Abstract---The paper focuses on English lexemes used in mass media publications about a new security development. The use of artificial intelligence for facial recognition and enhanced surveillance of citizens pose several ethical issues discussed in major broadsheet newspapers. Studies into the evaluation as a cognitive category have been used as the theoretical basis of the research. The contexts revealed lexical units displaying evaluation of surveillance and human rights issues. The lexemes fall within three semantic groups. Negative connotations are connected with personal experience or associations, as well as with human rights breaches, while advantages tend to be described with verbs denoting purpose. The use of AI is a highly controversial issue that deserves cross-disciplinary consideration.

Keywords---criticism, extra-linguistic reality, human rights, impartial judgement, linguistic means, prejudiced attitudes.

Introduction

Public safety is one of the major challenges people face in the XX and XXI centuries. With the increased use of information technologies for social and security purposes, facial recognition and video surveillance of citizens in public
places have repeatedly raised hot debates. As with many multilateral issues, these may be analyzed in terms of security, AI progress, and human rights. In this paper, we will try to analyze the linguistic means used in different mass media to describe people’s opinions of this state-of-the-art development.

The choice of words in such publications cannot but display the authors’ attitudes toward surveillance issues. The paper aims to analyze lexical units denoting positive, negative or neutral attitudes. Publications from The Guardian and The New York Times have provided contexts for linguistic analysis, while research by Russian and European scholars into the evaluation as a cross-disciplinary science has been used as the theoretical basis.

**Objectives**

The paper focuses on English lexemes used in mass media publications about a new security development. The use of artificial intelligence for facial recognition and enhanced surveillance of citizens pose several ethical issues discussed in major broadsheet newspapers.

**Method**

The cross-disciplinary character of the research enables a discourse-analytic approach to be employed. The discourse analysis method has been used to study the contexts and correlate the linguistic means with extra-linguistic reality, such as social opinions and technology trends. Linguistic units serve as tools to render personal or public opinions of specific phenomena, facts, and trends. Thus, they cannot but contain an element of evaluation. Evaluations of a cognition process have been addressed by scholars in various fields. For instance, Federica Calidoni-Lundberg believes evaluation is developing into an independent science (Lundberg, 2006; Venable et al., 2016). Vedung describes evaluation as a tool to determine the worth and value of public programs, to provide information to decision-makers...” (Vedung, 1997; Bauer, 2017). The Russian linguists O.N. Prokhorova and I.V. Chekulai say evaluation is among the most complex categories and suggest that it requires a cross-disciplinary approach. They stress that evaluation is “in the focus of psychological, linguistic and philosophical research” and consider mechanisms of comparison to constitute grounds for evaluation (Chekulai & Prokhorova, 2010; Domaneschi, 2016).

**Results**

Thus, evaluation is quite a complex cognition category. According to Lieber and Štekauer, “the process of evaluation starts in extra-linguistic reality”, and “the point of departure is a need in a speech community to evaluate an object of extra-linguistic reality” (Lieber & Štekauer, 2014; Xu, 2016). In this respect, mass media are excellent means to reflect the opinions of speech communities concerning new trends and phenomena.

Personal opinions are, without doubt, based on previous experience, values, traditions, and the challenges of the time. Because of this, it is always difficult to conclude whether there only one truth, or whether everybody is right in their way.
Calidoni-Lundberg proposes triangulation as a method to evaluate things and trends unbiasedly. The scholar describes triangulation as “the practice of studying an issue using several different methods as if you’re seeing it from different angles” (Lundberg, 2006; Solum, 2017). In doing this, she offers the so-called data triangulation (time, space, and persons), investigation triangulation (using multiple observers), theory triangulation (using more than one theoretical scheme in the interpretation of the phenomenon), and so on (Lundberg, 2006).

