CONSTRUCTING PR PROFESSIONALS' UNDERSTANDING OF AI FOR PR PURPOSES - A REPERTOIRE ANALYSIS OF PR PROFESSIONALS' BLOG TEXTS

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ABSTRACT

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Title

CONSTRUCTING PR PROFESSIONALS' UNDERSTANDING OF AI FOR PR PURPOSES – A REPERTOIRE ANALYSIS OF PR PROFESSIONALS' BLOG TEXTS

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Abstract

New technologies are here to revolutionize working life and demand agile performances from organizations including their communications departments. PR professionals are in the position to act as pioneers in adopting new technologies such as artificial intelligence based applications. However, PR professionals' knowledge and understanding of AI and its applications is still in preliminary stages, thus, in 2018 Chartered Institute of Public Relations (CIPR) launched the AI in PR panel to scope the influence of AI in PR work. The topic of this master's thesis is AI as a new phenomenon in public relations.

The aim of this thesis was to examine, how PR professionals' understanding of AI for PR purposes is constructed through PR professionals' blog texts by conducting a repertoire analysis. The collected data consisted of 30 blog texts written by PR professionals on the topic of AI in PR. The repertoire analysis searched for dominant repertoires constructed by reoccurring themes in the texts. In addition to these concepts, this thesis includes sections on Rogers' theory on diffusion of innovations, discourse analysis as a research approach, artificial intelligence and the relationship between AI and PR.

The findings of the repertoire analysis found four dominant repertoires in the data: repertoire of educating, repertoire of importance, repertoire of advantage and repertoire of human superiority. Each repertoire was constructed by distinctive themes. The findings concluded that PR professionals construct their understanding of AI for PR purposes by gaining and sharing knowledge about AI, acknowledging the importance and benefits of AI in PR work and by maintaining that in public relations humans have the edge over machines.

Key words

public relations, artificial intelligence, repertoire analysis, blog, communications

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Tiivistelmä

Uudet teknologiat tulevat mullistamaan työelämää ja vaatimaan ketterää toimintaa organisaatioilta kokonaisvaltaisesti – myös viestinnän osalta. Julkisuustyön eli PR:n ammattilaiset ovat avainasemassa toimimaan suunnannäyttäjinä uusien teknologioiden kuten tekoälysovellusten käyttöönotossa. Perustason tuntemus ja ymmärrys tekoälystä ja sen sovellutuksista on kuitenkin vielä alkutekijöissä PR-ammattilaisten keskuudessa, minkä vuoksi vuonna 2018 Chartered Institute of Public Relations (CIPR) kutsui koolle "AI in PR" -paneelin selvittämään tekoälyn merkitystä julkisuustyön alalla. Tässä maisterintutkielmassa aiheena on tekoäly nousevana ilmiönä PR-ammattilaisten työssä.

Tutkielman tarkoituksena oli selvittää, miten PR-ammattilaiset rakentavat ymmärrystä tekoälystä osana käytännön julkisuustyötä. Aihetta tutkittiin PR-ammattilaisten blogiteksteistä hyödyntäen repertuaarianalyysiä. Aineisto koostui 30 blogitekstistä aiheenaan tekoäly PR-työssä. Repertuaarianalyysissa pureudutaan tekstistä kumpuaviin teemoihin, joista muodostuu yksittäisiä repertuaareja. Näiden konseptien lisäksi tutkielmassa käsitellään Rogers'in teoriaa innovaatioiden diffuusiosta (diffusion of innovations), diskurssianalyysia tutkimusotteena, tekoälyä sekä tekoälyn ja julkisuustyön suhdetta.

Repertuaarianalyysin tuloksena aineistosta löytyi neljä hallitsevaa repertuaaria: kouluttaminen (educating), tärkeys (importance), hyöty (advantage) ja ihmisen paremmuus (human superiority). Jokainen yksittäinen repertuaari koostui erinäisistä teemoista. Työn lopputulemana oli, että julkisuustyön ammattilaiset rakentavat ymmärrystään tekoälystä osana julkisuustyötä oppimalla ja jakamalla tietoa tekoälystä, tunnistamalla tekoälyn tärkeyden ja hyödyt PR-alalla sekä tunnistamalla paremmuutensa tekoälykoneita vastaan.

Asiasanat

public relations, artificial intelligence, repertoire analysis, blog, communications

Säilytyspaikka

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1 INTRODUCTION

Communication professionals, such as public relations (PR) experts, have edged their way to become the key players in the changing world of business. Thus, when the professional landscape experiences changes, PR experts must hone and adjust their skillset accordingly, and be ready to take on new challenges. One of the most recent challenge inducing changes in the field has been the application of Artificial Intelligence (AI) technologies, which will continue to change the nature of the job.

Simply put, AI is meant to simulate and reproduce human behavior in technology, thus, the desire to make use of it in various fields from healthcare to finance has risen. The main goals targeted with artificial intelligence are to produce useful machines and understand human intelligence (Garnham 2017, 2). Robots powered by AI already work in our midst creating content and collecting, processing, measuring and targeting data that affect our lives in one way or another (Laajalahti 2017). Dichotomy surrounds the very existence of AI as it is constantly debated whether its overall development and evolution is positive or negative (Laajalahti 2017).

To public relations experts, AI can present new possibilities to influence, facilitate and examine human-machine interactions. Moreover, AI powered tools can speed up processes and provide valuable information acquired from massive amounts of data, through which, for example, messages can be targeted to specific stakeholder groups. This process can lead to influencing specific groups significantly and, for instance, cause a rise in the purchases of certain goods, or even ensure a certain outcome in a nation-wide election. The latter is claimed to have already occurred in the 2016 Presidential Election of the US, with the analytics company Cambridge Analytica using *Facebook's* user data to influence voters (Cadwalladr & Graham-Harrison 2017).

AI technologies already exist in the daily lives of PR professionals but they are yet to make the most of them in the context of their work (Panda, Upadhyay, Khandelwal 2019, 197). Thus, PR professionals need to familiarize themselves with the concept and learn how to best use it in their work. In 2018, the Chartered Institute of Public Relations organized a panel called #AIinPR to assist PR professionals in understanding the impact artificial intelligence has on the skills in the profession (Valin 2018, 2). This initiative has introduced the topic to many and fueled conversation in the midst of PR professionals on several personal, corporate and industry blogs.

The conversation encouraged by the #AIinPR panel has flourished in several lengthy blog posts implicating how PR professionals understand AI for PR purposes. These views constructing the overall understanding PR professionals have of AI are important to the professional field, as the AI infused technologies are new to the professional field and PR professionals have already developed anxiety over the matter (Panda et. al 2019, 198), therefore, prompting

the need for a deeper analysis of the blog texts in question. Moreover, previous research has yet to examine the phenomenon from a similar perspective.

Thus, the research problem of the current thesis is to examine, how PR professionals construct their understanding of AI for PR purposes. The selected data is in the form of thirty blog texts pertaining to and collected by following the AI in PR conversation. The blog posts, from the years, 2017, 2018 and 2019, come from corporate blogs, industry blogs and from personal blogs of PR professionals. The current study deploys a qualitative research method with discourse analysis as the research approach and repertoire analysis as the method of analysis. The analytical focus is on dominant aspects that rise from the texts in the form of repertoires, which are constructed by themes.

The thesis is structured as follows: first in the second chapter, the conceptual framework contextualizes PR in the age of AI. Next, Rogers' theory on diffusion of innovations is introduced and discussed in the context of the present study. Afterwards, the concept of artificial intelligence as well as the application of AI technologies are presented. The second chapter is concluded by offering an overview on the developing relationship between AI and PR. Chapter three, introduces discourse analysis as a research approach of the present study as well as the main analytical concepts of repertoire and theme. Chapter four details a section introducing the research question, data and method of analysis. The fifth chapter of the thesis includes the findings of the data, while the last chapter includes discussion and conclusions of the present study.

2 CONCEPTUAL FRAMEWORK

The present section consists of the basic concepts relating to the topic of the thesis beginning with the contextualization of PR in the age of artificial intelligence. Next, Rogers' theory on diffusion of innovations is introduced followed by the introduction of artificial intelligence with its key terminology and common applications. Finally, the relationship between artificial intelligence and public relations is given an overview on the basis of previous research and the findings of CIPR's AI in PR panel.

2.1 PR in the age of artificial intelligence

Public relations has traditionally relied on the human factor in the strategic management of relations between organizations and their stakeholders. It has been the PR professionals' duty to ensure that the right message from organizations is communicated to the right audience at the right moment via the right channel (Panda et al. 2019, 197). However, the age of AI introduces technologies which humans are able to transfer their workload – if they wish.

Technological advances have provided new tools to transmit messages to stakeholder groups while allowing the PR professional to make each decision in accordance with their strategy (Gunkel 2012). In the age of AI, intelligent applications are not merely tools for PR professionals to use in their work but also the tools to do their work on their behalf (Panda et al. 2019, 197). The emergence of AI solutions has created a fear of losing work to AI powered machines and the PR community, too, has experienced AI anxiety, which refers to the fear of the capabilities and stability of AI (Johnson & Verdicchio 2017; Panda et al. 2019, 198).

The basis of PR work is about managing and upholding the organization's reputation and brand as well as maintaining a good rapport with its stakeholders. The everyday tasks also include designing campaigns, writing press releases, social media monitoring and strategic work. AI could be utilized in number of time consuming PR tasks (Panda et al. 2019, 197). However, utilizing AI technologies, automation and big data can also be feared to lead to "moral indifference and moral blindness" in PR, as argued by Bachmann (2019, 327-328). He sees the Cambridge Analytica scandal from 2018 as a glimpse of a dark future ahead for public relations in the age of AI (Bachmann 2019, 328).

The age of AI brings changes not only to instances of PR work but also to the traditional communication models. The traditional models of communication all depict the human as the communicator and technology as the medium transmitting the messages of human interaction (Guzman & Lewis 2020, 73). The nature of this computer mediated communication (CMC) is about shift from

human to human (H2H) communication to human to machine communication (HMC) and machine to machine (M2M) communication (Gunkel 2012, 1). Moreover, Hancock, Naaman and Levy (2020) have already presented a model for AI-mediated communication (AI-MC) into the mix.

The role of the communicator can no longer be assigned to humans alone. All technologies can have built-in abilities to act as communicators, for example, by producing content such as news-writing programs (Guzman & Lewis 2020, 72). With technology assuming the role of the communicator, the traditional roles depicted are becoming obsolete (Guzman & Lewis 2020, 72; Hancock et al. 2020, 89). Moreover, Guzman and Lewis (2020, 73) maintain that communicative technologies, such as *Apple's* Siri or *Amazon's* Alexa, are not merely communicators by function but also interpreted as such by humans. Hancock, Naaman and Levy (2020, 90) also surmise that computer mediated interpersonal communication after the infusion of AI, which is presented as AI-MC "is not simply *transmitted* by technology, but *modified*, *augmented*, or even *generated* by a computational agent to achieve communication goals." Thus, the role of the human as the communicator is quietly changing.

As the role of the communicator becomes ambiguous, it also has effects on the PR profession. Taking into account the PR professionals' duty as expressed by Panda et al. (2019), who will be the one to create the communicated message, choose the audience, the time and the channel – the PR expert or AI technology? It is unclear, whether the PR expert will begrudgingly succumb to governing and moderating content and solutions created by AI technologies, or make the best of the technological advancements and find synergy. Moreover, what will be the course of stakeholder relationships and engagement if AI mediated communication disrupts the perceived relationship with generated responses and biased content (Hancock et al. 2020, 95)? Finding the suitable approach to AI in PR and constructing an understanding of AI's role in PR is no small task and requires effort and adapting to a new normal.

Harnessing new technologies to provide better communications results has historically not been a strength for the public relations community, as even the process of adopting the internet for PR purposes was seen as slow in the beginning of the 2000's (Holtz 2002, 3-4). Overall, Holtz' (2002) description about adopting the Internet for PR purposes has aspects that resemble adopting AI technologies as a part of PR work. Both require PR practitioners to learn new skills and some need to start from the basics without any expert help (Holtz 2002, 9), even though nowadays expert help is more easily arranged. Furthermore, in both instances the evolution of the new technology has been rapid and the public has found the new technologies quickly. Finally, both waves of new technology have encouraged communications and IT departments of organizations to work together. The end result of adopting the internet for PR purposes has been fruitful, while the results of AI in PR remain to be seen.

2.2 Diffusion of innovations theory

The theoretical standpoint chosen for the present study to explain the phenomenon of AI in PR is Roger's theory on diffusion of innovations. The theory was selected to highlight the process of an established social group adopting a new set of technological innovations. The theory also allows for the examination of both the diffusion process and the social group adopting the new innovation. Moreover, in the scope of the present study, aspects of the diffusion process are reflected to the dominant repertoires and themes constructing them in the data. Diffusion of technological innovations is conceptualized by Everett Rogers originally in 1962 and defined as follows:

"Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system." (Rogers 2003, 5)

Diffusion is about communicating messages that comprise of new ideas (Rogers 2003, 6). Diffusion can either be planned or spontaneous and always includes uncertainty and risk due to the newness of the matter (Rogers 2003, 6 & 35). Moreover, social change occurs, since technological innovations have the potential to bring about social change when new ideas are being invented, adopted or rejected, since each occurrence has its social consequences (Rogers 2003, 6). Thus, diffusion of innovation is bound to bring forth change that has effects on the social group.

The main elements in the diffusion of innovations are identified as innovation, communication channels, time and social system (Rogers 2003, 36). The main elements of diffusion can be placed in the context of the PR industry: the innovation in question is AI, communication channel for the diffusion of innovation is a set of online platforms or interpersonal channels, and the social system the PR community. The only open-ended element is time, since it is yet unclear how long it will take for the PR professionals to adopt or reject AI.

