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Ethics of Public Relations in the Age of Artificial Intelligence: An Integrative Theoretical Framework for Understanding Communicative Responsibility in the Automated Digital Environment

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Abstract

This study addresses a central problematic concerning the existing gap in public relations literature regarding the ethical framing of institutional communication practices amid the profound transformations brought about by artificial intelligence. Although partial attempts exist to address this intersection (Galloway & Swiatek, 2018; Wiencierz & Röttger, 2019; Wiesenberg & Tench, 2020), the field still lacks an integrative theoretical framework that reconceptualizes communicative responsibility in a manner that accommodates the specificities of automation and algorithmic personalization. The study seeks to construct this framework through a critical narrative review encompassing the analysis of 87 scholarly works published between 1984 and 2025 in the Scopus, Web of Science, and Communication Abstracts databases, spanning the fields of public relations ethics, artificial intelligence ethics, and data governance. These works were analyzed along three axes: philosophical foundations, epistemological assumptions, and scope of application in automated contexts. The study concluded by proposing a composite theoretical framework comprising five interrelated dimensions: graduated algorithmic transparency, distributed communicative accountability, informational justice, audience autonomy, and anticipatory responsibility. These dimensions were derived from the intersection between ethical problematics identified in public relations literature and emerging normative principles in the field of AI ethics, with the integration of the privacy problematic as a cross-cutting component that intersects with all five dimensions. This framework contributes to overcoming the deficiencies that traditional models suffer from when confronted with communication contexts characterized by technical invisibility. The study also presents illustrative application scenarios and a set of theoretical and practical implications that redefine ethical professional practice in the field of public relations.

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Section One: Methodological Framework of the Study

First – Introduction and Identification of the Research Problem

Over the past four decades, the field of public relations has witnessed a substantial theoretical accumulation in the domain of establishing an ethical foundation for professional practice. Beginning with the early contributions offered by Grunig and Hunt (Grunig & Hunt, 1984), who delineated the four models of practice and posited the two-way symmetrical model as the highest ethical ideal, passing through the philosophical grounding developed by Pearson (Pearson, 1989) drawing on Habermasian discourse ethics, and extending to the approaches adopted by Bowen (Bowen, 2004; 2008) in applying Kantian ethics to decision-making in public relations. However, this rich theoretical corpus emerged and crystallized within communication contexts that fundamentally differ from those that currently dominate the contemporary landscape, where algorithms did not undertake audience classification, message personalization, response measurement, and communication decision-making on behalf of the human practitioner.

Artificial intelligence has produced a structural transformation in the very nature of the communication process within the field of public relations. The matter is no longer confined to the use of digital tools that assist the practitioner in performing tasks with greater efficiency; rather, it has transcended this to the point where artificial intelligence has become a communicative agent in its own right in many contexts. Machine learning systems undertake the analysis of public sentiment on social media platforms, chatbots engage in direct interaction with audiences, and recommendation algorithms determine who receives which message, when, and in what format (Galloway & Swiatek, 2018; Wiencierz & Röttger, 2019). The intensity of this transformation has increased with the proliferation of generative artificial intelligence (Generative AI) models from 2023 onward, which have become capable of producing texts, images, and videos that simulate human content with a high degree of persuasiveness, thereby adding new dimensions to the problematics of credibility, disinformation, and sender identity (Hadi et al., 2023; Mündel & Kolo, 2024).

This transformation raises unprecedented ethical problematics that have not been adequately addressed in the existing literature. While it is true that studies have begun to touch upon this intersection-such as the study by Galloway and Swiatek (Galloway & Swiatek, 2018), which surveyed artificial intelligence applications in public relations; the study by Wiesenberg and Tench (Wiesenberg & Tench, 2020) on digital transformations in European practice; and the study by Al-Sayed (2021), which offered a critical Arab perspective on the subject-these studies were characterized by partial treatment. Some addressed the applied aspects without in-depth philosophical grounding, while others sufficed with documenting the phenomenon without constructing an integrative theoretical framework. This is partly attributable to the fact that traditional theoretical models were built upon a fundamental

assumption that the communicative agent is a conscious human being capable of ethical reflection and self-accountability.

The research problem becomes more clearly apparent when we observe that the prevailing ethical frameworks in public relations suffer from three principal deficiencies in confronting the new digital reality. The first manifests as a conceptual deficiency, insofar as concepts such as transparency, honesty, dialogue, and responsibility were formulated in the context of direct or quasi-direct human interactions and have not been reformulated to accommodate the contexts of automation and algorithmic personalization. The second is evident as a structural deficiency, whereby these frameworks assume clarity in the chain of ethical responsibility, whereas artificial intelligence disperses and scatters this chain among the programmer, system designer, practitioner, institution, and technology provider. The third is an epistemological deficiency, because many artificial intelligence operations are characterized by what is known as the black box-that is, the impossibility of tracing the logic by which an algorithm arrived at a particular communication decision-thereby undermining the epistemic foundation upon which ethical accountability rests (Diakopoulos, 2015; Pasquale, 2015).