The data we have selected from media contexts contain elements of the above triangulation components. First, numerous personal opinions are provided in the mass media materials under study, concerning the pros and cons of facial identification. Besides, there is a time reference in some of the arguments, referring us to the WWII period to speak about potential risks of excessive data collection. The opinion of multiple observers is shown concerning statistics and public opinion surveys. Replacing the theoretical element of the evaluation pattern, there is a more practice-oriented one, and that is: describing the surveillance system goals and potential.

I.V. Chekulai and O.N. Prokhorova consider evaluation as “an individual manifestation of acceptability or unacceptability of external world phenomena, somebody’s worldviews or social doctrines” (Chekulai & Prokhorova 2010). The acceptability or inadmissibility of surveillance over citizens is a hot issue of debates today. To reveal the most typical attitudes displayed, we have selected lexical units used in broadsheet publications, distributing them into three categories: positive, neutral, and negative ones.

Among the lexemes with a negative connotation used in the contexts under study to describe facial recognition systems, we have found conventional clichés sounding diplomatic enough, for instance: “controversial technology” (Zuo et al., 2019; Lomas, 2020), “posing a huge threat to human rights” (Alston, 2017; Dodd, 2020; Tagay, & Ballesteros, 2016). “an invasion of privacy” which is “being introduced without adequate public discussion” (Satariano, 2020). The nouns “skepticism” and “concerns” are also frequent in describing the surveillance issue: Vincent stresses there are “rights concerns” about the technology (Berg, 2018; Vincent, 2019) while V. Dodd writes about “skepticism from experts over how efficient the system is widespread concerns over civil liberties” (Greene, 2017; Dodd, 2020). N. Lomas sounds reserved enough, using the “risk” lexeme, though its combination with “harm”, “vulnerable”, “inequality“ and “discrimination” displays the author’s concern about side effects of the technological trend:

There’s a risk that police use of facial recognition could further harm vulnerable groups who already face a disproportionate risk of inequality and discrimination (Lomas, 2020; Garcia-Diaz, et al, 2016). Other contexts contain undisguised criticism towards the new development. This is revealed with epithets “dangerous” and “oppressive”, “breathtaking” (“a breathtaking assault on our rights”) (Dodd, 2020), “privacy hostile” and “rights-hostile” (Lomas, 2020), “a dangerous, oppressive and completely unjustified move” (Lomas, 2020). The noun “backlash” is frequently used to denote negative public opinion of some trends. Satariano argues that “the use of facial recognition technology in the United States has generated a backlash” (Satariano, 2020).
Speaking about possible reasons for such a negative attitude towards the high-tech trends, human rights concerns and the fear of a totalitarian control possibility prevail. The security move is seen by people as “an enormous expansion of the surveillance state and a serious threat to civil liberties” (Greene, 2017; Dodd, 2020). Authors state that “this technology puts many human rights at risk, including the rights to privacy, non-discrimination, freedom of expression, association and peaceful assembly” and fear that “facial recognition technology gives the state unprecedented power to track and monitor any one of us, destroying our privacy and our free expression” (Dodd, 2020). Valentino-DeVries refers to China’s example where “the government has deployed it as a tool for authoritarian control” (Valentino-DeVries, 2020).

Neutral attitudes displayed by observers mostly focus on the need to balance the trend’s pros and cons, stressing that we must “take a balanced approach to use the controversial tech” (Dodd, 2020) and mentioning “a worldwide debate about the balance between security and privacy” (Satariano, 2020). Contexts with the lexeme “mixed” used to describe the technology trend may also be interpreted as neutral, ones considering both advantages and disadvantages: Several American cities have piloted the live facial recognition systems, often with mixed results (Satariano, 2020).

The advantages of facial recognition are primarily connected with security considerations. Specialists describe it as “the next big leap for law enforcement” (Dodd, 2020). The technology goals are stated directly, saying it “is aimed at catching serious criminals and tracking down missing persons” (Dodd, 2020), “has a role in keeping Londoners safe” (Dodd, 2020), “the AI-powered tech ... will help tackle serious crime ... and help protect the vulnerable” (Satariano, 2020) and facial recognition is used “to spot criminal suspects (Satariano, 2020).

