effective-simpler-and-more-user-fri

Soman, D. (2015) "The Last Mile: Creating Social and Economic Value from Behavioral Insights", Rotman UTP Publishing

Sumpter, D. (2018) "Outnumbered: From Facebook and Google to fake news and filter-bubbles - the algorithms that control our lives", Bloomsbury UK

Sunstein, C. (2014) "Why Nudge? The Politics of Libertarian Paternalism", Harvard University

The European Parliament Staff (2019) *"Artificial intelligence, data protection and elections",* European Parliamentary Research Service

Accessible at :

http://www.europarl.europa.eu/RegData/etudes/ATAG/2019/637952/EPRS_ATA(2019)637952_E N.pdf

Walden University Library (2019) "*Fact v. Fiction - Fake News: What is Fake News*?", Walden Department Resources Accessible at : https://academicguides.waldenu.edu/library/fakenews#s-lg-box-13305708

Wong, J. (2018) "Mark Zuckerberg apologises for Facebook's 'mistakes' over Cambridge Analytica", The Guardian Accessible at : https://www.theguardian.com/technology/2018/mar/21/mark-zuckerberg-response-facebookcambridge-analytica

Zegeldorf, J., Henze, M., Hummen, R. and Wehrle, K. (2015) "*Comparison-Based Privacy: Nudging Privacy in Social Media*", SpringerLink Accessible at : https://link.springer.com/chapter/10.1007%2F978-3-319-29883-2_15

L'ERA DEL DARK NUDGE

Cambridge Analytica, la Manipolazione Digitale nella Politica, e la Frammentazione

della Società

(riassunto)

Introduzione

In una breve introduzione, si delinea una panoramica del rapporto tra i cittadini e gli strumenti digitali nella società odierna. Negli ultimi anni, tramite l'utilizzo dei social network, le persone hanno contribuito giorno dopo giorno alla costruzione di una identità digitale. Anche se considerata innocua dai più, questa mole di informazioni riguardanti un singolo individuo, che comprende i suoi gusti, le sue passioni, i suoi interessi e le sue abitudini, può essere utilizzata in molti modi da società in grado di immagazzinarla e sistematizzarla. Molto spesso, il comportamento degli utenti sui social network assume caratteristiche pericolose, poiché non si pensa all'enorme valore che i nostri dati, se processati da un team esperto, possano assumere.

In particolare, questa dissertazione analizzerà l'impatto che società di consulenza politica come Cambridge Analytica hanno avuto sulle elezioni statunitensi del 2016, sul referendum per la Brexit, sulle elezioni a Trinidad e Tobago, e sul ruolo manipolatore (*dark nudging*) che le scienze comportamentali possono avere se praticate su cittadini e utenti inconsapevoli tramite la raccolta di dati sensibili. Questa operazione, chiamata *microtargeting*, permette di acquistare dati raccolti su piattaforme come Facebook, e di utilizzarli per prevedere gli interessi e i punti deboli degli elettori, per poi presentare loro il messaggio che avrà maggior impatto sul loro subconscio orientandone così le scelte.

L'incontro tra la teoria dei nudge ("spintarelle"), lo sviluppo digitale e gli interessi elettorali è un argomento di particolare interesse accademico ma anche personale, e questa dissertazione ha come scopo principale quello di ricostruire il caso Cambridge Analytica e l'importanza delle *fake news* nel modo in cui ci si informa riguardo i partiti politici, di comprendere l'approccio dei governi sulla tutela della privacy online, e di sensibilizzare il lettore alla vicenda; ora più che mai, è di fondamentale importanza che venga compreso il valore dei dati personali e non che condividiamo online, e come questo valore cresca esponenzialmente con l'aumentare del tempo che passiamo sulle piattaforme *social*.

Cambridge Analytica, con la sua violazione della privacy degli utenti Facebook, ha contribuito alla polarizzazione e frammentazione della società: i vari gruppi, avendo esperienze diverse, hanno perso la capacità di calarsi l'uno nei panni dell'altro. Per difendere l'omogeneità della nostra realtà e

l'impoverimento culturale che deriverebbe da un'ulteriore polarizzazione acritica, c'è bisogno che tutti siano informati riguardo le fondamenta, lo sviluppo e il futuro di questo problema.