Hence, the research problem of this study is defined as the absence of an integrative theoretical framework that reconceptualizes ethical communicative responsibility in public relations in a manner that accommodates the emerging challenges imposed by artificial intelligence on professional practice in the digital environment. This does not imply the claim that the field is devoid of any treatment of this subject; rather, it means that available treatments remain fragmented and unintegrated within a coherent theoretical structure that connects the philosophical foundations of public relations with the emerging principles of AI ethics.

Second – Study Objectives

This study aims to achieve a set of interrelated objectives that progress from diagnosis to theoretical construction:

1- A critical review of the prevailing ethical theoretical frameworks in public relations literature and an assessment of the extent of their suitability for communication contexts based on artificial intelligence.

2- An investigation of the qualitative ethical problematics posed by the deployment of artificial intelligence technologies in public relations practice within the digital environment.

3- The construction of an integrative theoretical framework that re-establishes the concept of communicative responsibility in light of the transformations brought about by artificial intelligence.

4- The extraction of a set of theoretical and applied implications that contribute to the development of ethical professional practice and the guidance of future research in this domain.

Third – Significance of the Study

This study derives its significance from two complementary levels. At the theoretical level, it contributes to bridging a gap in both Arab and international literature, as studies addressing the intersection between public relations ethics and artificial intelligence remain limited and tend toward partial treatment, while serious attempts to construct integrative theoretical frameworks that rethink the philosophical foundations of communicative responsibility under automation are absent. At the applied level, the study acquires its significance from the pressing challenges faced by professional practitioners who find themselves confronted with advanced artificial intelligence tools-particularly generative AI tools-without clear theoretical ethical guidance to assist them in making responsible decisions, especially concerning issues of privacy, manipulation, disinformation, and algorithmic discrimination.

Fourth – Study Questions

This study attempts to answer four interrelated principal questions:

1- What are the fundamental deficiencies in the current ethical theoretical frameworks of public relations when applied to communication contexts mediated by artificial intelligence?
2- What are the qualitative ethical problematics to which the deployment of artificial intelligence in public relations practice within the digital environment gives rise?
3- What dimensions can be derived from the intersection between the literatures of public relations ethics and AI ethics to establish an integrative theoretical framework for communicative responsibility?
4- What are the theoretical and applied implications arising from this proposed framework for public relations practice and research?

Fifth – Methodology Employed

This study adopted the **critical narrative review** methodology as the most suitable for achieving its objectives of a foundational theoretical nature. This methodology transcends the descriptive review of previous studies to encompass the deconstruction of assumptions underlying existing theoretical frameworks, the evaluation of their internal consistency and explanatory capacity in confronting emerging phenomena, and the subsequent reconstitution of elements into a new, more comprehensive theoretical structure (Snyder, 2019; Jaakkola, 2020). It should be noted that this methodology differs from the systematic review in its strict procedural sense as defined by PRISMA protocols, since the nature of the research objective-which is to construct a theoretical framework rather than aggregate empirical findings-necessitates greater flexibility in the selection and treatment of works, while maintaining transparency in documenting research procedures.

Review Procedures

The review was conducted in three sequential phases according to the following procedures:

Phase One: Search and Extraction

The search was conducted in three principal databases: Scopus, Web of Science, and Communication Abstracts, using intersecting sets of search terms within three categories:

- **First category (public relations field):** "public relations ethics" OR "PR ethics" OR "corporate communication ethics" OR "communication ethics"
- **Second category (artificial intelligence field):** "artificial intelligence" OR "algorithmic" OR "automation" OR "machine learning" OR "generative AI" OR "chatbot"
- **Third category (technology ethics field):** "AI ethics" OR "algorithmic ethics" OR "data ethics" OR "digital ethics" OR "data governance"

These categories were combined using the Boolean operator AND between the first category and one of the other two categories, in addition to independent searching within each category for foundational works. Arabic-language terms were also added in Arab databases (Dar Al-Mandumah, Shamaa) such as: "public relations ethics," "artificial intelligence and communication," and "digital media ethics."

The temporal scope was defined as the period from 1984 (the date of publication of the foundational work by Grunig and Hunt) to 2025, with particular emphasis on works published after 2015 regarding AI ethics.

Inclusion criteria:

- The work addresses public relations ethics, AI ethics, or the intersection between them.
- The work offers a theoretical or conceptual contribution (not merely isolated empirical findings).
- The work is published in a peer-reviewed journal or an academic book issued by a recognized publisher.

Exclusion criteria:

- Purely applied studies that do not contain a theoretical contribution.
- Works related to artificial intelligence from a purely technical perspective without ethical treatment.
- Journalistic articles and non-peer-reviewed professional reports (with the exception of certain important regulatory documents such as AI HLEG principles).