Innovations most often offer at least some benefits for the potential adopters (Rogers 2003, 14), such as is the case with AI technologies for PR professionals. The uncertainty that all innovations embody can be expelled by the gathering of information, which requires effort (Rogers 2003, 14 & 35). The seeking of information will propel individuals to make a decision on the rejection or adoption of an innovation (Rogers 2003, 14). The five attributes of innovations are relative advantage, compatibility, complexity, trialibility and observability Roger 2003, 15-16). These attributes are evaluated by the social system the innovation relates to and determine the time it takes for the innovation to be harnessed into use (Rogers 2003, 36). The social system can consist of individuals or organizations.

Relative advantage refers to the benefit an individual receives from the innovation compared to the previous choice (Rogers 2003, 15). For example, can

an AI infused application gather and analyze data faster and with better results than an entry level PR worker. The greater the advantage received from the innovation is, the faster is the rate of adoption is likely to be (ibid.). Compatibility refers to the innovation's degree of being compatible with the values, past experiences and needs of potential adopters (Rogers 2003, 15). Thus, if the innovation is deemed unfit with the values of the social group, the adaptation period can be relatively slower if it requires a new value system to be put in place (ibid.). AI has raised questions of ethics, biases and immorality (e.g. Bachmann 2019; Hancock et al. 2020), thus making the innovation in parts less desirable to be adopted by the PR community - or more likely hindering the process of adoption. Complexity refers to the level of difficulty potential adopters experience in understanding and utilizing the innovation (Rogers 2003, 16). As the concept of AI technologies might be hard to comprehend due to its different components introduced in section 2.3, PR experts might have difficulty grasping the technology powering the tools that would benefit them, but it should not pose a problem. Meanwhile, the difficulty experienced in utilizing the tools could be speculated to be dependent on the individual.

Trialibility refers to the testability of the innovation for a limited trial period (Rogers 2003, 16). If a trial is possible, it dissolves the uncertainty created by the newness of the innovation (ibid.). Nowadays, as nearly every technological innovation has a limited trial period or a trial version in place, it should not be difficult to test out an AI solution. If the results of the trial are pleasing, decision made to adopt the innovation is estimated to be made quicker. Lastly, the attribute of *observability* refers to the level of how the results of the innovation are seen by others (Rogers 2003, 16). If the results are easily demonstrated, the adoption of the innovation is deemed likely (ibid.). In an organizational setting, AI solutions could be demonstrated to others but it should be clearly noted that, for instance, a press release was created by AI than a human, since otherwise it might not be clear that a tool has been used for the task unless the result is subpar in quality.

The nature of communication channels spreading the message of the innovation to the desired social system affects how the message is received. If the social group has individuals who have much in common, the group is by nature homophilous. Within a homophilous group communication between the individuals is believed to be more efficient than in heterophilous groups in which individuals differ from each other. However, homophily can also prevent innovations from being speedily shared within a social system. This is due to higher members of the social groups only communicating in "socially horizontal patterns", which causes innovations to only remain in their knowledge and not pour down to members with lower socioeconomic status, less education, and poorer technical expertise (Rogers 2003, 362). As a social group, the PR community can be estimated as homophilous, however, it is difficult to estimate whether the knowledge of the use of AI technologies in PR work moves slower due to communication being subdued to higher level PR officers, although it

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could be considered that within a larger scope the AI in PR conversation relays the information further and prevents this issue.

As mentioned above, the five attributes of innovations are all linked to the length of the innovation-decision process. It is the process in the course of which an individual, first, receives first knowledge on the innovation, second, forms an attitude towards it, third, makes a decision to adopt or reject the innovation, and fourth, implements the innovation to finally validate the decision (Rogers 2003, 20 & 37). The process can be shortened to five steps: knowledge, persuasion, decision, implementation, confirmation (Rogers 2003, 17 & 216). Step one, knowledge is gained when the social group first learns about the innovation and of its basic functionality. Step two, persuasion occurs when a positive or negative attitude is formed concerning the innovation. Step three, decision is made when the innovation is engaged with which leads to the decision to either reject or adopt the innovation. Step four, implementation occurs when the innovation is utilized. Lastly, step five, confirmation occurs when validation for the already made decision is sought, which might still change the outcome if deviating opinions are expressed by others. (Rogers 2003, 20.)

The innovation-decision process is the length of time it takes for an individual or an organization to complete the innovation decision process (Rogers 2003, 218). The period can vary, since some can move through the process quickly while others require years to adopt an innovation (Rogers 2003, 20-21). In diffusion of innovation, the rate of adoption can also be noted and measured by the number of individuals in a social group adopting the innovation during a limited period (Rogers 2003, 20 & 37). The rate determines the relative speed it takes for a social group to adopt an innovation. Ordinarily, the rate of adoption takes longer than the "awareness-knowledge" phase (Rogers 2003, 218). It should be noted that the element of time is closely tied to all of the above (Rogers 2003, 20).

Social systems are the final innovation element identified by Rogers (2003). Diffusion takes place in a specific social group that shares common goals (Rogers 2003, 23-24). How the social system is structured affects how diffusion occurs, as roles, relationships and possible hierarchy of the group need to be considered (Rogers 2003, 24). Social systems usually embody norms that can act as a catalyst for innovation rejection (Rogers 2003, 26), for example, the PR community views human as the main communicator and decision maker, which could change with AI solutions being harnessed into use. Social systems have members that act as opinion leaders (ibid.). The opinion leaders share information and advice about innovations and have procured their position by following the norms of the system, being socially accessible and technically competent (Rogers 2003, 26-27). They have the ability to influence their entire social group. A social group can also be influenced by a change agent who comes from outside the social group and uses influence on opinion leaders to impact the innovation decision (Rogers 2003, 27). A change agent for the PR community could be, for example, someone from an organization offering AI solutions.

Rogers (2003, 28) identifies three types of innovation decision that take place within a social system: optional innovation decisions, collective innovation-decisions and authority innovation-decisions. The first refers to an individual within a social system making their own decision on adopting or rejecting an innovation. The second refers to a decision made collectively by the entire social system with consensus. Meanwhile, the authority innovation decision is made by individuals in the position of power without other members' input. (Rogers 2003, 27-28). The innovation decision within the PR industry can be any of the aforementioned with some individuals rapidly making headway and adopting AI solutions, while others wait for a consensus to be achieved or a decision to be made for them. However, it should be noted that PR experts working in different countries, organizations and agencies form their own communication networks (Rogers 2003, 27) and can form their own innovation decisions.

The diffusion of innovations theory includes five adopter categories assigned based on the degree of innovativeness an individual or an organization depicts (Rogers 2003, 37). To specify, innovativeness refers to how early compared to others can someone adopt innovations. Rogers (2003, 287) maintains that socioeconomic status, personality values and communication behavior play a part in the individuals innovativeness. The categories are: innovator, early adopter, early majority, late majority and laggards.

Rogers (2003) has identified the "ideal types" of each adopter category and assigned characteristics to them. Innovators are deemed as venturesome with high ability to consume technical knowledge (Rogers 2003, 282-283). Moreover, they can tolerate risk and uncertainty and accept negative outcomes that can ensue once innovations occasionally fail. They hold an important position in social groups as the launchers of new ideas. Early adopters in most social groups are the opinion leaders who are respected by others (Rogers 2003, 283). They act as role models and once they adopt or reject an innovation, it signals others how to proceed and decreases uncertainty. The category falling in the middle is early majority described as deliberate (Rogers 2003, 283). Consequently, the majority of individuals in a group belong to this category and are willing to adopt innovations after seeing others having success, thus, their innovation-decision period is also longer than that of two previous groups (Rogers 2003, 824). The late majority category are described as skeptical with their objective to adopt an innovation only after peer pressure commands it. Moreover, members of this category demand that uncertainty is removed for them to be ready to adopt a new technological venture, which usually takes place once the majority of the social system has already done so (Rogers 2003, 284). The last category is known as the laggards, who are described as traditional with their outlook in the past and suspicion about new ventures (ibid.). Moreover, the laggards warrant that an idea is successful before adopting it and hold on to their opposition as long as they can.

Additional characteristics assigned to each adopter category are generalized by individuals' socioeconomic status, personality values and

communication behavior (Rogers 2003, 287). The earlier adopters are deemed to have a higher socioeconomic status than late adopters and generally be more social in their communication behavior. Personality values see earlier adopters having greater intelligence, empathy, rationality and educational and professional ambition than late adopters. Moreover, earlier adopters have generally a better attitude toward change and science and better resources to deal with risk and uncertainty. (Rogers 2003, 298). In the scope of the present study, it should be noted that applying and evaluating these characteristics is difficult due to the nature of the data.

In the present study, Rogers' theory on diffusion of innovations will be applied to the PR community as a social system, the communication channel as a blog and the innovation as AI technologies. Repertoires and themes found in the data will be reflected to Rogers' concepts detailed above, as they can reveal aspects about the diffusion process in the context of AI in PR.

2.3 Artificial intelligence

In this section, the basic, relevant concepts of Artificial Intelligence (AI) will be introduced and discussed. The manner in which the subject is discussed remains on a rudimentary and general level, as this is not a computer science thesis. Thus, a broad understanding of artificial intelligence will not be required from the reader. First, the history and definition of the term AI will be briefly discussed, after which relevant key terminology of AI will be presented.

Artificial intelligence governs a universal field providing countless of opportunities to automate, systemize and simulate intellectual tasks (Russel & Norvig 2003, 1). Moreover, problem solving is a key element of AI, providing a range of effective solutions for different applications by the creation of goal-oriented intelligence agents (Ertel 2011, 3). On the whole, AI as a science is interdisciplinary, making use of discoveries in such fields as logic, statistics, image processing, linguistics, philosophy, psychology and neurobiology, for example (Ertel 2011, 9). As an example, IBM's artificial intelligence Watson relies on natural language processing (NLP) in order to understand human created sentences and configure multiple meanings to terms and concepts (Captain 2017 in Jarrahi 2018, 578).

The brief history of the field begins in the 1930s with Kurt Gödel, Alonso Church, and Alan Turing forming the foundations for logic and theoretical computer science (Ertel 2011, 5). In 1956, John McCarthy, a pioneer in the field of AI, made the first key statement of AI in the proposal for the Dartmouth Summer Research Project on Artificial Intelligence that continues as a basic principle in AI research to this day:

"The study is to proceed on the basis of the conjecture that every aspect of learning or any other feature of intelligence can in principle be so precisely described that a machine can be made to simulate it." (McCarthy et al. 2006, 2.)

Defining the term "artificial intelligence" has proven to be more challenging, as during its existence AI researchers have viewed the concept differently and coined multiple definitions for the term. Some of the most famous definitions are the following:

"The goal of AI is to develop machines that behave as though they were intelligent" (McCarthy 1956, in Ertel 2011, 1-2)

"Artificial Intelligence is the study of how to make computers do things at which, at the moment, people are better." (Rich 1983 in Ertel 2011, 2.)

McCarthy's definition is considered relatively simple, while Rich's definition is viewed broader, since it puts emphasis on the adaptivity of human intelligence and machine learning (Ertel 2011, 3). The definitions above are general definitions of AI and, in the section 2.4.1, definitions linking AI and PR will be briefly introduced and discussed.

Rationality is considered the main avenue of AI, which has made developing systems that act and think rationally one of the main goals of the field, rather than creating machines that merely try to mimic human behavior and way of thinking (Russel & Norvig 2003, 2). This avenue puts emphasis on machine learning, as basic AI is a machine only mimicking humans, while machine learning is a system able to determine how to map out a specific task (Sterne 2017, 9).

In the core of artificial intelligence remains the principle that machines can be taught to possess similar, and even broader, intelligent capabilities than humans (Russel & Norvig 2003; Ertel 2011). Perhaps the most famous test formed to demonstrate the similarities between human intelligence and machine intelligence is the Turing test, perfected by Alan Turing in 1950 (Ertel 2011, 4; Flasiński 2016, 3). Originating as the imitation game, the purpose of the test was to see if a machine could pass as human in a conversation. On several occasions, machine intelligence was able to imitate human intelligence and make a human believe they were conversing with another human (Flasiński 2016, 3). If the machine can trick the human 30 % of the time, it passes the test (Ertel 2011, 5). The original test focused merely on the linguistic competence of the machine, however, nowadays the test has evolved to imitating art in the form of paintings and music, for example (Chamberlain, Mullins & Wagemans 2015).

2.3.1 Key terminology and taxonomy of AI

The following table (Table 1) depicts the key terminology of AI as collected from sources mentioned in the table.

Table 1 Key terminology of AI

Term	Definition	Source
General AI (AGI)	Refers to a machine that can handle any intellectual task.	Roos 2018
Narrow AI (weak AI)	AI that handles a specific task. All AI methods utilized today fall under narrow AI and progress in the field is monumentally fast.	Roos 2018; Sterne 2017
Strong AI	A machine with a truly intelligent and self-conscious "mind", feared to take over the world	Roos 2018; Sterne 2017
Machine learning	Algorithm based systems that use large amounts of data and learn through trial and error while autonomously developing itself	Sterne 2017
Deep learning	Techniques of machine learning where several simple processing units are connected in a network in order to let input through to the system, like humans processing visual information through sight.	Roos 2018; Sterne 2017

In order to make sense of the several disciplines of AI and the fields closest to it, a classification system e.g. a taxonomy can be created. The taxonomy of AI can be visualized, for example, by using an Euler diagram in order to present the relationships between different disciplines of AI (Figure 1). In short, an Euler

diagram consists of shapes depicting different concepts that overlap when the concepts overlap as well.