Capitolo I

Nel primo capitolo si gettano le basi teoriche per la comprensione della teoria dei *nudge*. Pur essendo il concetto già noto alla comunità accademica nell'ambito delle scienze e della psicologia comportamentale, è con la pubblicazione del libro "Nudge", scritto nel 2008 da Richard Thaler e Cass Sunstein, che la teoria acquista notorietà mondiale. Essenzialmente, il termine "nudge" può essere tradotto con "spintarella benevola": è una tecnica di persuasione non invasiva in cui si reindirizza il comportamento delle persone senza negare le altre opzioni, e senza aggiungere significativi incentivi economici (Thaler e Sunstein, 2008).

Questa concezione nasce come una sottocorrente del paternalismo libertario: chi si appresta a strutturare politiche pubbliche efficienti, in questo caso lo Stato, utilizza le tecniche del *nudging* per massimizzare il benessere pubblico e guidare i cittadini verso le scelte migliori.

Di conseguenza, nella tradizione accademica della disciplina, questo concetto è imprescindibilmente accompagnato da un'accezione positiva. Nel corso della dissertazione, tuttavia, verrà introdotta la concezione di *dark nudging*, ovvero la declinazione negativa del termine, volto ad indicare una manipolazione nascosta del subconscio del cittadino per raggiungere interessi di un'oligarchia, spesso pagante.

In un secondo momento, viene analizzato l'utilizzo dei nudge nell'arena globale, dagli Stati Uniti alla Scandinavia, con la costituzione di unità governative apposite e la diffusione di network culturali online.

Successivamente, si approfondisce il duplice meccanismo cerebrale che avviene quando prendiamo una decisione: lo studioso Daniel Kahneman, nel suo libro "Thinking Fast and Slow", effettua una distinzione tra il Sistema Uno, utile per il pensiero automatico e istintivo, e il Sistema Due, basato sulla riflessione. L'operato di aziende come Cambridge Analytica dimostrerà come, facendo leva sulla parte istintiva e reazionaria del cervello umano, sarà possibile influenzarlo a prendere una decisione piuttosto che un'altra, o a cristallizzare associazioni negative che sarà difficile smantellare.

Capitolo II

Nel secondo capitolo viene analizzato principalmente il concetto di *nudging* neutrale, ovvero libero dalla concezione positiva legata alla tradizione accademica. Viene avanzata l'ipotesi che il

concetto possa descrivere un qualsiasi tentativo di influenzare le scelte individuali, a causa di comportamenti di routine, associazioni automatiche, abitudini e pregiudizi che rendono il cervello umano prevedibile e malleabile (Guldborg Hansen, 2016). La concezione positiva del nudging, più che in un'aspettativa, si traduce in un invito ad applicare i comportamenti ritenuti più giusti, ma è possibile utilizzare questi principi per qualunque scopo, specie se con il supporto di strumenti digitali e di una vastissima banca dati.

I punti chiave dell'operato di aziende come Cambridge Analitica, quindi, sono tre: l'applicazione di principi comportamentali alla realtà, la raccolta sistematica su larga scala di informazioni e abitudini di una popolazione, e il finanziamento di queste operazioni da parte di miliardari in cerca di un modo di affermare la propria ideologia politica.

Inoltre, all'interno del capitolo, viene rivisitato il concetto di dati personali: nella società odierna, è possibile parlare di dati come del "nuovo denaro"; chi ha accesso ad una grande quantità di essi (*Big Data*) ha la possibilità di influenzare la società e controllare il corso degli eventi.

Successivamente vengono delineate le principali modalità tradizionalmente utilizzate per analizzare gli elettorati, in primo luogo tramite le informazioni demografiche: età, genere, etnia, luogo di residenza. Già nel 1940, sociologi statunitensi come Paul Lazarsfeld avevano scoperto un'associazione tra, ad esempio, la classe sociale di appartenenza e la probabilità di votare per un partito piuttosto che un altro.