While many negative connotations are rendered with adjectives, the verb used in the examples above appears to be effective in specifying purposes. Verbs tackle, catch, track down and spot are applied in phrases connected with crime and criminals, and help, protect, keep someone safe are used concerning law-abiding citizens. To a certain extent, it builds an impression of the system’s efficiency, thus convincing people of its importance.

Studying the contexts from another perspective, we can see that the attitudes displayed may be subjective or objective, prejudiced or impartial. Among the subjective ones, there are references to personal experience or beliefs, for instance, stating that “the use of census data facilitated the World War II-era abuses” (Vincent, 2019). Another context revealing a similar association is provided below:

“We are a community that has been surveilled in the past, and we’re also a community where the latest technological advancements [were] used in our oppression” (Vincent, 2019). In some cases, it is not an individual but a professional community that approves of the development, for instance: Security services are also hugely interested (Dodd, 2020). On the other hand, statistics and survey results may help provide an impartial judgment of the technological
trend, or rather of the admissibility to apply it for security purposes. These data may be found in the following examples:

The Met said the system was 70% effective at spotting wanted suspects and falsely identified someone as wanted in one in a thousand cases. But Prof Pete Fussey – an expert on surveillance from Essex University who conducted the only independent review of the Met’s public trials on behalf of the force – found it was verifiably accurate in just 19% of cases (Dodd, 2020). The context gives us an insight into the statistical data concerning the system’s effectiveness. Still, even these are not seen as objective, since experts differ in their assessments of the system capabilities.

Technological reasons are provided by observers to sustain their opinions. The system limitations include inaccuracy: for instance, it is “less effective at scanning dense crowds” (Dodd, 2020). Speaking about public opinion, some sources cite alleged public support of the innovation:

The Met rejected claims the scheme was “a breathtaking assault on rights” and claimed that 80% of people surveyed backed the move (Dodd, 2020). The verb “to back” (“backed the move”) displays appraisal. However, as it coexists with negative opinions (“a breathtaking assault on rights”), it is difficult to consider any of them purely objective and impartial. Even within opinion poll participants, there are individuals whose priorities differ, as their needs for privacy do.

Thus, apart from bringing about some evident advantages, the introduction of AI in safety provision is quite naturally connected with several challenges. The lexemes chosen by choice opinion polls participants and security services representatives quoted in mass media, and those used by observers themselves, reveal attitudes towards the trend. Though the issue is contradictory, the lexical means enable us to identify three distinct evaluative groups: the positive, the neutral, and the negative ones. The contexts reveal the potential of adjectives functioning as epithets to render negative connotations, while verbal forms are effective at creating a positive image of the innovation. Lexemes “mixed”, “controversial”, “balanced” tend to reveal a neutral or a tolerant attitude (Nelson, 2007; Castelli & Tomelleri, 2008).

Speaking on the numerous negative attitudes revealed in the contexts, we can suggest that there are several major concerns behind this “backlash”. Most of them are connected with human rights issues. The context below lists other three challenges, namely: technical inaccuracy, threatening human freedoms, and personal data misuse risks:

Inaccuracy is not the only potential rights problem, however. Since the technology can track where we go and with whom, its use could discourage people from freely expressing themselves and associating with others. It also creates a pool of information that could be misused in a discriminatory manner (Vincent, 2019). Thus, we can see how technological advance brings us to face the choice between ethics and efficiency (Sinclair et al., 2005; Gill, 2009).
As most of the publications under study describe, facial recognition systems frequently fall under severe criticism for fear of human rights abuse. Still, it is quite unlikely that hi-tech development will pause in the face of any personal doubts or even technical inaccuracies. Just the other way around, experts turn their attention to The Internet of Things network. Andrade defines IoT as “a global network infrastructure integrating the physical world with the virtual world of the internet by linking uniquely identified physical and virtual objects, things and devices through the exploitation of data capture (sensing), communication and actuation capabilities” and specifies potential applications for it, such as: “Tracking Behavior; Enhanced Situational Awareness; Sensor-driven Decision Analytics; Process Optimization; Optimized Resource Consumption; Complex Autonomous Systems” (Correia da Silva Andrade et al., 2015; Sabri, 2017). There is no doubt, such innovations open enormous possibilities. Still, a sufficient balance is necessary between IT advances and traditional human values. Among the requirements for ethical, or even human-compatible, use of AI applications, is privacy and human rights protection, transparency and accountability, balance, and compliance with the law. V. Dodd stresses that “this is no time to experiment with this powerful technology that is being used without adequate transparency, oversight and accountability” (Dodd, 2020). N. Lomas writes that we need “the right safeguards and transparency in place to ensure that we protect people’s privacy and human rights” and emphasizes that any interference with individuals’ rights should be “by the law, pursue a legitimate aim, and be ‘necessary in a democratic society” (Zysset, 2016; Lomas, 2020).

We are facing another “powerful technology”, as V. Dodd puts it, comparable with the most significant inventions made by our civilization. The technological advantages that artificial intelligence offers us may be great. AI is a breakthrough compared with the invention of the light bulb, a PC, and an engine, but also having its disadvantages and posing certain risks. This paper provides insight only into one of the many ethical aspects connected with the hi-tech advance, which is: human rights. Apart from that, there are fears of AI falling into wrong hands and being used for harmful purposes, fears of it getting out of human control, as well as replacing jobs and resulting in total unemployment. Besides, there is a danger that computerization in some spheres may result in a lower proficiency, and the very value of high-skilled specialists will gradually disappear. This is connected with the fact that some professions require creativity and talent, the need to adapt and to interpret. The use of AI in such spheres will yield just a simplified result, erasing the effort and experience of the professional communities. It refers to artists, writers, translators, and interpreters, among others (Terrizzi Jr et al., 2010; La Fors-Owczynik, 2016).

Artificial intelligence arouses interest in linguistics on its own, as it involves speech production and processing mechanisms. However, any technological advance deserves adequate evaluation and assessment. What is indispensable in one vocational sphere, should be used extremely reasonably and cautiously in another one. Mass media are a successful tool of influencing people, but at the same time, they have the potential to reveal public sentiments, attitudes of various communities toward new trends and procedures (Glassman et al., 2007; Bates, 2004). Linguistic means showing evaluation is an efficient means to get across their message.
Conclusion

The study has enabled us to reveal linguistic means describing personal and public attitudes towards some security issues, namely: enhanced surveillance using artificial intelligence in facial identification. The lexical units denoting evaluation fall within three distinct groups: the negative one (including those showing undisguised criticism), the neutral (calling for a balanced approach) one, and the positive one (mainly describing advantages of the technological trend). Adjectives prove to be efficient in denoting negative attitudes, while verbs describing purpose tend to describe the advantages of AI use in public surveillance (Peterson et al., 2016; Apodaca, 2007). Besides, the opinions expressed with lexical means may be prejudiced (when a person has specific associations, experiences, or memories of similar facts of phenomena) and objective. Some contexts reveal fears of totalitarian control and abuse of human rights, such as the rights to privacy, non-discrimination, freedom of expression, association, and peaceful assembly.

Hopefully, balanced use of technological innovations will pave the way for better performance in many activities. However, digitalization should be a means to assist people, not to oppress them. Moving forward in terms of hi-tech, humanity must at least not step backward in respect toward human lives and traditional human values (Drew et al., 2011; Song & Soliman, 2019).

AI potential and its application for various purposes deserve a thorough study in terms of ethics, safety, technology, and several other sciences. Linguistic research accompanies all of them, language being a means of data exchange, a resource for information storage, and an evaluation tool.

Recommendations

It is suggested that this study be considered for other possible processes and methods for considering the application of artificial intelligence in studies related to human rights so that the subject can be fully examined in various aspects.

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