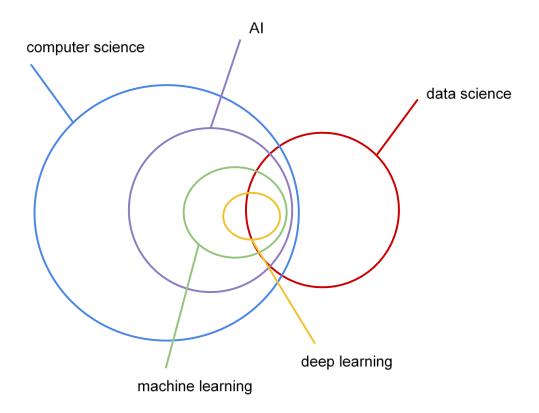


Figure 1 Taxonomy of AI

As can be seen from Figure 1, computer science is the concept the subfields of which are AI, machine learning, deep learning, and, partly, data science. The proximity of the shapes depicts how closely the concepts are linked to each other. For example, AI is the closest subfield of computer science, and machine learning is the closest subfield of AI causing it to be often utilized synonymously (Galloway & Swiatek 2018, 736). Data science is only partly connected to the other shapes, as the concept includes several unrelated sub-disciplines such as statistics in addition to concepts of computer science.

2.3.2 AI applications

Artificial intelligence has only appeared in the everyday life of people in the first decades of the 21st century, mainly through advanced technologies in electric and mobile devices. However, for many, it is still confusing, what exactly is and is not AI technology.

Recommendations systems are key examples of AI in use, while spreadsheets that can do calculations automatically based on pre-given functions

do not require AI (Merilehto 2018, 22; Roos 2018). Most typical example of an AI infused system in people's daily lives is the recommendation systems utilized by *Spotify, Netflix, Amazon* and several newspaper outlets, for example. Recommendation systems, or recommender systems, are the product of narrow AI that combines automatization and machine learning with recommender algorithms learning and deducing the preferences of each user (Karakayali et al. 2018, 5; Merilehto 2018, 35; Roos 2018). Recommendation systems play a significant role in sustaining customer satisfaction and engagement as they are used to personalize content in order for the user to continuously make quick choices and maximize their time using the service (Merilehto 2018, 35-36).

Similarly to recommendation systems, chatbots are utilized for enhancing customer satisfaction and customer engagement (Chung, Ko, Joung & Kim 2018). Chatbots are AI infused software applications capable of communicating via natural language (Dale 2016, cited in Skujve, Haugstveit, Følstad & Brandtzgaez 2019, 31). Chatbots have garnered interest in a variety of fields in recent years, as their technology can be applied in several contexts (Skujve et al 2019, 31). The advancements in machine learning enable chatbots to constantly gain sophistication and, in the future, become indistinguishable from humans in conversation (ibid.). Thus, as experts of creating and sustaining customer engagement, PR professionals also need to learn about chatbots in order to recognize the value and challenges they embody.

Recommendation systems and chatbots are already well-established AI applications. However, new and more sophisticated AI infused phenomena are surfacing quickly. One example are deepfake videos.

"Deepfakes" are hyper-realistic, fabricated but authentic AI infused videos in which people are depicted to say and do things that in reality have not taken place (Westerlund 2019). The videos are the result of deep learning, more specifically, a process in which neural networks analyze data sets with the objective to fully mimic a person takes place (Westerlund 2019, 40). The videos appear authentic and can basically be created by anyone with a computer (Westerlund 2019, 39). Following this fake news era technology, for example, a video of a CEO could be fabricated to ruin their company's reputation and affect its business devastatingly. Thus, the CEO would require a PR expert to navigate the potential threat of deepfake videos and develop a strategy to confront them. Like everyone facing the potential threat of deepfake videos (Westerlund 2019, 40), in order to do their jobs, PR professionals need to understand deepfakes as an AI created phenomenon, why they exist and what is the technology behind them. The starting point is to understand artificial intelligence and its stance in PR.

2.4 Artificial intelligence in PR

In this section, the relationship between AI and public relations is discussed focusing mostly on the possibilities and implications AI offers to PR practitioners and the limited amount of previous research conducted into the phenomenon. Moreover, this section reflects on how AI is viewed by PR professionals in the report by Chartered Institute of Public Relations (CIPR) (Valin 2018) fueling the discussion on the matter and providing data for this thesis. First, however, continuing on the AI section of this thesis, AI is defined in the perspective of public relations.

2.4.1 Defining AI in PR

In the previous section, AI was defined on a general level focusing on the concept's background in computer science. However, it should also be noted that as AI holds no one definition, the concept is available for definitions from the fields the concept is applied. Thus, here, AI can be defined from the perspective of public relations. Nevertheless, as the union between the two fields is still fairly short, only a few of these definitions have been recorded.

The Chartered Institute of Public Relations #AIinPR panel defines the concept as follows:

"[A] sophisticated application of technology whereby a machine demonstrates human cognitive functions such as learning, analysis and problem solving." (Valin 2018, 5).

CIPR's definition follows the unfortunate but understandable misconception that marks all technologies interacting with humans and displaying human characteristics as AI technologies (Valin 2018, 5). This is seen to perpetuate unnecessary buildup and ambiguity around the subject (ibid). While this conceptualization is concise and informative, it fails to pinpoint what AI is for PR professionals. However, drawing on CIPR's definition, another party is bringing this perspective to their definition of AI:

"[T]echnologies showing humanoid cognitive abilities and performing humanoid functions in undertaking public relations activities, independently or together with public relations practitioners." (Galloway & Swiatek 2018, 735).

Here, arguably the most essential role of artificial intelligence in public relations is underlined with "-- undertaking public relations activities, independently or together with public relations practitioners". This is the basic idea of how AI technologies might be utilized in PR in a broader context, which will be discussed next.

2.4.2 The synergy of AI and PR

In the future, organizations are believed to work better as a cause of synergic cooperation between humans and AI (Jarrahi 2018, 579). Thus, harnessing AI to work in the field of public relations is monumentally important for the sake of the profession. Embracing AI in PR is inevitable if the professionals in the field wish to retain offering educated counsel to their clients and creating influence (Galloway & Swiatek 2018).

Less than 3 % of average news stories of public relations are about the relationship between AI and PR (De Oliveira 2017), which makes it no surprise that this relationship is also maintaining a scholarly vacuum with a minimum of published peer-reviewed scholarly works, possibly due to lack of relevant theories (Galloway & Swiatek 2018, 736; Panda et al. 2019, 199). Consequently, the existing scholarly work puts most emphasis on task automation, thus, neglecting other avenues which PR practitioners could benefit from AI based technologies (Galloway & Swiatek 2018). However, some research into the scope of AI in PR has been conducted and published. Panda, Upadhyay and Khandelwal (2019) focused on determining, whether AI is a strategic disruption for PR and map out AI's benefits, limitations, challenges and ramifications to the PR sector. By conducting interviews with 31 PR experts Panda et al. were able to determine that PR professionals are welcoming of AI into the PR industry and view it as partly inevitable particularly in menial tasks, yet they remain skeptical about implementing AI into their work (Panda et al. 2019, 201). Moreover, Panda et al. (2019, 201-205) recognized AI applications for PR work meant to make a case for AI adoption. The findings are summarized in a table form below (Table 2).

Table 2 AI applications in PR

assisting PR managers in designing campaigns
automating tactical tasks
leading to current and relevant insights
identifying and tailoring content for influencers
creating accurate (buyer) personas
identifying and responding to crises
measuring and reporting
content creation
automation of menial and repetitive tasks
managing PR crisis
managing agency-client relationship

The applications marked in Table 2 are based on AI's ability to process and track data and have the potential to save time and induce effectiveness. It should be noted that as AI for PR purposes is anew avenue of study, the few papers exploring it tend to focus on the potential and target less focus on the negative, since the implications AI for the PR sector are not yet clear.

Utilizing AI applications creates the opportunity for better decision-making in the workplace (Jarrahi 2018, 579). With AI assisting in the decision-making process both the analytical (AI) and the intuitive (human) approach to decision-making are connected, and the results are believed to be better than humans or AI trying to rely on one or both approaches alone (Jarrahi 2018, 580).

AI is nothing but analytical, which is often un-achieved by humans, while humans are more intuitive and can utilize common sense in their thought process, making the partnership productive (Jarrahi 2018, 581). AI can do the analytical hard work by going through huge amounts of data and offering results, but humans will know what to do with the gathered knowledge and take necessary action (Galloway & Swiatek 2018, 737; Jarrahi 2018, 581; Lichtenthaler 2018). The process – called intelligence amplification – emphasizes the collaboration between humans and AI, and excommunicates the idea that AI is taking over our jobs or professions, as stereotypically feared (De Oliveira 2017).

The collaboration between human intelligence (HI) and artificial intelligence has another name suggested in business context: meta-intelligence (Lichtenthaler 2018). Applying meta-intelligence, wherein humans and AI work together, could be a reasonable solution for businesses in order to avoid relying on AI or HI alone. Consequently, relying solely on AI is where most companies are estimated to go wrong in their digitalization initiatives (Lichtenthaler 2018).

In the very near future, education into AI technologies will be crucial for PR experts (Galloway & Swiatek 2018, 736). In the short run, this requires PR experts to cultivate a sufficient understanding of AI and its common applications. Consequently, in the long run, this basic knowledge base should be built upon in order to ask critical questions about the functions of AI in the field of PR. (Galloway & Swiatek 2018, 736). Thus, public relations professionals do not need to become experts in AI technologies, rather they require a basic training in order to provide informed counsel to their clients (Sterne 2017, 6; Galloway & Swiatek 2018, 736). However, it would not be ill-advised to hire a few AI experts to educate and guide the professionals on the right path (Lichtenthaler 2018).

2.4.3 PR skills and AI - humans still needed?

When determining the many potential applications of AI technologies in the work of PR professionals, it is necessary to determine the relevant skills and tools in the industry. This is how the Chartered Institute of Public Relations (Valin 2018) #AIinPR panel began its venture to determine the place of AI in the industry. Next, CIPR's discussion paper will be briefly presented and discussed, since the

majority of the collected data is based on the conversation started with the publication of this document.

The #AIinPR panel applied the Global Alliance Global Body of Knowledge (used in connection with the Global Alliance's Melbourne Mandate) to construct a list including 52 skills needed to practice public relations (Valin 2018, 4). CIPR also used a crowdsourcing exercise and characterized over 120 tools in public relations. These tools were categorized and scaled on a five-point scale by function and AI sophistication. The scaling is the following: 1. Technology that simplifies a process or provides a service; 2. Social listening and monitoring tools; 3. Automation of tasks; 4. & 5.: Machine intelligence applied to structured and unstructured data. Only the points 4 and 5 are deemed to represent AI. (Valin 2018, 5).

CIPR's project progressed with 17 PR professionals benchmarking the skills against tools (Valin 2018, 4-6). In the following tables (Table 3 and Table 4), the results are presented. Table 3 presents the analysis organized in three categories focusing on the level of technology in PR skills.

Table 3 Level of technology in PR skills

Level of technology	Number of skills	Example of skills	Outlook in 5 years
skills with zero tech or AI	17 of 52 (32 %)	Ethical considerations; strategic thinking; empathy; theory application	Not likely to change
skills or portions thereof that may have a minor contribution from tech or AI tools	14 of 52 (27 %)	critical thinking; campaign implementation	May increase
skills where tech or AI tools is already more prevalent	21 of 52 (41 %) tech & AI, 6 of 52 (12 %) solely AI	content creation; doing basic research; campaign evaluation	Likely to increase to 38 %

From Table 3, it can be determined that, by combining the first two rows of the table, 59 percent of PR skills, at this point, are mostly not candidates for AI. However, some of their aspects do have minor contributions from technology or AI (Valin 2018, 7). Nevertheless, this percentage may experience changes in the future with new advancements in technology and AI.

The contents of Table 4 depict the number of PR skills that benefit from different levels of technology, and in which tasks the level of technology can be useful. Furthermore, a few examples of specific tools taken from CIPR's crowdsourced spreadsheet of technological tools for PR practitioners are included (AlinPR.org 2019). For example, the level 2 of technology is social listening and monitoring tools, which are only applied in eight percent of PR skill set in tasks such as comment tracking and stakeholder segmentation (Valin 2018, 8). Example tools in this category are Meltwater, Tableau and Comms Matrix. The use of this level of technology is expected to increase in PR tasks in five years with increased automation and AI.

Table 4 PR skills benefitting from technology

Level	Utilized in number skills	Example of tasks	Example of tools	Outlook in 5 years
1: Technology that simplifies a process or provides a service	3 of 52 (6 %)	preparing presentations; project management; planning; proofreading	Grammarly; Doodle; Talkbook	Likely to increase with automation
2: Social listening and monitoring tools	4 of 52 (8 %)	community identification and building; comment tracking; stakeholder segmentation	Meltwater; Tableau; Comms Matrix	Likely to increase with automation and AI
3: Automation of tasks	9 of 52 (17 %)	data analysis; content management; social media engagement	Nuzzel; Hootsuite; Sprout Social	Likely to shift to AI
4 & 5: Machine intelligence applied to structured and unstructured data	6 of 52 (12 %)	trend identification; issue tracking; report generation;	Quid; Traackr; Wordnerds; Autonomous Learning Machine (ALM)	Likely to increase to 38 %

In conclusion, artificial intelligence is already linked with public relations and its presence will only increase in the future. Thus, it is crucial to examine the concept of AI in PR and how PR experts construct their understanding of AI for PR purposes.

3 RESEARCH APPROACH

The research approach of the present study is discourse analysis (DA) drawing on its subfields. The method utilized in the current study is repertoire analysis. The methodology includes the concepts of discourse, repertoire and theme, which will be elaborated on in this section. The methodological approach draws on these concepts due to the interest in examining a phenomenon constructed in textual data on both micro and macro levels. Moreover, as the present study aims to examine how PR professionals construct their understanding of AI for PR purposes through PR professionals' blog texts, examining and tracing themes and repertoires as building blocks of the discourse of AI in PR is well justified. In this section, discourse analysis will be introduced followed by the introduction of the concepts of discourse, repertoire and theme.