The initial search yielded 214 works, which were filtered after reviewing titles and abstracts to 126 works, then after in-depth reading to 87 works that were included in the final analysis.

Phase Two: Comparative Critical Analysis

The selected works were analyzed along three axes: their philosophical foundations (utilitarian, Kantian, dialogic, virtue-based, other), their epistemological assumptions concerning the nature of the communicative agent and the communication process, and their scope of application in terms of their capacity to accom-

modate automated contexts. The results were organized into an analytical matrix that facilitated systematic comparison between frameworks and the identification of points of intersection and gaps (see Table 3 in the Appendix).

Phase Three: Integrative Theoretical Synthesis

Proceeding from the identified gaps and points of intersection between the relevant knowledge fields, the proposed framework was constructed according to the following logic: identifying the qualitative ethical problematics posed by artificial intelligence in the context of public relations specifically (and not in general terms), then linking these problematics with the normative principles available in both fields, and finally formulating the framework's dimensions such that each dimension responds to one or more problematics while maintaining logical coherence among the dimensions. The formulation of the dimensions underwent several revisions and refinements before arriving at the final version, which will be explained in detail in Section Four.

Section Two: The Theoretical Roots of Public Relations Ethics – A Critical Review

First – The Historical Trajectory of Ethical Consciousness Formation in the Field

The current ethics of public relations cannot be understood in isolation from the historical trajectory through which the field itself was formed. Public relations emerged as a professional practice in an atmosphere in which propaganda and manipulation of public opinion were largely accepted, as evidenced by the legacy of Edward Bernays (Bernays, 1928), who did not hesitate to describe his practice as "the engineering of consent," and Ivy Lee, who faced sharp criticism for his work on behalf of entities accused of misleading public opinion. This legacy continued to cast its shadow over the field and fuel the fundamental tension between the persuasive function of public relations and the requirements of professional ethics (L'Etang, 2003; Fawkes, 2007).

The systematic theoretical establishment of public relations ethics effectively began with the emergence of the Excellence Project led by Grunig and his colleagues (Grunig, 1992; Grunig & Grunig, 1992) in the 1990s. This project was based on the hypothesis that the two-way symmetrical model represents the most ethical and effective form of public relations practice, because it is founded on negotiation and the balancing of interests between the organization and its publics rather than unidirectional persuasion. This proposition constituted an important shift because it linked the ethical dimension with the functional dimension, making ethical practice a prerequisite for achieving organizational excellence rather than a burden upon it.

However, this very linkage was subjected to fundamental criticisms. Both Moloney (Moloney, 2006) and L'Etang (L'Etang, 2008) noted that the Excellence model harbors a latent contradiction, as it claims symmetry while the relationship between the organization and its publics is in reality characterized by fundamental asymmetry in power, information, and resources. Heath (Heath, 2001) argued that framing public relations as a management function divests it of the societal rhetorical dimension that should be central to ethical evaluation.

Second – Philosophical Foundations

The theoretical contributions to public relations ethics can be classified according to three major philosophical foundations, each possessing its own internal logic, strengths, and limitations.

The first foundation lies in the **utilitarian approach**, which judges the ethicality of a communicative act based on its outcomes and outputs. This approach has been implicitly employed in much of the public relations literature that links ethical practice to the achievement of benefit for the greatest number of stakeholders (Bivins, 2004). It should be noted that the utilitarian approach is not monolithic; rather, it encompasses important variations such as act utilitarianism, which evaluates each act individually; rule utilitarianism, which evaluates the general rules that guide action; and preference utilitarianism, which takes into account individuals' preferences rather than merely the quantity of pleasure and pain. Each of these variations has different implications for evaluating AI ethics, as act utilitarianism might justify a discriminatory practice in a specific case if its net benefit is demonstrated, while rule utilitarianism would reject it if its generalization would lead to overall harm. However, the utilitarian approach in its various forms suffers from a fundamental problem in the context of artificial intelligence relating to the difficulty of measuring aggregate communicative benefit and tracking its distant and ramified effects.

The second foundation lies in the **Kantian or deontological approach**, upon which Bowen (Bowen, 2004; 2005; 2008) focused in particular. This approach posits that the ethical act is that which proceeds from good will and adheres to universal principles such as respecting the dignity of persons as ends in themselves rather than means, and honesty as an absolute duty not justified by outcomes. Bowen developed a model for ethical decision-making based on three Kantian criteria: good will, respect for human dignity, and the universalizability of the decision. Despite the philosophical robustness of this model, it has been noted that it tends toward abstraction and lacks sufficient flexibility for dealing with complex contexts in which ethical considerations become intertwined with institutional and technical pressures.