Di particolare interesse è il modello di regressione della probabilità. Nel caso della Brexit tali modelli hanno permesso di evidenziare associazioni tra alcune variabili e la propensione a rimanere o lasciare l'Europa. Tra le scoperte, è emerso che giovani sotto i vent'anni hanno una probabilità molto maggiore di aver votato "Remain" rispetto agli adulti sopra i cinquant'anni (Sumpter, 2018).

La differenza tra questi studi e quello realizzato da Cambridge Analytica sta solamente nel modo in cui i dati che fungono da base per l'analisi vengono acquisiti; avendo avuto accesso alle informazioni personali di milioni di utenti Facebook, l'impatto di tale operazione è stato duplice: i social network fungono sia da banca dati, che da piattaforma pubblicitaria per la condivisione dei contenuti.

Come ultimo punto del capitolo, viene introdotto il vero e proprio caso Cambridge Analytica: nata come una società di consulenza politica grazie al finanziamento della multimilionaria famiglia Mercer, e portata alla ribalta grazie a personalità come il ricercatore accademico Aleksandr Kogan e la direttrice dello sviluppo Brittany Kaiser, CA è stata in grado di costruire dal nulla un modello analitico atto ad interpretare grandi moli di dati, attribuirgli un senso, ed elaborare contenuti pubblicitari validi basati su di esso. I suoi clienti, più o meno alla luce del sole, hanno spaziato dal candidato repubblicano Ted Cruz al presidente degli Stati Uniti Donald Trump, passando per i partiti pro-Brexit e quelli di vari governi in giro per il mondo.

Capitolo III

Nella terza parte di questa dissertazione, vengono analizzati tre principali casi di studio, per mostrare l'impatto reale del *dark nudging*: le elezioni presidenziali statunitensi del 2016, il referendum per la Brexit, e le elezioni a Trinidad e Tobago.

Per quanto riguarda il primo caso, la manipolazione è avvenuta principalmente in favore della campagna elettorale "Trump for President": dopo aver fatto fronte all'iniziale disorganizzazione dello staff del candidato repubblicano, il team di Cambridge Analytica ha elaborato una strategia composta da due punti principali. In primo luogo bisognava raccogliere abbastanza dati, in modo tale da compiere un'analisi significativa; questa mansione, portata avanti da Kogan, è stata svolta su *Qualtrics*, una piattaforma che permette ai ricercatori di scambiare dati con gli utenti (che avevano effettuato l'accesso con le credenziali Facebook) in cambio di qualche dollaro. Dopo avere ottenuto legalmente accesso anche ai *mi piace* degli amici di questi utenti, come previsto dal regolamento di Facebook, la raccolta di dati è stata ampliata esponenzialmente. Analizzando le risposte dei partecipanti ad un semplice test di personalità, CA li ha poi suddivisi in base a cinque tratti principali: apertura, coscienziosità, estroversione, amicalità, e tendenza alla nevrosi. In base alle percentuali di ogni utente, quindi, si è poi costruita una pubblicità capace di far leva sulle sue debolezze per convincerlo a votare Trump.

Nel caso della Brexit, invece, il focus è passato dal voler individuare un nemico esterno (e. g. gli immigrati per gli Americani), al trovare delle vittime dell'Unione Europea (e. g. i paesi deboli o in via di sviluppo) al fine di screditarla agli occhi degli elettori.

Per coinvolgere anche quella parte dell'elettorato che si prevedeva sarebbe stata meno sensibile alle argomentazioni tradizionali, ovvero i giovani adulti e gli studenti, è stato istituito il gruppo BeLeave, in grado di far presa sui giovani.

Sulla carta, il partito pro-Brexit Leave.EU nega ogni coinvolgimento di Cambridge Analytica nella loro campagna elettorale, ma tutto ciò è smentito da fattori oggettivi come la presenza della Kaiser alle principali conferenze del partito.

Intervistati successivamente su quale sarebbe il loro voto se il referendum fosse ripetuto, i Britannici hanno dato un segnale chiaro: il 55% sceglierebbe di rimanere nell'Unione (Armstrong, 2018).