3.1 Discourse analysis

Discourse analysis is an interdisciplinary perspective, theory and method used in the fields of linguistics, anthropology, psychology, communication and, increasingly, in business and organization studies (Alvesson & Karreman 2000; Eriksson & Kovalainen 2008; Potter 1996 & 2008; Philips & Hardy 2002). With its roots in the 1950's, discourse analysis has flourished since the mid-1990's established three subfields; critical discourse analysis (CDA), Foucauldian discourse analysis (FDA) and discursive psychology (DP) (Potter 2008, 218). The present study, however, benefits from all the subfields, with more emphasis on discursive psychology and Michel Foucault's views on discourse.

The cross disciplinary interest, and the fact that DA is considered an overall perspective on social life and its research (Potter 1996, 133), has made discourse analysis an umbrella term and molded the concept of DA with each field applying its basic principles to its own uses. The heterogeneous nature of the concept is the basis for discourse analysis not having one set definition even within a singular field (Silverman 2001, 178). In the field of linguistics the definitions, however, are close to one another with examples such as study of language-in-use (Gee 2010, 8); study of language and its effects (Johnstone 2017, 1); study of language use in context (Mäntynen & Pietikäinen 2009, 19); and, study of language use and its role in social life (Potter 2008, 218). Meanwhile in organization studies the focus is more towards the social aspect, for example study of social action mediated through language (Eriksson & Kovalainen 2008, 227); and the study of the social text (Alvesson & Karreman 2000; 1126).

Gilbert and Mulkay (1984) offer an account of discourse analysis that sufficiently combines the most essential aspects of DA:

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"Discourse analysis, then, is the attempt to identify and describe regularities in the methods used by participants as they construct the discourse through which they establish the character of their actions and beliefs in the course of interaction." (Gilbert & Mulkay 1984, 14.)

Context is a crucial element of discourse analysis, as participants are always depended on context (Gilbert & Mulkay 1984, 177; Mäntynen & Pietikäinen 2009, 23). However, in DA, context itself is a multilayered concept as it pertains to all aspects of constructing meaning. Moreover, context as a multilayered concept attempts to depict the situational and temporal aspects of language use (Mäntynen & Pietikäinen 2009, 23).

Discourse analysis can be conducted in a variety ways, for example, micro level analysis of language use in specific texts or macro level analysis of discursive elements in specific contexts (Mäntynen & Pietikäinen 2009, 21; Philips & Hardy 2002, 19). It is also quite common to combine micro and macro level analysis (Gee 2010; Philips & Hardy 2002), since the line between is unclear and both micro and macro level aspects are present as a continuum of one another (Mäntynen & Pietikäinen 2009, 21). Thus, in the present study both macro and micro level elements will be examined in the form of repertoires and themes.

3.2 Discourse

Due to its interdisciplinary and dynamic nature, many scholars view the abstract concept of discourse differently (Mäntynen & Pietikäinen 2009, 18). Regarding the current study, the most suitable definition belongs to the French philosopher Michel Foucault, according to whom discourse can be noted as a construction of reality (Mills 2004, 46). The way people talk about certain phenomena construct them for everyone (Mills 2004, 47). Accordingly, PR professionals blogging about artificial intelligence in their professional arena, construct this phenomenon for other PR professionals and other interested parties. Thus, in the present study discourse is also seen as a construction of reality.

Foucault's view on discourse as constructing reality is also linked to knowledge and power (Eriksson & Kovalainen 2008; Höglund 2016; Jørgensen & Phillips 2002). Through knowledge, different constructions of reality arise, and meaning is produced "by organizing reality into individual repertoires" (Höglund 2016, 47). This allows the opportunity for those with particular knowledge to produce discourses that reproduce and endorse their own position of power (Höglund 2016, 47). Discourse can only be produced after the speaker has established their legitimacy through authority gained by social or contextual position (Höglund 2016, 48; Mills 2004, 46). Validated PR professionals in their field, thus, have the legitimacy and power to produce the AI in PR discourse according to their specific knowledge base and similarly construct their understanding of the phenomenon.

The producer of the discourse also sets the field for the discourse and decides which discourses to include or exclude from it (Höglund 2016, 49). The exclusion of specific discourses sets boundaries to the discourse that is created through the included discourses (Mills 2004, 60). Sometimes, also the excluded discourses have significance (Mills 2004; Höglund 2016, 49). For instance, excluding discourse (and themes) on child labor from fashion discourse has significance.

The concept of discourse is regarded differently also in relation to its accountability. Foucault uses the word 'discourse' when referring to both the abstract concept of discourse, and when referring to countable discourses (Höglund 2016, 45). With *discourses* he refers to the set and culturally divided ways of assigning meaning that alter the subject of conversation (Mäntynen & Pietikäinen 2009, 19). In critical discourse analysis, however, discourse has two different meanings. 'Discourse' meaning language as a social action and 'a discourse' referring to a specific, historically rooted phenomenon that is viewed and usually described in a certain way and from a certain viewpoint (Mäntynen & Pietikäinen 2009, 21). The former can be referred to as the 'little d', while the latter is the 'big D' (Gee 2010).

Foucault views discourses as regulated 'groupings of statements' with discourse specific internal rules (Mills 2004, 43). These 'groupings of statements', in turn, belong to the same 'discursive formation' (Foucault 1972, 117, cited in Höglund 2016, 12). The foucauldian 'statement' is not a single utterance, as a sentence can function as a multitude of different statements depending on the discursive context (Mills 2004, 54). Moreover, statements can be considered as 'serious' utterances conveying reality (Dreyfus & Rabinow 1982, cited in Mills 2004, 55). Discursive formations are regarded as repertoires by Wetherell and Potter (1988, 172). Thus, the levels of Foucault's discourse with a 'group of statements' and 'discursive formation' represent themes and repertoires. Accordingly, in the current study, the discourse – both countable and uncountable – of AI in PR are the themes and repertoires constructed in the data.

3.3 Theme & repertoire

The concepts of discourse, theme and repertoire are linked together. Recurring themes in the form of discursive elements (vocabulary, lexis, metaphor etc.) construct repertoires, which, in turn, construct discourse (Höglund 2016, 58; Mills 2004; Wetherell & Potter 1988). The analytical focus in the present study is on themes and repertoires and in this section the concepts of are introduced.

Repertoires, or interpretive repertoires, as known in Wetherell and Potter (1988) and Gilbert and Mulkay's (1984) works, can be considered as building blocks used by speakers to construct phenomena, actions and cognitive processes (Wetherell and Potter 1988, 172). The examination of repertoires is strongly linked to context. Gilbert and Mulkay (1984) performed their research on

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scientific context, while Wetherell and Potter (1988) researched racism in New Zealand.

Repertoires help readers to make sense of the knowledge provided in text (Höglund 2016, 53). Moreover, repertoires act as 'practices' which can be built on and referred to in the production of discourse, for example, shared knowledge within a community (ibid.). Thus, the creators of blog posts relating to public relations naturally have a pre-existing knowledge of the professional field and its phenomena in the form of repertoires to build on and refer to in their writing such as the repertoire of 'professional ethics' or 'corporate image'.

Repertoires can be considered as patterns forming linguistic registers linked to specific context that can be reproduced (Gilbert & Mulkay 1984, 39; Potter 1996, 135). When producing discourse, participants often draw on different repertoires and mix them in the process of constructing a specific phenomenon (Potter 1996, 135). The aim of the present study is to identify repertoires based on 'clues' provided by recurring themes. This differs from the scholarly work of Wetherell and Potter (1988, 172) who view repertoires as constructed by "a restricted range of terms" with basis in stylistics and grammatical coherence, structured merely around one or more central metaphors. Thus the present study follows more closely to the method used by Höglund (2006).

The concept of repertoire can also be considered as a similar concept with the linguistic concept of register (Gilbert & Mulkay 1984, 39). However, as the concept of repertoire is more established in the fields of discourse analysis and discursive psychology, it is chosen for the current study.

It should be noted that the concept of theme, even though relating closely to the concept of repertoire, has not been established in any significant scholarly works. Thus, the introduction of the concept relies heavily on the work of Höglund (2016), who has established the concept in a way that is suitable for the purposes of the current study. Höglund (2016, 54), interpreting Mills (2004), summarizes the concept of theme and its relation to repertoire in the following:

"A theme can be identified as, for instance, a single word, an expression or a metaphor in a statement. The themes refer to other statements with similar themes and when these statements with related themes form a group of statements, they become a repertoire." (Höglund 2016, 54.)

Regarding themes, it is crucial to note that only individual examples linked together as recurring themes in the same social context can be interpreted as constructing repertoires. Individual themes can also refer to several different repertoires (Höglund 2016, 58).

People use knowledge to make sense of everyday discourse and themes it includes (Höglund 2016, 48). People dealing in the field of PR recognize when they come across an industry blog text and are prepared to identify the themes it may include, for instance, a new or already existing phenomenon in the field including themes of marketing, ethics and corporate responsibility. People also

identify if the themes are foreign or in conflict with the discourse, for example, themes of glorifying religious fundamentalism or racism. Thus, people are able to identify specific discourses as fitting or unfitting to their construction of identity or certain phenomena (Höglund 2016, 48). Moreover, people can use discourse to construct themselves as members or non-members of specific groups (ibid.).

4 DATA AND METHODOLOGY

In this section, the present study is introduced beginning with the research question. Next, blog texts of PR professionals as data will be introduced offering insight into blogs as data and rationale for the selected data. Additionally, the method of data collection will be explained. Finally, repertoire analysis as the method of analysis will be described.

4.1 Research question

How do PR professionals construct their understanding of AI for PR purposes through blog posts?

The objective of the research question is to examine through discourse analysis based repertoire analysis, how the PR community views the concept of PR in the context of their professional field and how the community members explain this new phenomenon in their field to one another as professionals. Themes constructing the dominant repertoires in PR professionals' blog texts aim to depict aspects of PR professionals' understanding of AI as a part of their daily working lives. Moreover, in the context of Rogers' diffusion of innovations theory, the aim is to trace, whether some aspects of the diffusion process can be revealed in the data through themes and repertoires.

4.2 Data

In this section, the data and data collection of the present study are introduced. First, general information about blogs as data for qualitative analysis is briefly provided. Next, the chosen data is introduced by summarizing the topics of the blog posts and describing the type of sites the blog texts appeared. Additionally, the methods of data collection are detailed and numerical information on the data is provided.

4.2.1 Blogs as data

Albeit blogs are just one medium in today's constantly expanding media landscape, the format has persisted in its popularity. Weblogs first became popular in the eve of the new millennium in 1999 (Myers 2010, 2). The basic characteristics of a blog usually include the following: updated regularly, include text, images, video or sound, contain a web of links (Myers 2010, 2). People can use the blog format for several purposes in variety of ways, contexts and settings

(personal, organizational) (Hoffman 2012; Schmidt 2007, 1410) providing various topics for research.

Blogs can be separated into two categories: theme and content (Danesi 2013, 68). The former includes, for example, video blogs 'vlogs', while the latter includes, for example, corporate blogs. In the present study, the focus is on content blogs which will be introduced in the following section. Blogs offer variety in genre with plethora of topics (Danesi 2013; Hoffman 2012; Myers 2010). Styles also differ depending on the nature of the blog, with some posts containing impulsively written personal views, while others are carefully planned and thought-out (Hoffman 2012, 2). Blogs are directed for audiences sharing interests, beliefs and values (Gaines 2013, 67), thus, bringing together audiences with shared knowledge on specific discourses.

Scholars in the fields of communication and linguistics view blogs as valid data for research based on the position they hold as persuaders in all central areas of life (Myers 2010, 3). Basically, the medium is considered to offer intimacy and engagement, and act as a space to freely express one's ideas and opinions (Gaines 2013, 66). Studying language and discourse of blogs provides the opportunity to closely examine what is said and how (Myers 2010, 4).

4.2.2 Units of data

The data of the present study consists of blog texts authored by PR professionals on the topic of artificial intelligence and public relations. The number of selected data units is 30, and all texts have been published during the time period from January of 2017 to May of 2019 in personal, corporate and industry blogs. The complete list of blogs is marked in Appendixes 1 and 2. The rationale for selecting this specific time frame is to gather a sufficient amount of varied data and trace the early development of the discourse that is fairly new. The calculated average length of one blog text is 612 words and all blogs are written in English. Albeit the objective is to examine blog texts written by PR professionals, it should be noted that no detailed credential vetting of blog authors occurred when selecting the data.

The blog texts chosen for the present study represent three types of content blogs: corporate, personal and industry blogs (see Appendix 1). The majority of blog texts (14/30) are from PR and communications firms' corporate blogs. Texts from personal blogs (10/30) are authored by PR professionals who are either PR entrepreneurs or merely PR professionals authoring their own PR-themed blog. Industry blogs (6/30) is a category developed for the present study representing blog texts contributed by PR professionals to independent PR-themed blogs with various authors. The uneven division of different categories is due to the fact that there are more corporate blogs covering the topic than personal or industry blogs. Moreover, it should be noted that the nature of the blogs is unrelated for the purposes of the present study as discourse is constructed in all the blog texts selected as data.

The method of data collection for the present study was three-fold as data was collected in three ways. First, the traditional way of searching data was a *Google* search with different combinations of the key words: artificial intelligence, public relations, AI, PR, "communication professionals". The search found blog posts marking approximately a third of the overall data collection of 30 blog texts. Second way of data collection takes place on the micro-blogging site *Twitter* by following the hashtag #AIinPR set up by CIPR's AI in PR panel – mentioned in section 2.4. The rationale for this was that a *Google* search alone might not bring out all search outcomes on the topic. Moreover, a number of tweets with the hashtag contain links to blog posts authored by a PR professional on the topic of AI in PR. The third way of data collection was finding blog posts through the links on other blog posts, as blogs usually have hyperlinks to other blogs on the related subject.