The third foundation lies in **dialogic ethics**, which Pearson (Pearson, 1989) established drawing on Habermas's theory of communicative action (Habermas, 1984). This foundation posits that the ethicality of public relations is measured neither by the outcomes of the act nor solely by the intentions of the agent, but by the degree of adherence to the conditions of ideal dialogue, which include: sincerity and honesty, equal right to participation, absence of coercion, and openness to revising positions. Kent and Taylor (Kent & Taylor, 2002) developed this foundation into a more applied dialogic model comprising five principles: mutuality, propinquity, empathy, risk, and commitment to dialogue.

Third – Contributions of Virtue Ethics and Ethics of Care

Alongside the three preceding foundations, the past decade has witnessed growing interest in applying virtue ethics to the field of public relations (Place, 2019; Harrison & Galloway, 2005). Virtue ethics affirm that ethical practice does not spring

solely from adherence to rules or calculation of consequences, but from the formation of a professional character endowed with virtues such as honesty, courage, justice, and practical wisdom. The ethics of care approach developed by Noddings (Noddings, 2003) also contributed by illuminating the relational and emotional dimension of ethical practice.

Fourth – Reference to Non-Western Approaches

It should be noted that the foundational literature in public relations ethics arose in an eminently Western context, which raises questions about its universality. Some voices have begun to call attention to the necessity of considering cultural diversity in ethical grounding (Sriramesh & Verčič, 2020). In the Islamic intellectual traditions, for instance, concepts such as amanah (trustworthiness), the public interest (maslaha), and the prevention of harm occupy a central position in framing professional responsibility (Al-Hamdani, 2022), and these concepts can enrich the discussion of AI ethics, particularly regarding the principle of non-maleficence and the protection of privacy. Likewise, Asian approaches grounded in values of collective responsibility and social harmony (Huang, 2004) may offer useful alternatives to Western individualistic models in dealing with the problematic of distributing responsibility in contexts of automation. This study acknowledges that its treatment is primarily based on Western frameworks given their dominance in the available literature, but it calls for broadening this horizon in future research.

Fifth – Deficiencies in Confronting the Digital Transformation

Despite the theoretical richness that characterizes these contributions collectively, there are fundamental observations that must be registered regarding their capacity to respond to the transformations brought about by the digital environment in general and artificial intelligence in particular.

From the first standpoint, all of these frameworks were built upon the assumption of the centrality of the human agent in the communication process. Whether the matter concerns the Kantian model that presupposes a rational agent possessing good will, the dialogic model that presupposes parties capable of listening and empathy, or virtue ethics that speak of human character traits, the entry of artificial intelligence as a communicative agent or quasi-agent disrupts these assumptions.

From the second standpoint, these frameworks assume a reasonable degree of transparency in the communication process, meaning that the recipient knows they are communicating with a specific entity. However, many applications of artificial intelligence in public relations operate in a manner invisible to the public (Coombs & Holladay, 2018).

From the third standpoint, these frameworks assume the possibility of tracing the chain of responsibility in a relatively clear fashion. But when a communication decision results from the complex interaction between data, algorithms, designers, practitioners, and digital platforms, responsibility becomes dispersed to the extent that traditional models become incapable of addressing it (Couldry & Mejias, 2019).

These observations do not mean that the preceding theoretical heritage is devoid of value; rather, they mean that it requires review, expansion, and reformulation that accommodates the new conditions of communication practice.

Table (1): Comparison of Traditional Ethical Frameworks for Public Relations and Their Suitability for AI Contexts

Theoretical Framework	Philosophical Foundation	Ethical Judgment Criterion	Strengths	Deficiencies vis-à-vis AI	Degree of Suitability
Excellence Model (Grunig)	Pragmatism / Systems theory	Achieving symmetry and balancing interests	Links ethics to organizational effectiveness; establishes clear normativity	Assumes a human agent; ignores informational asymmetry in algorithmic environments	🟡 Partial
Kantian Approach (Bowen)	Deontological / Formal ethics	Good will, respect for dignity, and universalizability	Philosophical rigor; absolute rejection of manipulation; respect for individual autonomy	Assumes a rational, conscious agent; does not address distributed responsibility; rigidity before complex contexts	🟡 Partial
Dialogic Model (Kent & Taylor)	Discourse ethics / Habermas	Respecting conditions of ideal dialogue: honesty, equality, absence of coercion	Makes the communication process itself the object of evaluation; rich in procedural criteria	Assumes direct human interaction; does not accommodate automated interaction	🟡 Partial
Virtue Ethics (Place; Harrison)	Aristotelian	Availability of practitioner virtues: honesty, courage, practical wisdom	Focuses on the practitioner not just the act; considers professional development	Does not address non-human agency; excessive individualism ignoring institutional and technical structures	▨ Limited
Utilitarian Approach (Bivins)	Consequentialist / Benefit calculation	Maximizing net benefit for the greatest number of stakeholders	Applied flexibility; relatively measurable	Difficulty measuring algorithmic impact; may justify discrimination in favor of the majority; ignores individual rights	▨ Limited

Note on evaluation criteria: The degree of suitability was classified according to three criteria: (a) the framework's capacity to accommodate non-human agency, (b) its capacity to deal with distributed responsibility in complex technical chains, (c) its capacity to address technical invisibility and algorithmic personalization. A framework was classified as "high suitability" if it met all three criteria, "partial" if it met one or two, and "limited" if it did not adequately meet any of them.