Come ultimo caso di studio, viene affrontato quello delle elezioni a Trinidad e Tobago. I due partiti in competizione erano quello degli Afro-Trinidadiani e quello degli Indo-Trinidadiani; impiegata da questi ultimi, Cambridge Analytica è stata in grado di trovare una differenza culturale fondamentale tra i due gruppi: il grandissimo rispetto per la famiglia e i genitori degli Indo-Trinidadiani. Dopo aver creato un movimento sociale chiamato "*Do So!*", che coinvolgeva

principalmente i giovani, e averli invitati a non votare alle elezioni in segno di protesta, CA è riuscita ad ottenere che i giovani elettori Afro-Trinidadiani restassero a casa, mentre gli Indo-Trinidadiani ascoltavano i propri genitori e si recavano ai seggi. Alla fine, i clienti di Cambridge Analytica sono riusciti a raggiungere il proprio obiettivo: vincere le elezioni.

Tramite l'analisi ed il confronto sistematico di tre importanti vittorie conseguite dall'azienda, è possibile osservare il grande impatto che questo tipo di organizzazione può avere sul corso degli eventi, globalmente.

Capitolo IV

In questo capitolo viene analizzato il ruolo delle *fake news* e della disinformazione nella società e nella politica.

In primo luogo, viene sottolineata la differenza tra *mis*-informazione e *dis*-informazione, e si esplora la possibilità che questo tipo di notizie venga diffuso per due motivi principali: al fine di influenzare le menti degli elettori sul piano politico, oppure per scopi satirici.

Vengono citati alcuni esempi di come la diffusione di informazioni non veritiere, pettegolezzi e teorie cospiratorie abbiano portato a gravi danni all'immagine di molte persone reali, spesso neanche direttamente coinvolte nelle vicende in questione, come nel caso della *Pizzagate Conspiracy* durante la campagna elettorale di Trump nel 2016.

Inoltre, si prende in considerazione l'uso delle *fake news* da parte di alcuni politici per screditare fonti che non fanno loro comodo. In particolare Donald Trump ha dimostrato di servirsi di quest'arma per colpire giornali attendibili, facendo un uso spropositato del termine fino a snaturarlo. Emerge, in questo frangente, la preoccupazione per lo stravolgimento dei fatti causato da tale concezione, e la strumentalizzazione di questi mezzi appare grottesca, specie se praticata dal presidente degli Stati Uniti.

Infine, si analizza la prospettiva satirica delle *fake news*, nello specifico per quanto riguarda la nascita di testate giornaliste satiriche online come Lercio.it e The Onion.

Dopo una breve descrizione del loro operato, si descrivono due avvenimenti in cui le notizie parodistiche fasulle di tali giornali sono state prese sul serio da alcuni utenti su internet, provocando conseguenze in alcuni casi anche a livello nazionale e internazionale.

Il potere di queste pubblicazioni satiriche si rivela interessante, poiché esse sono in grado di confondere realtà e finzione nella mente degli utenti internet, e poiché si rivelano un altro tassello da aggiungere al complesso quadro di disinformazione e manipolazione praticata tramite i social network.

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Capitolo V

Nell'ultimo capitolo, incentrato sul tema della privacy e della regolamentazione internazionale, si presta inizialmente particolare attenzione ad uno dei protagonisti della vicenda, che ha avuto un ruolo fondamentale nel garantire che l'operato di Cambridge Analytica andasse a buon fine: Facebook. Dopo una breve introduzione sulla storia della piattaforma, una delle più usate al mondo, e sui suoi impressionanti numeri, si passa ad analizzare suo il vero impatto sui fatti.

Emerge un dato preoccupante riguardo l'approccio iniziale del team di Facebook relativo alla possibilità di partecipare alla campagna elettorale pro-Trump: la COO di Facebook Sheryl Sandberg, molto prima che scoppiasse lo scandalo, aveva infatti dichiarato di vedere l'elezione come una grande opportunità commerciale per la sua società (Davies, 2018).

Per comprendere la benevolenza o meno di Facebook, si riportano i punti e le dichiarazioni salienti del CEO Mark Zuckerberg durante il suo processo; egli non dimostra di avere agito con piena consapevolezza, e invece conferisce l'impressione di avere sottovalutato la gravità del fenomeno.