4.3 Method of analysis

The method of analysis of the current study is repertoire analysis. Drawing on Wetherell and Potter (1988) and Gilbert and Mulkay's (1984) scholarly work, the present study deploys the method in order to examine how PR professionals construct their understanding of AI for PR purposes via different repertoires. The analytical focus of the current study is to identify and interpret themes and repertoires which construct the discourse of AI in PR. The aim is to trace the dominant repertoires that act as "group of statements" (Foucault 1972) constructing discourse. Consequently, themes act as "discursive formations" (Foucault 1972) which construct repertoires. The method is qualitative and performed systematically.

It should be noted that other qualitative methods instead of repertoire analysis could have been utilized to perform the analysis of the chosen data. The methods considered before selecting repertoire analysis were thematic analysis and framing and perspectivising, respectively. Thematic analysis was deemed not sufficient enough for the purposes of the current study, since it was not compatible with discourse analysis as a research approach and could not allow for the meaningful examination of linguistic aspects of the data. Meanwhile, framing and perspectivising would have been more useful in examining media discourse (Ensink & Sauer 2003, 5). Moreover, perspectivising would have warranted a careful inspection of each blog author's point of view, which ultimately did not fit into the scope of the present study. Thus, repertoire analysis proved to be the most suitable for the purposes of the current study.

It is noteworthy to acknowledge that repertoire analysis as a methodological choice for the current study follows the example set by Höglund's (2016) dissertation. Moreover, the present study draws closely on the conceptual framework in her study. Both of which could be deemed as a less than ideal choice as the work in question is a dissertation. However, the

aforementioned work – even if not considered as prominent scholarly work – has set up a conceptual framework and methodology that was quite seamlessly able to be applied for the purposes of the current study. However, the original scholarly works of Wetherell and Potter (1988), Gilbert and Mulkay (1984) and Foucault (1972) have also been utilized.

The analysis of data follows a systematically performed bottom-up approach, occurring first on the textual micro level by tracing themes and organizing them into repertoires on the macro level. To summarize, themes and repertoires act as analytical building blocks constituting findings of which overall conclusions are drawn. More specifically, the data is examined by – after repeated readings of the data – tracing reoccurring themes, second, combining the discovered themes into repertoires, and, finally, selecting the dominant repertoires pertaining to the issue of AI in PR and how understanding of AI for PR purposes is constructed. Themes are traced by mostly examining discursive elements presented in Table 5 below. The list of discursive elements is partly informed by Höglund (2016) and Wetherell and Potter's (1988) work on themes and repertoires but overall established for the purposes of the present study.

Table 5 Discursive elements

expressions
metaphors and similes
descriptive or thematic vocabulary
modal verbs
pronouns
repertition
word choice
superlatives

The following chapter, about the findings of the data is structured by introducing the most dominant repertoires and detailing how each of them is constructed on the textual level through themes. Moreover, aspects of themes and repertoires relating to Rogers' theory on diffusion of innovations will be acknowledged. Namely, the five steps of the innovation-decision process are traced. The steps mentioned also in section 2.2 are: 1. knowledge, 2. persuasion, 3. decision, 4. implementation and 5. confirmation. However, also other concepts of Rogers' theory such as innovation attributes (relative advantage, compatibility, complexity, trialibility and observability) and types of innovation decisions are acknowledged if found in the data.

Throughout the next chapter examples of the data are provided in order to justify the findings. The examples are coded by first giving the repertoire number, which are the numbers 1 through 4 and then assigning a running example number, for instance, the sixth example of the second dominant repertoire is coded as example 2.6. Emphasis (bolded text) is placed on the examples by the thesis author in order to illustrate discursive elements. It should also be noted, that the blog texts are coded by number (Blog 1, Blog 2 etc.), thus,

recorded observations of the data do not include information on the blog authors or publication details. To summarize, the objective is to present the overall justification process for the findings leading to discussion and conclusions in the last chapter.

5 FINDINGS

As detailed in the previous section, the findings are presented in this section by introducing the most dominant repertoires and deconstructing them on the textual level through occurring themes constructed by discursive elements.

The data of 30 blog texts by PR professionals was quite homogenous as a whole. Overall, examining these blog texts revealed that four dominant repertoires clearly stood out. These four repertoires were repertoire of educating, repertoire of importance, repertoire of advantage and repertoire of human superiority. The themes constructing each repertoire were multifold with some occurring continuously in several texts while others were linked to multiple repertoires simultaneously. This section presents each of the dominant repertoires in the order listed above beginning with the repertoire of educating.

5.1 Repertoire of educating

For public relations professionals sharing knowledge and offering insight comes naturally, thus, the occurrence of repertoire of educating in nearly all units of data is no surprise. However, the rationale for its presence varied between the texts and offered valuable information on PR professionals' mindset over the relationship between AI and PR. Next, the repertoire of educating will be deconstructed.

The themes continuously constructing the repertoire of educating were the themes of explaining and clarifying. Moreover, themes of normalizing and opportunity also contributed as building blocks of this repertoire.

From blog texts published in 2017 to 2019, the theme of explaining was most clearly constructed by sharing the basic definition for the concept of AI, while the theme of normalizing appeared in statements attempting to introduce AI technologies as everyday tools. Next, some example statements highlighting this observation.

Example 1.1

"Artificial intelligence is the development of computer systems that are able to perform tasks that typically require human intelligence." (Blog 2)

Example 1.2

"AI refers to tools and technologies to make machines smart" (Blog 5)

Example 1.3

"It's important we understand **what artificial intelligence (AI) means**; it's what makes machines seem like they have human intelligence." (Blog 8)

Example 1.4

"First let's stop and **remind ourselves** what we **mean** by AI..." (Blog 12)

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Example 1.5 "AI is defined in the dictionary as..." (Blog 13)
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The examples above emphasize the basic issue in the matter of AI and PR, which is that the concept of AI is still so foreign in the PR industry that the authors have to begin their texts by introducing the topic. In example 1.1 it is boldly stated what AI is without a source, while in example 1.5 the author consults the dictionary. Moreover, the readers are reminded by the authors of the meaning of AI as well as what it refers to. Basically, the topic appears to be treated as so inherently confusing and distressing that the readers need to be eased into the subject. It is also noteworthy that this was still the case in 2019, which is the publication year of Blog 12 of the chosen examples. Based on these features, it could be surmised that the blog authors are sharing the knowledge they have gathered in order to alleviate the uncertainty they and their colleagues feel about the concept of AI being introduced for PR purposes. Notably, as per Rogers' theory of diffusion of innovations, uncertainty and risk are always included in the diffusion process (Rogers 2003, 35). Continuing with this trend, the authors also deemed important to introduce the history of artificial intelligence:

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Example 1.6 "The term artificial intelligence appeared in the 1950s..." (Blog 1)
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Additionally, some utterances were offered to bring the issue closer to everyday human action:

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Example 1.7
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"Let's look at an example of AI in action in **something we do everyday**: search." (Blog 6)

Example 1.8

"The thing is, AI (that's artificial intelligence by the way) is **already in our lives**, from social media algorithms, to customer service chatbots on websites" (Blog 13)

In these examples a simple textual device is used to make PR professionals see AI as something other than confusing or distressing; the use of personal pronoun we in nominative and possessive form (our). Rather, the topic is linked with a PR professionals' daily task, searching, in example 1.7. Meanwhile, in example 1.8, AI is casually revealed to already be in PR professionals' lives. Overall, opening the concept with concrete examples from the community's daily work routines can be estimated as necessary for the intended readers in order to lessen their confusion and distress. In the process of diffusion, this would mark the first step of the innovation-decision process, knowledge (Rogers 2003, 20).

Facts and figures construct the theme of explaining, as well as the themes of clarifying and normalizing – emphasis is added to the examples:

Example 1.9

"Public relations is **relatively** low in the rankings for jobs that will be **likely** be replaced – estimated last year at 17.53% for public relations executives." (Blog 8)

Example 1.10

"Currently, 12% of practitioners use AI to **support** their **activity**, with this number expected to increase to 38% within the next five years." (Blog 15)

In the example 1.9 from Blog 8, facts and figures are used to establish comfort for the PR community that the executive positions are not in imminent danger to be replaced by AI. The statement is also mitigated by using adverbs *relatively* and *likely*, as otherwise the statement could draw focus to the use of the word *replace* alone. Thus, the utterance is similarly clarifying, explaining and even normalizing.

Example 1.10 from Blog 15, in turn, uses the fact and figure combination to voice the current and future state of AI applications in the field of PR. Notably, here, AI is said to *support* PR professionals, carefully highlighting the idea that AI is strictly something supporting the work, not doing the work instead of the PR professionals. Moreover, the word *activity* is used instead of "work" perhaps to acknowledge the nature of public relations as not just average day-to-day work. Here, these word choices play a role in normalizing the new tools while also explaining and clarifying the fact that the presence of AI in PR will increase.

Examples of normalizing AI in PR appears in the following statements:

Example 1.11

"The thing is, AI (that's artificial intelligence by the way) is already in our lives, from social media algorithms, to customer service chatbots on websites" (Blog 13)

Example 1.12

"--every comms practitioner uses some form of AI within their day-to-day role – and likely it's actually fairly well-embedded for many" (Blog 15)

Example 1.13

"The reality is that artificial intelligence is already present in many tools that public relations agencies use in our day to day lives." (Blog 19)

The above examples with expressions such as *already in our lives* in example 1.11 and *day to day* in examples 1.12 and 1.13 along with a string of ly-ending adverbs *likely...actually fairly* in Blog 15 are carefully pushing PR professionals to realize that AI could and should be seen as a normal part of their work. Moreover, beginning the statements with *the thing is* and *the reality is* make the utterances seem honest, while saying that *every* communications professional uses some form of AI is aiming to affect the reader with the idea that everyone else is doing this already. Consequently, the use of the adverb *already* in examples 1.11 and

1.13 is also managing to make the statements more ushering and reassuring to the reader. This could be viewed even as the second step in the innovation-decision process, *persuasion* (Rogers 2003, 20), with a positive attitude beginning to establish.

In addition to the above themes of explaining, clarifying and normalizing, the theme of opportunity also constructs the repertoire of educating. Firstly, the theme is present by being infused with concrete examples of PR tasks.

Example 1.14

"Monitoring programs can track chatter, alert brands about negative mentions, and **even** identify patterns that communications pros can use to build **better** engagement strategies." (Blog 20)

Example 1.15

"Artificial intelligence can **not only** determine what users want to see and how many users there actually are, **but** it can **also** tell professionals what tactics are working." (Blog 24)

In these examples, the use of the words *even* as an adverb as well as the parallelism *not only...but also* and the comparative *better* are emphasizing the promise of AI technologies in PR.

Secondly, the theme of opportunity as a component of repertoire of educating appears in the form of lists, the functionality of which is to introduce readers the possibilities that AI brings to the field of PR. In the data, lists are comprised, for example, under the following statements:

Example 1.16

"Here are some examples of tasks that an AI systems can help us with now:..." (Blog 19)

Example 1.17

"Here are some ideas for introducing a culture of innovation:..." (Blog 23)

Example 1.18

"Here are some basic ways artificial intelligence can complement the public relations industry:..." (Blog 24)

Notable in all the above examples is that they begin with the same words: *here are some.* The words highlight the notion that there is more on the subject than merely the list that follows. These lists distinctively offer compilations of tasks which can benefit from AI, ideas for introducing a culture of innovation ready to take on AI technologies and basic ways AI can complement the PR industry. Different lists discovered from the data result to the assumption that possibilities within AI in PR reside in many levels and can be incorporated as such. The theme of opportunity also heavily constructs the repertoire of advantage which is deconstructed in section 5.3.

In summary, the repertoire of educating was deconstructed into the themes of explaining, clarifying, normalizing and opportunity. Based on the repertoire of educating and the construction of its themes, it can be suggested that PR professionals remain in need of basic knowledge on the concept of AI and how it can be applied to the field of PR. Moreover, the concept of AI in PR is in need to be softened and normalized for PR professionals in order to lessen fearful thoughts. Finally, the multitude of possibilities offered by AI for PR professionals need to be emphasized in order to enlighten the community about the advancements and assistance AI technologies can provide.

Fitting the repertoire of educating along with its themes to Rogers' theory of diffusion of innovations, it could be summarized that they represent the first steps into the innovation-decision process: knowledge and persuasion. Moreover, gathering information lowers the amount of uncertainty and risk, which are present in the diffusion process (Rogers 2003, 35). This process of gathering information on AI technologies is lined within the repertoire of educating with authors sharing the knowledge they possess in order to decrease the uncertainty faced by their readers on the matter of AI in PR.

5.2 Repertoire of importance

The repertoire of importance has a strong presence in nearly all units of data of the present study. The rationale for its presence is tightly linked to one objective in a PR professional's work, which is to possess the best skills and understanding in order to provide the best for the clients and to the whole of PR community. Understanding and utilizing AI technologies in PR will maintain the course on this objective. The overall message recorded in the data is that the topic of AI in PR needs to be discussed, since it is viewed as having a major impact on the professional field. Next, the repertoire of importance is deconstructed.

Repertoire of importance is constructed most noticeably by the themes of inevitability, urgency, survival and, the theme that is linked to all of them; change. The continuous appearance of these themes, and the repertoire they construct, argue that the topic of AI in PR is regarded as a serious matter to be discussed in the field of public relations.