🟢 High suitability 🟡 Partial suitability ▨ Limited suitability

Source: Prepared by the researcher based on the critical review of the literature

Section Three: Artificial Intelligence in Public Relations Practice – Diagnosing the Ethical Problematics

First – Mapping Current Deployment

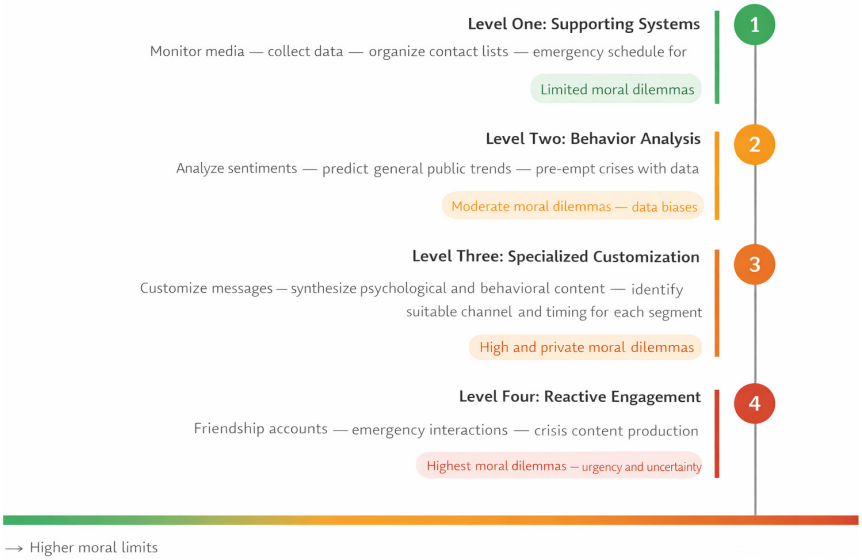
Before delving into the ethical problematics, it is necessary to draw a clear picture of how artificial intelligence permeates contemporary public relations practice.

Four graduated levels of this deployment can be distinguished according to the degree of automation and autonomy.

The first level lies in **assistive automation**, where artificial intelligence performs routine tasks under full human supervision, such as media monitoring, data collection, and organizing contact lists. This level does not raise fundamental ethical problematics beyond those known in the use of any technological tool.

The second level lies in **predictive analysis**, where machine learning algorithms undertake the analysis of massive quantities of data to extract patterns and predict public opinion trends, measure sentiments, and identify influencers. Here, ethical problematics begin to emerge because these analyses may involve unfair classifications or biased inferences (Noble, 2018; O'Neil, 2016).

The third level is **algorithmic personalization**, where artificial intelligence undertakes the design of customized messages for different audience segments based on their psychological, behavioral, and demographic characteristics. This level raises profound problematics concerning manipulation, exploitation, and privacy (Zuboff, 2019).



Source: Prepared by the researcher based on the analysis of literature on AI deployment in public relations. (Galloway & Swiatek, 2018; Wiencierz & Röttger, 2019)

Figure (1): Graduated Levels of AI Deployment in Public Relations and Their Relationship to the Intensity of Ethical Problematics

The fourth level lies in **autonomous interaction**, where AI systems undertake direct interaction with audiences through chatbots and virtual assistants, in addition to-at the present stage-the production of generative content based on Large Language Models (LLMs) that have become capable of drafting press releases, reports, crisis responses, and marketing content in a quasi-autonomous manner (Hadi et al., 2023; Mündel & Kolo, 2024). At this level, ethical problematics reach their peak because the audience may not know that it is interacting with a machine or reading content produced by artificial intelligence (Edwards, 2021).

Second – The First Problematic: Transparency and the Black Box Paradox

Transparency is considered one of the most deeply rooted ethical values in public relations literature (Rawlins, 2009). However, artificial intelligence introduces an entirely new meaning to the problem of transparency. Three layers become problematic in this context: identity transparency (that the audience knows it is interacting with an AI system), process transparency (that it is understood that the messages are the product of algorithmic classification), and logic transparency (that it is possible to explain the basis of the communication decision). The final layer is characterized by extreme complexity given the nature of deep neural networks, which are difficult even for their designers to interpret internally (Burrell, 2016; Mittelstadt et al., 2016).

In the specific context of public relations, this challenge manifests particularly when an organization uses a generative AI system to draft press releases or crisis responses-should it disclose this? And when it uses algorithms to classify the audience and direct different messages to different segments, does the audience have the right to know the bases of this classification?