È importante puntualizzare che, a livello pratico, nessun *data breach* è stato commesso: il punto più controverso della questione, ovvero di come CA abbia avuto accesso anche ai dati degli amici dei partecipanti, viene chiarito facilmente, poiché una clausola dei termini di servizio di Facebook prevede questa possibilità per gli utenti che abbiano attivato certe impostazioni di privacy.

Tuttavia, viene individuata la colpa di Facebook proprio nella maniera criptica in cui sono formulati i suoi *terms of service*, in una sorta di inconsapevole manipolazione dell'utente da parte della piattaforma.

Infine, vengono delineate le differenze dei due approcci principali alla data protection: quello europeo e quello statunitense.

La privacy, nell'Unione Europea, viene concepita come diritto inalienabile delle persone, e per questo deve essere difeso in quanto tale.

In USA, invece, il focus è più spostato verso la Data security e l'integrità dei dati. Qui, l'approccio è essenzialmente di tipo commerciale: il dato è un elemento vendibile, non un diritto della persona, e di conseguenza anche le tutele sono differenti.

Il dato del cittadino appartiene al governo, che deve proteggerlo, ma ha il diritto di essere al corrente di quel dato. Al contrario, in UE il dato del cittadino è il dato dell'individuo e non può né deve essere oggetto di commercio salvo ove un consenso consapevole, chiaro e libero sia stato prestato a queste finalità.

Questa diversità di concezione si prospetta fondamentale per comprendere a fondo l'ultima parte di questa dissertazione: il limite fino a cui i diversi governi sono in grado di proteggere i cittadini, e le finalità con cui lo fanno.

Conclusioni e ricerca futura

Come si è cercato di dimostrare in questa tesi, il mondo in cui viviamo oggi può essere definito una "cleptocrazia digitale": i nostri dati, bene di maggior valore che possediamo, sono effettivamente messi sul mercato e offerti al miglior acquirente. La iper-connessione, che viene citata dai capi dei più diffusi social network come loro primaria finalità, non può non essere accompagnata dalla sensibilizzazione a livello globale dell'importanza di proteggere i nostri dati, e dalla diffusione dei mezzi per farlo, in primo luogo con una semplificazione dei termini di servizio di tali piattaforme. Le nostre identità digitali sono ormai una parte fondamentale della nostra esistenza, e non avrebbe

senso porsi controcorrente in questo fiume in piena: esse ci garantiscono progresso, apertura mentale, e capacità di far arrivare le nostre idee a tantissime persone con pochi click.

Ora più che mai, è importante che sia incoraggiato lo scambio di idee tra gruppi diversi, un qualcosa che è stato reso quasi impossibile dalla effettiva frammentazione della società in cui viviamo, effetto collaterale anche dell'operato di Cambridge Analytica e similari.

Creando diversi livelli di informazione, e mostrando materiale diverso ad ogni utente, queste società hanno contribuito alla quasi estinzione di una realtà condivisa e di una narrativa comune.

Il duplice ruolo che ricopriamo oggi, come cittadini e utenti internet, ci obbliga a tentare di difendere l'esistenza di una società in cui le informazioni sono oggettive, e ognuno possa crearsi autonomamente un pensiero critico.

Questa dissertazione nasce con l'intento di offrire una panoramica sul valore dei dati nella società odierna, e incoraggia ulteriori ricerche per comprendere al meglio il modo in cui la questione, giorno dopo giorno, stia assumendo nuove forme: dalle ceneri di Cambridge Analytica sono risorte altre aziende con le medesime finalità, e solamente monitorando ogni sviluppo con occhio consapevole sarà possibile intuire la direzione verso cui il mondo si sta muovendo. Tale consapevolezza consentirà di prendere quegli accorgimenti necessari a garantire che le scelte individuali, soprattutto in materia elettorale, siano il risultato di un cosciente e corretto processo di conoscenza individuale, privo di condizionamenti più o meno occulti. È in gioco il futuro della democrazia per come l'abbiamo conosciuta ed imparata ad apprezzare nei secoli.