The themes constructing the repertoire of importance are quite apparent in the texts as they can be found in impactful statements, which capture the readers' attention. For instance, the following statements demonstrate the themes of inevitability and urgency:

Example 2.1

"It is no good thinking 'What is the implication for my role and my function' – we don't have a choice." (Blog 10)

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"Machine learning and AI is growing and **already impacts everyone's lives every day**." (Blog 13)

Example 2.3

"At this point, the question isn't whether you are going to adopt AI, it's **how fast** are you prepared to get on board?" (Blog 28)

These examples highlight the stance which is apparent in several PR professionals' blog texts; AI is irreversibly taking its place in the PR community. The collective statement ending utterances we don't have a choice; already impacts everyone's lives every day and how fast are you prepared to get on board give a sense that it is not up to the PR professional to decide whether to adopt AI technologies. Thus, this depicts AI as something that PR professionals are required to learn how to operate as soon as they can.

The theme of urgency, does, however, also appear in another context where the reasoning behind adopting and understanding AI technologies has more emphasis on the role of PR professionals.

Example 2.4

"--we can't remain **complacent** about the adoption of AI in PR, but must work **diligently** to reshape, retrain, and reinvigorate the industry" (Blog 7)

Example 2.5

"It will be the job of communicators **to support people through this transformation**." (Blog 9)

Example 2.6

"As professionals whose role is focused on building mutual understanding, communications leaders are in a **strong position** to advise how AI implementations will be greeted by the media, influencers and the general public." (Blog 17)

The above examples shed light on the bigger picture which is that AI in PR is not merely about the ability to use AI technologies in their own subjective work or work with AI. PR professionals are in the unique position to offer guidance to others and affect how AI will be met not only in the PR community but in society. PR professionals cannot be *complacent*, as they have to be the ones *to support people through this transformation* and use the *strong position* they possess to advice others. Thus, there is urgency in the community to attempt to get the attention from their colleagues to educate themselves *diligently* on the matter. In the context of Rogers' (2003) diffusion of innovations theory, this stance could imply that the PR community is ready to make a *collective innovation-decision* and progress to the third step on the innovation-decision process, *decision* to adopt the innovation.

Some feel that the PR industry, or the communications sector, is not prepared for the age AI in a manner that it should be, compared to other industries, which causes urgency to be mixed up with frustration as can be seen from the following examples.

Example 2.7

"---when it comes to adopting AI technology to give employees superpowers, communications is **SLACKING**. We're **behind** our colleagues in marketing, and we are **way behind** industries like healthcare, manufacturing, and retail---" (Blog 5)

Example 2.8

"On the agency and client side, while the marketing industry is more data-driven, enabling AI for PR is **woefully behind**." (Blog 11)

Example 2.9

"Why, oh why, then is the communications profession so **far behind** when it comes to embracing automation?" (Blog 30)

All these authors have chosen to exemplify their meaning by pairing the word *behind* with adverbs *way*, *woefully* and *far* for added impact. Moreover, in example 2.7, the verb *slacking* is written in capital letters to intensify its impact. Similarly, repetition is used in examples 2.7 and 2.9 to have the same effect.

The theme of survival comes out in the data with a similarly negative tone wherein it seems that PR professionals must hope for survival in the age of AI.

Example 2.10

"To find a role for humans in the automated future, it is **necessary** to look for areas where human intelligence is vastly superior to AI." (Blog 4);

Example 2.11

"We need to evolve and diversify to remain relevant." (Blog 10)

Example 2.12

"If **we** want to **remain relevant** in the quickly changing communications industry, we **must** be ready to embrace all AI has to offer." (Blog 20)

Example 2.13

"---we can use our brains to figure out what we **need** to know to be able to progress and **remain relevant**, but we **need** to do it now and we **need** to stop thinking of everything as an issue and start thinking of the opportunities." (Blog 27)

Here, the example 2.10 brings out the polarization between humans and machines and hints that it is *necessary* to take action in order to find a place in the new AI-infused world. However, the main concern for PR professionals seems to be to *remain relevant*, a phrase that is used in examples 2.11, 2.12 and 2.13 and paired in all of them with modal verbs expressing necessity e.g. *need* and *must*. In example 2.13 *need* is also repeated three times. Thus, along with the example 2.11, there is an obligation to act in order to remain relevant. Noticeable, too, is the use of the personal pronoun *we* referring to the whole of PR industry that builds a sense of community.

Overall, the PR community seems to be quite anxious over attaining the attention of their colleagues and directing it to the AI in PR conversation. The main theme heralding others within the repertoire of importance, is naturally the theme of change. The theme of change presents itself in three noticeable ways: negatively, positively and as neutral. First, examples of negative change are discussed.

Example 2.14

"What **machines** are doing is **taking away** the entry-level work for graduates and young people to get into an industry." (Blog 13)

Example 2.15

"It's [AI being embedded into PR] **a battle** within the sector at a time when we desperately need to be coming together to tackle the bigger issues." (Blog 15)

Example 2.16

"AI projects will deliver **erroneous** outcomes due to bias in data, algorithms or the teams responsible for managing them." (Blog 17)

As can be viewed from example 2.14, the change brought on by AI in the PR industry is mostly affecting the entry-level positions negatively. The utterance has a negative disposition, as *machines* are *taking away* something from humans, revealing again the polarization between the two. Meanwhile, example 2.15 sees AI bringing *a battle* into the industry which can also be considered as negative. Finally, the example 2.16 from Blog 17 introduces another concrete, negative change linked to AI with a clear statement where the word choice *erroneous* carries the negativity. Overall, however, statements signaling negative change do not appear in the data frequently and are clearly overshadowed by the positive. Nevertheless, they still play a significant role in constructing the repertoire of importance. Example 2.16 also signals doubt about AI technologies being fully applicable in PR work due to, for example, data bias. Thus, the compatibility attribute of an innovation (Rogers 2003, 15) is under consideration.

Positive examples about the theme of change are more plentiful and often appear in the same text with the negative statements, since the authors appear to be quite careful to voice all sides of the matter.

Example 2.17

"We need to get to grips with how AI can **help** us – because it can **help** us – and **start** taking more advantage of it." (Blog 15)

Example 2.18

"As artificial intelligence continues to gain traction, it's an ideal time for those in the public relations industry to **start** determining how AI can **help** them in the workplace." (Blog 24)

Example 2.19

"Artificial intelligence and communications pros can work together to make sense of this massive quantity of data and focus on the **insights that matter**." (Blog 30)

The examples 2.17 and 2.18 both mention *help* AI brings to the PR profession with, for example, assisting in menial tasks. However, in both examples, it is also acknowledged that the industry is not yet applying AI technologies and *starting* is required. Meanwhile, example 2.19 from Blog 30 takes the union between AI and PR a step further by proposing working together and focusing on *insights that matter*. Thus, there is a reality where AI and PR are expected to work together in synergy, and some PR professionals might be looking forward to it. This further implies that the decision to adopt has been made.

The theme of change with the focus on neutral statements on AI in PR are the most frequently appearing in the data. In these statements the change brought on by AI is accepted but not emphasized either positively or negatively. However, it remains as something to be taken seriously.

Example 2.20

"PR people **have to** upskill. We **have to** embrace the change. And we're not alone in facing this **"threat"**." (Blog 16)

Example 2.21

"Carving out time to **get comfortable** now with the power of this technology will **yield tremendous value later**." (Blog 21)

Example 2.22

"Right now, if you're going to **invest** anywhere, it should be in learning as much as you can about things like machine learning and automation and voice recognition. You will thank yourself for it in a couple of years time when **everyone else is in panic mode**." (Blog 25)

All the above statements reflect how vital PR professionals understand working on their AI knowledge and skills. Example 2.20 is built on the modal verb have to and the impact of repetition and short sentences. The air quotes on the word threat, meanwhile, demonstrate the exaggerated notion that AI is a threat not only to the PR industry but to other professional fields as well, which explains the reference that they are not alone – a statements which further neutralizes the "threat". Examples 2.21 and 2.22 usher PR professionals to get comfortable and invest in learning to yield tremendous value later and thank oneself when everyone else is in panic mode. Furthermore, the effort required from PR professionals is referenced by using the expression carving out time and talking about – most likely – investing time to learn about AI concepts. Thus, the challenge brought on by change is recognized but not given an outright judgement as the situation is what it is. Notably, as marked by Rogers (2003) the change can also be viewed as social change that often takes place when new innovation is adopted.

In summary, the repertoire of importance can be deconstructed into the themes of inevitability, urgency, survival and change. It can be determined from the data that the process of accepting AI as a part of PR professionals' work is continuing with shattered views on the matter. Some see the change as inevitable and are prepared to work for it, while others see the industry dismissing the extent of change it will bring to the profession. Moreover, PR professionals are ushering each other to acknowledge the change and familiarize themselves with the new technology. Thus, mostly the consensus in the profession is that it is crucial to learn about AI and upskill in order to maintain the role of PR professionals. As mentioned earlier, this implies that the PR community has moved on to the third phase of the innovation-decision process and is making the decision to adopt this innovation.

5.3 Repertoire of advantage

The repertoire of advantage appears in the data quite frequently with PR professionals considering the positive aspects of AI embedded into PR. Marking the basic notion that innovations always have benefits for the potential adopters (Rogers 2003). Consequently, there is a relatively strong case to be made in favor of AI technologies being infused into PR work mostly in regards to changing the daily workload to focus more on strategic work and spend less time on menial tasks. Professionals in the field are eagerly sharing these new opportunities to each other since much of it is still unrealized within the profession. Despite not appearing in all units of data (24 of 30), the repertoire of advantage is the clearest repertoire existing in the data with also the clearest views on the matter. Next, the repertoire of advantage is deconstructed.

There are only a few themes constructing the repertoire of advantage in the data: theme of opportunity, theme of cooperation and the theme of progress. Overall, all themes represent AI as a positive thing for PR and reflect and compare its possibilities to the present situation where, for example, a huge amount time is spent on tasks that could be handled by AI technology. Thus, relative advantage, which is one attribute of an innovation as identified by Rogers (2003, 15), is considered and voiced in the context of the aforementioned themes.

The theme of opportunity includes statements on the promising potential of AI technologies and the concrete opportunities AI infusion brings to the sector. As the opportunities are plentiful with great promise, PR professionals are not hesitant to voice these to their colleagues out loud.

Example 3.1

[&]quot;All these AI applications will help PR folks save a ton of time on longer projects, resulting in increased opportunities to focus on what really defines a PR agency: ideas." (Blog 3)

Example 3.2

"AI and machine learning, although not yet being used widely in our industry and big data not yet being used widely in business/organisations, **will** enable us to work **faster** and **smarter**." (Blog 10)

Example 3.3

"For example, through innovations in AI, the way a crisis is anticipated or mitigated will likely change drastically. Data will continually be collected and through machine learning and natural language generation, some crises, especially reputational, may possibly be averted, to the extent communications and actions may be sent throughout a supply chain and to news outlets, in machine to machine communication, to minimize or avert a crisis." (Blog 11)

Example 3.4

"One of **the greatest** potential benefits of AI and public relations is that it **could** mean you never **have to** complete a monotonous task ever again." (Blog 20)

The four examples above all seemingly emphasize the potential AI brings to the public relations sector. It will save time, allow focus to be transferred elsewhere in the job, allow for efficient and better work results, help to prevent or deter crises and minimize menial tasks. It is significant to notice the use of modal verbs, which communicate the writer's view. Modal verbs in these examples are *will*, *may*, *could* and *have to*. It's also noteworthy to mention that here the modal verb *will* acts also as a future tense expressing a voluntary action. Paired with verbs such as *help* and *enable* and adverbs such as *likely* and *continually*, *will* is used to express a positive view. Same goes for the uses of *may*, *could* and even *have to* in these examples.

Examples from 3.2 and 3.4 also demonstrate the use of comparatives (*faster*, *smarter*) and superlatives (*the greatest*) with the same positive impact for the reader. Finally, the word choices and expressions such as *PR folks*, *save a ton of time* in example 3.1 and *change drastically* example 3.3 carry a specific tone for the reader. Referring to PR professionals as *PR folk* signals a carefree and familiar stance towards the social group and the relaxed expression about saving a ton of time gives the impression that the expression is honest; a lot of time will be saved. Meanwhile, talking about *drastically* changing managing crises raises the readers' attention as the word choice is a powerful pair to the verb *change*, even though here it is mitigated with the adverb *likely*. Overall, these examples give the impression that PR professionals are eagerly waiting for the opportunities supported by AI.

The theme of cooperation is about the views on the alliance between artificial intelligence and PR and, more specifically, about its more positive implications to the PR profession.

Example 3.5

"Far from **stealing** our jobs, AI **can** make us **better** at them. The **future** of artificial intelligence and PR is **bright** and **positive** -- a **future** that we **should embrace**, rather than **fear**." (Blog 2)

Example 3.6

"--a **healthy combination** of automation to streamline the workflow and **human emotion will** serve the public relations industry best." (Blog 24)

Example 3.7

"--if we up-skill and learn more about data and AI and how it works **WITH PR**, public relations practitioners can really **make headway**, reinforcing their purpose, their role and the value they **can** add to an organisation. It needn't **kill** public relations!" (Blog 27)

The examples above demonstrate the desired balance between the work done by AI technologies and PR professionals. Examples 3.5 and 3.7 depict the polarization the issue has brought to the PR community. In example 3.5, AI is said not to *steal* PR jobs but to make PR people *better* at them, and, later, PR professionals are urged to *embrace* the future of AI and PR rather than *fear* it. Correspondingly, in example 3.7 it is said that with AI, PR professionals can *make headway* and that AI need not *kill* PR. Thus, the pairings *steal-better*, *embrace-fear* and *make headway-kill* emphasize the polarization and let the reader be directed to the positive wording.

Word choices creating an optimistic stance are also present elsewhere in the examples with adjectives such as *bright*, *positive* and *healthy*. PR and AI are also linked together by certain linguistic devices: by repetition in example 3.5 with repeating the word *future*, in example 3.6 with the expression, *a healthy combination*, and in example 3.7, by marking *with PR* in capital letters. Finally, modal verbs *can*, *will* and *should* are again used for impact.