Third – The Second Problematic: Autonomy and Algorithmic Manipulation

The value of autonomy occupies a central position in ethical philosophy in general and the Kantian approach in particular. The tension between legitimate persuasion and unethical manipulation has been a subject of ongoing debate in public relations literature (Fawkes, 2007). However, artificial intelligence deepens this tension in an unprecedented manner. On one hand, psychological and behavioral profiling technologies enable an enormous capacity to target individuals with messages designed to elicit specific emotional responses, as the Cambridge Analytica scandal revealed (Cadwalladr & Graham-Harrison, 2018). On the other hand, algorithmic personalization may create echo chambers and filter bubbles (Pariser, 2011; Sunstein, 2017). The central ethical question is: when does personalization transform from a legitimate service into manipulation that undermines the cognitive and decisional autonomy of the audience?

To illustrate this problematic in the context of public relations: suppose a pharmaceutical company used artificial intelligence to identify individuals most susceptible to health anxiety-based on their digital behavior-then directed exclusively to them messages amplifying the risks of certain diseases to market its products. Would this be considered legitimate persuasion or manipulation exploiting psychological vulnerabilities?

Fourth – The Third Problematic: Justice and Algorithmic Bias

Numerous studies have demonstrated that AI systems may reproduce and amplify existing biases in society (Buolamwini & Gebru, 2018; Benjamin, 2019). In the specific context of public relations, this risk manifests when classification algorithms exclude entire audience segments from receiving messages or services based on racial or class characteristics, or when sentiment analysis systems tend to misinterpret

the cultural expressions of particular communities. For example, a crisis monitoring algorithm might classify a specific community's reactions as "acutely negative" due to cultural expression patterns that do not actually represent a hostile stance, thereby leading the organization to an inappropriate response that deepens the gap instead of bridging it.

Fifth – The Fourth Problematic: Dispersed Responsibility and Accountability

Among the most complex ethical problematics is the issue of distributing responsibility when an automated communication decision leads to harm. Let us imagine that an AI system used in crisis management misclassified a particular crisis and launched an inappropriate response that contributed to the exacerbation of the situation. Who bears ethical responsibility? Matthias (Matthias, 2004) termed this phenomenon the "responsibility gap" to refer to cases in which the technical system produces results that cannot be clearly attributed to any specific human agent.

Sixth – The Fifth Problematic: Privacy and the Data Economy

The use of artificial intelligence in public relations cannot be separated from the massive personal data collection ecosystem that feeds it. Zuboff (Zuboff, 2019) described this reality as "surveillance capitalism." In the context of public relations, the problematic manifests in the tension between the desire to deeply understand the audience in order to provide effective and appropriate communication, and respecting its right to privacy and control over its personal data. The concept of informed consent is also subject to increasing criticism due to its length, complexity, and obscurity (Solove, 2013). Among the illustrative examples in this context: when a public relations firm collects data from social media platforms regarding audience reactions toward its institutional client, and uses this data to train a predictive model that identifies the most influential individuals in their social networks in order to target them with customized messages-is this considered legitimate use of publicly available data, or a violation of the reasonable privacy expectations of these individuals?

Section Four: Toward an Integrative Theoretical Framework – Dimensions of Communicative Responsibility in the Age of Artificial Intelligence

First – Foundational Premises of the Proposed Framework

The proposed theoretical framework proceeds from four foundational premises:

- **The first premise:** Traditional ethical frameworks should not be abolished but rather expanded and reformulated. This premise is consistent with what Floridi (Floridi et al., 2018) proposed when he affirmed that AI ethics does not require the invention of new values so much as it requires the reinterpretation of existing values.
- **The second premise:** Ethical responsibility in AI contexts is a distributed and shared responsibility that requires a networked rather than linear conceptualization of the accountability chain.

- **The third premise:** The ethical framework appropriate for the age of artificial intelligence should be proactive rather than merely reactive (Ethics by Design).
- **The fourth premise:** The ethical dimension is inseparable from the political and economic dimension, as public relations practices based on artificial intelligence occur within asymmetric power structures (Holtzhausen, 2012).

Second – Justification for Selecting the Five Dimensions and Addressing the Privacy Problematic

Proceeding from these premises, the framework was constructed according to a synthetic logic linking the identified problematics with the normative principles available in both fields. The selection of dimensions underwent several revisions before arriving at the final formulation. In the early stages, six dimensions were proposed including an independent dimension for privacy. However, in-depth analysis revealed that privacy, in the context of artificial intelligence and public relations, is not a standalone problematic so much as it is a **cross-cutting component** that permeates all other dimensions. Algorithmic transparency necessitates balancing the right to privacy in disclosing the data used. Distributed accountability requires determining who bears responsibility for protecting personal data. Informational justice encompasses the fairness of data handling and non-exploitation. Audience autonomy includes the right to control one's data. Anticipatory responsibility requires a prior assessment of privacy violation risks. Therefore, allocating privacy to an independent dimension would have led to repetition and overlap with other dimensions, whereas integrating it as a cross-cutting component reflects its true nature and permits more precise and comprehensive treatment.