The theme of progress also plays a role in the repertoire of advantage, as AI is viewed to provide the PR profession with advancements which can, for example, minimize menial tasks and redirect time to be spend on more strategic work.

Example 3.8

"By taking advantage of the automation on offer, it means that those at any level can focus more on the intuitive parts of the role and further develop as professionals as a result." (Blog 15)

Example 3.9

"--artificial intelligence is a valuable tool that **will help** agencies to automate and perform routine tasks **more efficiently**. This **will free up** valuable time that professionals can dedicate **to better serve** clients, journalists, prescribers, influencers and other publics with whom we deal with on a daily basis." (Blog 19)

Example 3.10

"AI can create **greater** efficiencies, save time, and **help** you make **more informed** decisions for your clients or company. Used properly, it **will** remove the **mundane**, **tedious** tasks and **free** you to do what you do best **– develop thoughtful**, **dynamic**, **creative** strategies for clients." (Blog 21)

The advancement PR professionals can make with the help of AI is multifold, with PR professionals developing themselves as professionals as well as better serving their clients. Notable in the above examples is how adjectives and verbs are used to elevate the positive advancements brought on by AI technologies. The comparative word *more* is used in the examples both with verbs and adjectives, but mostly in conjunction with the latter. Example 3.8 marks the word to be used with a verb in focus more, while in examples 3.9 and 3.10 it is used with adjectives, *more efficiently* and *more informed*. The line of other adjectives also in comparative form are better and greater in examples 3.9 and 3.10. In the latter example, adjectives are also used to emphasize the change in the job if AI is used properly; mundane and tedious tasks are removed and replaced with thoughtful, dynamic and creative tasks of strategy development. The words free and help also make appearances in the examples to highlight the positivity of the message. AI will help and give the freedom to do more demanding, meaningful activities for clients as a result. Clients and other stakeholder groups are mentioned here in examples 3.9 and 3.10, while in example 3.8 from Blog 15 the focus is more on the PR professionals' own development.

The repertoire of advantage constructed by the themes of opportunity, cooperation and progress comprises the most positive views PR professionals have about artificial intelligence. Some even provide concrete examples as to how to make the most of the new technologies, even though none are – yet – admitting to using them. This could indicate that the collective decision to adopt AI technologies for PR purposes has been made but the innovation-decision process is yet to reach step four, implementation (Rogers 2003). Consequently, step two, persuasion, with the social group forming a positive attitude appears to be in motion in these texts. However, it could also be that the innovation decision-process is progressing in unusual order – which Rogers (2003, 22) notes possible – which could, for example, suggest that the decision to adopt has been forced by the changing organizational climate and not made voluntarily by the social group after all.

Nevertheless, the desire and need to be on the edge of the new technological revolution seems to be quite strong within the PR community. The circumstances of not having enough time to focus on strategic tasks and innovations due to the repetitive, time consuming tasks appear to have numbed a part of the sector, which is why AI is rather welcomed to change the day-to-day work for the better. However, in order to convince others to see the positive about AI infusion, a need remains to recognize the doubts people have about AI by polarizing the positive and the negative aspects of AI in PR. Thus, in light of the positive remarks, AI appears to have a way in with the PR professionals if they have enough courage to take the leap.

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5.4 Repertoire of human superiority

The repertoire of human superiority is born out of PR professionals' need to demonstrate that people still have value during the age of AI. In the data, this repertoire includes much juxtaposition between human and machine. The main themes constructing the repertoire are expertise, reassurance and humanity. The first two comprise mostly of statements emphasizing the most valued *human* skills PR professionals have that make them invaluable for their professional field. Meanwhile, the theme of humanity is more about the human factor and why humans will always trump machines. The themes appear to collide within the repertoire more than in other dominant repertoires. Next, the deconstruction of these dominant themes of repertoire of human superiority.

The theme of expertise consists of statements where PR professionals are lifting each other up in order to build a strong sense of professional expertise in the community before welcoming AI. They list characteristics of a PR professional and describe the traits they have without which the job cannot be done, in case AI is feared to replace humans in the industry.

Example 4.1

"With new technology comes the emergence of new roles, and some of which will need to draw on our collective skill set – **creativity**, **engaging narrative**, and a **fundamental understanding** of human behaviour." (Blog 8)

Example 4.2

"Our communications skills could also support the development of wording for AI, such as chatbots. We are **masters of creating engaging content** so it makes sense to seize opportunities such as this." (Blog 9)

Example 4.3

"Successful interactions with journalists and other sophisticated stakeholders require **impeccable judgement** which is often based on instinct." (Blog 17)

Example 4.4

"Public relations professionals possess **intangible communication skills** that allow them to build **meaningful** relationships with clients and members of the press. These skills **cannot be replicated** by a computer, and according to a recent Oxford study, PR specialists only have an 18% chance of being **replaced** by artificial intelligence." (Blog 28)

From the above examples, it is apparent that only extremely bolstering word choices are used to describe a PR professional. They have *fundamental understanding* of human behavior (example 4.1), *impeccable judgement* (example 4.3) and *intangible communication skills* (example 4.4), and they are also *masters of creating engaging content* (example 4.2). It stands to reason that there is a motivation behind this abundant credit they give themselves as *our* attributes in examples 4.1 and 4.2. Moreover, as to bemoan the possibility that a machine would handle interacting with stakeholder groups in the future, stakeholders are

referred to as *sophisticated* (example 4.3) with whom *meaningful relationships* can only be built by someone with *intangible communication skills* which *cannot be replicated* (example 4.4). However, there are, of course, differences between the messages in the examples. In example 4.1 from Blog 8, PR professionals are encouraged to build new roles by reaching in their skillset in the age of AI. Meanwhile, in example 4.2 from Blog 9, they are encouraged to support AI technologies with their skills of content creation. In the other two examples, however, the stance is more defensive with emphasizing the need for humans in PR due to their superior skills, with the latter statement also citing a study for a further reassurance.

The theme of reassurance delivers a calm message to PR professionals about their job security which some are doubtful about with AI having already taken over several positions in other sectors. In the data, there seems to remain a need for balance between all that AI technologies can and cannot do for humans to soften the power of the new technology.

Example 4.5

"However, the soft skills -- relationship building, creative strategy development, trust building and storytelling -- will **remain** the **provenance of PR professionals**, not machines." (Blog 2)

Example 4.6

"It might suggest that being a business partner is the place to be as it is the strategic work which is at the heart of the role that is **less likely to be replicated** by AI." (Blog 12)

Example 4.7

"--machines and bots "have no moral compass" for the time being at least, and it **remains for people** to enforce the ethics in PR regardless of what tasks we give to technology." (Blog 16)

Example 4.8

"Yes, machines can be programmed to automate processes, spot patterns and even mimic human behaviour, but without a curious mind, innovation is **impossible**. And at a time when audience behaviour is constantly shifting in response to media fragmentation, this **innately human trait** is more important than ever before for PR professionals." (Blog 26)

In the above statements, the presence of reassurance is built by expressing which tasks will *remain* (examples 4.5 and 4.6) for PR professionals and which are *less likely to be replicated* (examples 4.7) by AI technologies. Moreover, the last statement emphasizes that innovations are *impossible* without the curious human mind. However, these aspects alone will probably not sooth the restless minds of PR professionals, thus, concrete examples are offered. Possessing soft skills, acting in a business partner role, enforcing ethics and having a curious mind are few of the essential assets of PR professionals mentioned here. It should also be noted that again a strong polarization between humans and machines is reflected in these statements much to the humans' favor. For instance, in example 4.5, soft

skills are said to *remain the provenance of PR professionals, not machines*, wherein the word *provenance* exhibits the more powerful humans. In addition, in example 4.8, the curious human mind is referred to as *innately human trait*, thus, subtly bringing forth the inhumanity of AI and the power of humans. Example 4.8 also represents the theme of humanity but was chosen to demonstrate reassurance due to its encouraging message to PR professionals. AI technologies can do much for PR professionals except – at least for now – take over their jobs.

The final theme is humanity, which was a theme quite difficult to name, as it includes statements demonstrating both PR professionals' expertise and reassurance but is still more adamant in emphasizing the human's role in PR. Compared to the previous themes, the word choices are more absolute and listings of tasks, abilities and traits are longer. It seems that PR professionals wish to convince each other that the human side is still stronger than the machines, in order to work with them without uncertainty and fear of being replaced.

Example 4.9

"There are still some essential human skills that the robots **will never be able to gain**. Think strategy, creativity, ethics, and people management." (Blog 13)

Example 4.10

"But **no program has the ability**, for example, to design a comprehensive communication strategy for a client; to establish personal relationships with media and influencers to they can be receptive to the messages of a brand; to manage a crisis communication campaign; or to choose an original location to make a difference in an event." (Blog 19)

Example 4.11

"These **computers still lack the basics** that differentiate successful PR professionals –empathy, intuition, common sense, human touch and life experience. These abstract characteristics **spawn creativity** and **a superior PR product**, and they **are not replicable by a machine**." (Blog 21)

Example 4.12

"Empathy, listening, creative problem solving, and building trust are all qualities that **will always give us an edge over machines**." (Blog 30)

The examples above express the PR professionals' view that humans have and will continue to have skills that machines cannot master. The statements have quite definitive expressions with human abilities being referred to as something that *robots will never be able to gain* (example 4.9) and that *will always give us an edge over machines* (example 4.12). These statements in addition to the phrases *no program has the ability* (example 4.10) and *computers still lack the basics* (example 4.11) make it quite clear that as of now AI technologies are not expected to surpass humans in the PR sector. The *skills, abilities, characteristics* and *qualities* are listed in each statement with four to five examples only a couple of which are the same in different statements. Thus, it could be suggested that all these elements mentioned, such as empathy, creativity and relationship and trust-

building, *spawn the superior PR product* referred to in example 4.11. This product is, presumably, the result of the humanity PR experts possess.

Similar to the repertoire of advantage, the repertoire and themes constructing the repertoire of human superiority give the impression that the innovation-decision made to adopt AI technologies for PR purposes has not been collectively made by the PR community. More specifically, it appears that again the phase two of the innovation-decision process, *persuasion*, is being worked through. Here, the attitude is formed more carefully than in the repertoire of advantage by examining the issue by comparing and contrasting humans and machines and emphasizing the human traits for reassurance. However, the need for this is established by the completed innovation-decision to adopt AI technologies.

Overall, the repertoire of human superiority plays an important role for PR professionals constructing their understanding of AI for PR purposes, since their unique abilities and attributes are brought to the center. This requires self-reflection, which can be hard to initiate, but the PR community has found the motivation for it due to the emergence of AI technologies. Moreover, they demonstrate their humanity by reassuring each other and recognizing the features which make them indispensable as experts, even though no machine has yet threatened their position.

6 DISCUSSION AND CONCLUSIONS

In this section, first, the findings are discussed based on the observations made in the previous section. The results will be illustrated in Table 6 and deliberated further afterwards. Table 6 marks repertoires and themes, which were examined with the aim of tracing how PR professionals construct their understanding of AI for PR purposes as revealed by PR professionals' blog texts. Moreover, the diffusion process of adopting AI technologies for PR purposes is dissected further in this section.

The second part of this chapter concludes the present study by briefly summarizing its focus points, considering the limitations of the current study and offering avenues for future research. Furthermore, the contents of the present study will be critically evaluated.

6.1 Discussing the findings

The findings of the present study are summarized in Table 6 simply by placing the dominant repertoires in the column on the left and their respective themes in the column on the right. The findings are also marked in Appendix 1. Next, these findings will be discussed proceeding repertoire by repertoire and finally, the findings will be discussed in the contexts of Rogers' diffusion of innovations theory aspects of which were revealed in the data by examining themes and repertoires.

Table 6 Analysis findings

Repertoires	Themes
Educating	explainingclarifyingnormalizingopportunity
Importance	inevitabilityurgencysurvivalchange
Advantage	opportunitycooperationprogress
Human superiority	expertisereassurancehumanity

To deliberate on these observations further, it can be suggested that PR professionals are beginning to understand their need to properly assess the ramifications of AI technologies being and not being embedded into their work. The repertoire of educating is born out of confusion, uncertainty and the need to provide background knowledge to the overall concept of AI and how it relates to PR. This indicates that gaining knowledge and educating themselves and others arises as an integral part of how PR professionals construct their understanding of AI for PR purposes. The repertoire of educating had a very prominent role in the data, as nearly all blog texts include themes constructing it. Consequently, it can also be viewed to indicate that sharing knowledge about the phenomenon is warranted and that the concrete adoption of AI technologies is still in early stages. This observation is examined later on in the context of diffusion of innovations theory.

Based on the findings, it can be determined that the PR community needs to be taught not to fear the change that AI is bringing but to embrace it and to adapt and develop their skillset accordingly. Thus, the appearance of the repertoire of importance, which includes PR professionals attempting to voice their concern over being left behind while other sectors make the most of AI technology. Moreover, PR experts wish that the community would upskill, in order to help themselves to navigate their daily routines better, and, be in the position to help and guide organizations and communities dealing with AI. Thus, noting the importance of the issue acts as a vital part in constructing PR professionals' understanding of AI in PR. The repertoire of importance had a notable role in the data suggesting that emphasizing the issue has reached a level of high importance in order to gain the awareness of the whole professional field. What is more, it signaled that a decision to adopt AI technologies as a part of PR work has already been made, since there seems not to be any other choice.

One of the conflicts making PR professionals wary of adopting AI is the notion that machines will take over, when, instead, the intelligence infused machines aspire to help people do their work better. The repertoire of advantage appears to highlight the opportunities AI brings to the PR sector. The opportunities introduced seem endless for supporting PR work and enabling more time to be spent on strategizing instead of handling time consuming menial tasks. AI could even be viewed to open avenues for self-development as a PR professional. The amount of potential benefit offered in adopting AI technologies in PR work had most likely created optimism in many PR experts who signaled it in their blog texts. Imagining and reporting the new possibilities also might strengthen the faith in the future of the profession in the age of new technology. Thus, noting the potential benefits has a notable part in constructing PR experts' understanding about AI in PR.

As voiced in texts demonstrating the repertoire of human superiority, the human factor is expected to uphold the PR profession in many years to come, even if the work PR graduates do might radically change. The reassurance 55

offered to everyone working in the PR field holds on to the fact that AI technologies are merely intended to support people in their work. Thus, the machines will not take over – at least for now. However, it should still be validating for PR professionals to read that humans remain as the real professionals while machines are just machines. This view marks that in order to understand the concept of AI in PR, the PR community needed to relieve themselves of the idea that machines are better than them in their line of work. The repertoire of human superiority appears to maintain the notion that within the PR sector, a decision has been made to adopt AI technologies, otherwise there would be no need for validating and reassuring that humans are still the ones in charge. Notably, this appears to be the consensus within the #AIinPR conversation started by CIPR's AI in PR panel.

Considering Roger's theory on diffusion of innovations on the basis of the data, it appears that the innovation-decision regarding adopting AI technologies for PR purposes has been made. However, the innovation-decision process as designed by Rogers (2003) as a five step program, has yet to be completed in the scope of the gathered data. More specifically, the first three steps – *knowledge*, *persuasion* and *decision* – can all be recognized and assigned to themes and repertoires in the data. However, the last steps, *implementation* and *confirmation*, are not referred to in the data.

Repertoire of educating, constructing of themes of explaining, clarifying, normalizing and opportunity, can be linked to the first steps of the innovationdecision process, knowledge and persuasion. The basic functionality of the repertoire is to share knowledge about AI to other PR professionals and steer them into forming an attitude towards the concept. The themes of explaining and clarifying support the first step, while the themes of normalizing and opportunity signal persuasion. Meanwhile, the repertoire of importance, constructing of the themes of inevitability, urgency, survival and change, appears to line with step three of the innovation-decision process, decision. Namely, the themes of urgency and inevitability signal that the decision to adopt AI for PR purposes has been made. The repertoire of advantage supports both steps two and three with the texts focusing on forming a positive attitude towards AI for PR purposes and reaching a stage where the technology is viewed as a part of PR professionals' lives with concrete examples. The same two steps are also traced within the repertoire of human superiority, the functionality of which is to help the community to form an attitude about AI through reassurance that is warranted since AI is to be embedded into PR work.

The nature of the innovation-decision is ambiguous, as there are three types of innovation-decisions (Rogers 2003, 28) – collective, authority and individual-all of which could be applied to the context of the present study. In the data, the first two can be theorized on the basis of the innovation-decision process. On one hand the decision could be considered as a collective innovation-decision of the PR community, since, based on the findings in sections 5.1 and 5.2, the decision is based on the knowledge and persuasion (attitude) gathered and, thus, takes place after these two steps. However, on the other hand, as more clearly indicated

by the findings in sections 5.3 and 5.4, the innovation-decision seems to have been presented by an authority, since the innovation-decision process appears to proceed in an irregular order with persuasion taking place after the decision. In the scope of the present study, however, the matter cannot be thoroughly dissected.

6.2 Conclusions

In this master's thesis, the focus was on determining how PR professionals construct their understanding of artificial intelligence for PR purposes through PR professionals' blog texts. A discourse analysis based repertoire analysis of thirty blog texts was conducted in order to trace the dominant repertoires present in the blog texts about AI in PR. Thus, the analytical focus was on repertoires and the themes constructing them. Moreover, as per Rogers' diffusion of innovations theory, a secondary focus point was to see, whether aspects of the diffusion process could be revealed through themes and repertoires.

As detailed in previous sections, the main dominant repertoires found were the repertoires of educating, importance, advantage and human superiority. Each repertoire marks how PR professionals construct their understanding of AI in PR. In the repertoire of educating, PR professionals emphasize learning, gaining and sharing knowledge about AI, while repertoire of importance sees them grasping the prominence of the issue and the need for upskilling. Meanwhile, repertoire of advantage includes PR professionals acknowledging the benefits to be acquired through AI technologies. Finally, in the repertoire of human superiority, PR professionals construct their understanding of AI in PR by contrasting humans and machines and eventually maintaining that they are not in the position of being replaced by AI, but are in the position to make the most of the new technologies and build synergy with them.

Rogers' (2003) theory on diffusion of innovations can be applied to the topic of AI in PR by linking it to themes and repertoires. Some notable findings in the data based on themes and repertoires were that only a few steps of the innovation-decision process could be traced. Namely, it can be assessed that PR professionals have only just completed or begun to complete the first two or three steps of the process. The data suggests that of the five steps, *knowledge* and *persuasion* have been gained with the third step, *decision*, growing or already made by the social group here named as the PR community taking part in the AI in PR conversation via their blog texts. Nevertheless, the last to steps, *implementation* and *confirmation*, remain unfulfilled as many have yet to take concrete action in knowingly applying AI technologies in their work. Thus, further research avenues could focus on tracing the diffusion process thoroughly.

This thesis has limitations beginning with the fact that the findings are based on discussions in PR professionals' blog texts by only a portion of the PR community. Furthermore, this portion of the PR community belongs to the 57

branch discussing the AI in PR issue as intended by the CIPR's AI in PR panel. Thus, the voice of other PR professionals outside this conversation remain unheard even though the issue relates to them as well, therefore, the data is very limited as to applying the findings on a more general level. Moreover, the themes and repertoires could have been differently constructed if the data had been, for example, in spoken form or in the form of an interview. It is evident, that the present study merely scratched the surface of the topic of AI in PR and provided an introductory look into the topic on the basis of PR professionals' blog texts. With a larger amount of data, the concept of AI in PR could have been explored more deeply and other topics such as AI and ethics in PR could have been examined.

As more research will be conducted into the role of artificial intelligence in public relations, the most prominent topics of research could be communication ethics in the age of AI, and artificial intelligence mediated communication (AI-MC) which Hancock, Naaman and Levy (2020) have already begun to implore. As AI will take on more permanent and stable role in all communications, its implications to Shannon and Weaver's (1949) sender-receiver model should also be considered. Furthermore, as noted in data, beginner and junior-level PR work is expected to diminish or change radically with AI technologies being applied in PR work, it would be prominent to examine this process and the views these PR officers have about the matter.

In par with the limitations of the present study, an evaluation of the thesis requires to be offered. Critically evaluating the present study reveals that other theoretical or methodological choices could have been considered in order to deliver more salient and valuable results. As a research approach, discourse analysis could have been utilized on a deeper level and the theoretical foundations could have been improved by adding other theoretical concepts. One problem beginning at the time of writing the background chapters of the thesis was that very little research had been conducted into the concept of AI in PR. Thus, some references chosen were weaker on a scholarly level than warranted and some primary sources were referenced quite heavily. However, the findings based on the chosen data were clearly detailed and presented and reached the aims of the research problem.

Nevertheless, this thesis proclaims that PR professionals are welcoming towards a more future-proof field of communications with their understanding of AI for PR purposes strengthening by educating themselves and their colleagues on AI, and urging them to see the importance of the matter while maintaining that humans will remain the ones to lead the charge in the field of PR. Overall, the contribution of the current study to the field of PR is to acknowledge the nature of the AI in PR conversation and how it pertains to PR professionals constructing their understanding of AI. The PR community is a homophilous social group, wherein the danger lies that new ideas are only communicated within the higher level operatives and information takes longer to pour down to larger groups. However, the AI in PR conversation is preventing this on a larger industry level and most likely also impacting PR professionals in

various positions. Thus, it remains pertinent to examine this conversation and the seeds sown in the process which can have relevant impact on the PR sector as a whole and alleviate AI anxiety in the course of this technological transition.

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APPENDIX 1 CATEGORIZED DATA AND FINDINGS

Number	Title	Publication site	Publication date	Blog category	Main themes	Main repertoires
1	How Artificial Intelligence is Impacting Public Relations	CASACOM	2.11.2017	corporate blog	inevitability; opportunity; explaining; clarifying	educating; advantage; importance
2	Artificial Intelligence and PR: What You Need to Know	Marx communications	4.12.2017	corporate blog	opportunity; explaining; clarifying; reassurance; cooperation	educating; advantage; human superiority
3	How Artificial Intelligence Will Change Public Relations	Big Fish PR	2.5.2017	corporate blog	uncertainty, opportunity; explaining; clarifying	educating; advantage; importance
4	What does artificial intelligence mean for public relations?	PRCA	date not given	corporate blog	survival; explaining; clarifying; reassurance	educating; human superiority; importance
5	5 Things I Want #AlinPR to Do for Me ASAP	WE-worldwide	23.4.2019	corporate blog	explaining; clarifying; opportunity; urgency; frustration	educating; advantage; importance
6	Putting the AI in Public Relations	Spinsucks	27.3.2019	industry blog	explaining; clarifying; expertise	educating; importance
7	How to Put AI in PR and Demonstrate the Value of Communicators	Spinsucks	17.4.2019	industry blog	explaining; clarifying; expertise; inevitability	educating; importance
8	AI in PR: What do we need to consider now?	Sarah Rosalind Roberts	22.4.2018	personal blog	explaining; clarifying; normalizing; opportunity; expertise	educating; importance; advantage; human superiority
9	AI in PR – seize the opportunities	Sarah Rosalind Roberts	14.3.2019	personal blog	explaining; clarifying; inevitability; opportunity; expertise	educating; importance; advantage; human superiority
10	AI – Creating disruption in our industry to see around the corner	PRfest	20.3.2019	industry blog	explaining; clarifying; urgency; inevitability; opportunity; expertise; survival	educating; importance; advantage; human superiority
11	AI for PR – The Path to the Present, and the Potential	Fleishman-Hillard	27.2.2019	corporate blog	opportunity; change; expertise; urgency; frustration	importance; advantage; educating; human superiority
12	Artificial intelligence #AI – could it transform the communication business partner role?	LinkedIn	5.3.2019	personal blog	opportunity; reassurance; explaining; clarifying;	educating; advantage; human superiority
13	The lessons, fears and opportunities in AI	DTW	26.11.2018	corporate blog	opportunity; explaining; normalizing; expertise; reassurance; humanity; inevitability; change	educating; importance; human superiority; advantage

14	AI is here in PR (but it has limitations)	Dan Gerella	23.10.2018	personal blog	explaining; clarifying; reassurance; expertise; opportunity	human superiority; advantage; importance; educating
15	Artificial Intelligence in PR: a partnership, not a battlefield	Hannah Claffey Says	9.11.2018	personal blog	explaining; clarifying; normalizing; opportunity; progress; change	educating; advantage; importance
16	PR can no longer rage against the machines	LinkedIn	5.10.2018	personal blog	opportunity; reassurance; explaining; clarifying; survival; change	human superiority; advantage; importance; educating
17	Artificial Intelligence: The opportunity for communications leaders	LinkedIn	9.10.2018	personal blog	opportunity; reassurance; explaining; expertise; inevitability; change	human superiority; importance; educating; advantage
18	Making the complex world of AI simple: Why PRs should be embracing tech and working/ experimenting with chat bots	Influence online	27.9.2018	industry blog	expertise; opportunity; survival; explaining; clarifying	importance; educating; advantage
19	Artificial intelligence reaches public relations	Canela PR	13.3.2019	corporate blog	explaining; normalizing; expertise; humanity; opportunity; progress	educating; human superiority; advantage
20	How AI and Public Relations Go Together Like PB&J	Spinsucks	7.3.2018	industry blog	explaining; clarifying; reassurance; expertise; opportunity; survival	educating; advantage; human superiority; importance
21	Artificial Intelligence is Here to Stay – So Are PR Pros	Cookerly	21.8.2018	corporate blog	explaining; reassurance; expertise; humanity; opportunity; progress; change	educating; human superiority; importance; advantage
22	Artificial Intelligence (AI) in PR & business – friend or foe?	Balloupr	23.5.2018	corporate blog	explaining; clarifying; reassurance; opportunity; worry	educating; importance; advantage; (human superiority)
23	Tackling the impact of technology and AI on PR	Wadds	26.6.2018	personal blog	explaining; clarifying; opportunity	educating; importance
24	Does Artificial Intelligence Have a Place in Public Relations?	Ronn Torossian	25.2.2019	personal blog	explaining; clarifying; reassurance; expertise; humanity; cooperation; opportunity; change	educating; advantage; human superiority; importance
25	Why is PR Sleepwalking Into the Threat of Artificial Intelligence?	Paul Sutton	4.4.2018	personal blog	explaining; clarifying; change; reassurance	educating; importance
26	Why PR professionals won't be replaced with robots	BlueskyPR	???	corporate blog	expertise; reassurance; explaining; clarifying	human superiority; educating
27	Will public relations be killed by artificial intelligence?	Aura PR	1.2.2018	corporate blog	opportunity, reassurance; humanity; survival; cooperation	importance; educating; advantage

28	AI in Public Relations	Buchanan PR	25.10.2018	corporate blog	opportunity, reassurance; expertise; inevitability, explaining; clarifying	educating; importance; advantage; human superiority
29	3 Ways Artificial Intelligence Will Impact Public Relations	Midas PR	5.12.2017	corporate blog	opportunity; progress; reassurance; explaining; clarifying	advantage; human superiority; importance
30	How Artificial Intelligence Will Make Communications Pros More Efficient	Spinsucks	14.3.2018	industry blog	explaining; clarifying; reassurance; humanity; opportunity; urgency, frustration; change	educating; human superiority; importance; advantage

APPENDIX 2 DATA

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