Alternatives such as the inclusion of a "technical competence" dimension (i.e., the practitioner's capacity to understand the systems being used) were also excluded, as it was determined that competence is a practical precondition for activating the framework rather than a normative ethical dimension in itself. The dimensions thus settled at five, taking into account that each dimension has a direct connection to one or more of the identified problematics, as illustrated in the following table:

Table (2): Linking the Identified Problematics with the Dimensions of the Proposed Framework

Identified Problematic	Dimension(s) Addressed in the Framework	Nature of Treatment
Transparency and the black box paradox	Graduated algorithmic transparency	Direct and central treatment
Autonomy and algorithmic manipulation	Audience autonomy	Direct and central treatment
Justice and algorithmic bias	Informational justice	Direct and central treatment
Dispersed responsibility and accountability	Distributed communicative accountability + Anticipatory responsibility	Dual treatment (structural and temporal)
Privacy and the data economy	Cross-cutting component permeating all five dimensions	Integrative embedded treatment

Source: Prepared by the researcher

Third – Dimension One: Graduated Algorithmic Transparency

This dimension reformulates the traditional concept of transparency to accommodate the three layers identified above, while recognizing that complete transparency may not be possible or desirable in all cases. Therefore, the framework adopts the concept of graduated transparency, which is based on the principle that the required level of transparency should be directly proportional to the degree of impact of the algorithmic decision on the rights and interests of the audience.

At the **minimum level**, every individual should know that they are dealing with an AI system and not a human being (the principle of disclosure of communicative identity). At the **intermediate level**, the organization should be able to explain the general logic by which its intelligent systems operate to regulatory bodies and the affected public. At the **maximum level**, there should be mechanisms for independent auditing that allow qualified external parties to examine the systems and verify their fairness.

This conceptualization intersects with the principles of the European General Data Protection Regulation (GDPR) and the recommendations of the European High-Level Expert Group on Artificial Intelligence (AI HLEG, 2019), which affirmed explicability as a prerequisite for trustworthiness.

The cross-cutting privacy component: Algorithmic transparency includes a commitment to disclosing the types of personal data used, their sources, and the purposes of their processing, while maintaining a balance between the audience's right to knowledge and the protection of individuals' sensitive information.

Fourth – Dimension Two: Distributed Communicative Accountability

Source: Prepared by the researcher – based on the theoretical framework proposed in the present study

Figure (2): Distributed Communicative Accountability Model – Levels of Responsibility in the AI Context

This dimension addresses the problematic of the responsibility gap by presenting a networked conceptualization of accountability that transcends the traditional linear model. It is based on the distinction between three interacting levels: **design responsibility** (borne by developers), **deployment responsibility** (borne by the practitioner and the organization), and **governance responsibility** (borne by the organization in its capacity as an entity accountable to society).

The essential element is the principle of **residual responsibility**, which means that the organization remains ethically responsible for the outputs of the systems it uses even if it had not anticipated or intended their results (Jonas, 1984).

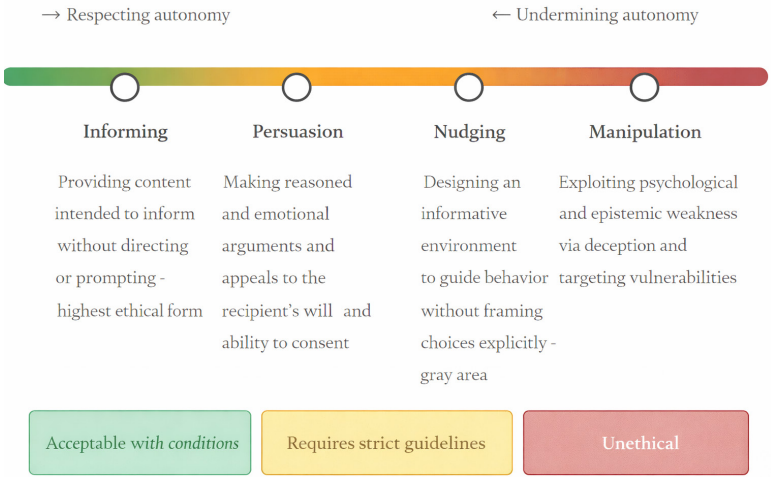
The cross-cutting privacy component: Accountability includes a clear specification of who bears responsibility for protecting personal data at each level of the value chain, and procedures for redress when a violation of audience privacy occurs.

Fifth – Dimension Three: Informational Justice

This dimension transcends the narrow concept of non-discrimination to adopt a more comprehensive conceptualization comprising three components: **distributive informational justice** (ensuring that audience segments are not excluded), **representational justice** (ensuring that training data and outputs reflect the diversity of the audience), and **participatory justice** (ensuring that affected audiences have a voice in shaping policies). This dimension draws on the literature of informational justice (Floridi, 2013; Taylor, 2017) and the works of Fraser (Fraser, 2009).

The cross-cutting privacy component: Informational justice includes ensuring that the data of the most vulnerable groups are not disproportionately exploited, and a commitment to ensuring that data collection and processing are fair and balanced across different audience segments.

Sixth – Dimension Four: Audience Autonomy



Source: Prepared by the researcher by developing the classification of Fawkes (2007) in light of the digital nudging literature (Thaler & Sunstein, 2008; Zuboff, 2019)

Figure (3): The Spectrum of Communicative Influence and Its Relationship to Audience Autonomy in the AI Context

This dimension reformulates the value of respect for autonomy to accommodate the new forms of influence enabled by artificial intelligence. It transcends the traditional binary distinction between legitimate persuasion and unethical manipulation to propose a graduated spectrum comprising four reference points: **informing** (the least problematic form), **persuasion** (legitimate on the condition of awareness), **nudging** (a gray zone), and **manipulation** (ethically rejected).

This dimension affirms that the practitioner's responsibility includes a positive commitment to empowering the audience to make informed decisions, not merely a passive commitment to not deceiving them.

The cross-cutting privacy component: Audience autonomy includes the right to control one's personal data and the provision of genuine (not nominal) options to refuse tracking and personalization, going beyond the nominal consent models criticized by Solove (Solove, 2013).

Seventh – Dimension Five: Anticipatory Responsibility

This dimension draws on the concept of proactive responsibility developed by Jonas (Jonas, 1984) and Grunwald (Grunwald, 2012). It comprises three operational components: **prior ethical impact assessment**, **continuous monitoring** of outputs, and **reversibility and correctability**. This dimension imparts to the framework a dynamic, adaptive, learning character.

↔ Mutual integrative relationships among the five dimensions ↔

Transparency is a prerequisite for accountability – Accountability is a prerequisite for justice – Justice enhances autonomy – Anticipatory responsibility is an encompassing envelope

Source: Prepared by the researcher – the theoretical framework proposed in the present study

Figure (4): The Proposed Integrative Theoretical Framework – Dimensions of Communicative Responsibility in the Age of Artificial Intelligence

The cross-cutting privacy component: The prior impact assessment includes a specific estimation of privacy violation risks associated with any new system, and continuous monitoring includes periodic verification of system compliance with data protection policies.

Eighth – Integrative Relationships Among the Five Dimensions

The five dimensions should not be understood as separate components but rather as an interconnected system in which each dimension nourishes and reinforces the others. Transparency is a necessary prerequisite for accountability. Accountability is a prerequisite for justice. Justice is organically linked to audience autonomy. Anticipatory responsibility is an encompassing envelope that ensures the proactive activation of the other four dimensions. And privacy is a cross-cutting component that permeates all dimensions.

The relationship among these dimensions is not necessarily hierarchical, as the importance of each dimension may vary according to context. In the context of crisis management, for example, anticipatory responsibility and accountability may take precedence, while informational justice and autonomy may take precedence in the context of campaigns directed at marginalized segments. Tensions may also arise between dimensions, such as the tension between the requirements of full transparency and the protection of privacy, or between the audience's autonomy in refusing personalization and the organization's ability to provide effective communication services. In such cases, the framework proposes that the principle of protecting the weaker party (i.e., the audience) serve as the tiebreaker when conflicts arise, in alignment with the fourth premise concerning the asymmetry of power.

Table (3): The Five Dimensions of the Proposed Framework – Components, Indicators, and Theoretical Foundations

Dimension	Sub-components	Applied Indicators	Theoretical Foundations	Relationship to Other Dimensions
Graduated Algorithmic Transparency	Identity transparency; Process transparency; Logic transparency	Disclosure of AI use – Explanation of general logic – Independent external audit	Rawlins (2009); Diakopoulos (2015); Pasquale (2015); AI HLEG (2019); GDPR	Enabling prerequisite for accountability and autonomy
Distributed Communicative Accountability	Design responsibility; Deployment responsibility; Governance responsibility; Residual responsibility	Clear usage policies – Oversight mechanisms – Corrective procedures – Periodic accountability reports	Jonas (1984); Matthias (2004); Floridi et al. (2018)	Activates transparency; prerequisite for justice
Informational Justice	Distributive justice; Representational justice; Participatory justice	Algorithm bias testing – Training data diversity – Involvement of affected audiences	Fraser (2009); Taylor (2017); Noble (2018); Couldry & Mejias (2019)	Requires accountability; enhances autonomy

Dimension	Sub-components	Applied Indicators	Theoretical Foundations	Relationship to Other Dimensions
Audience Autonomy	Graduated influence spectrum; Cognitive empowerment; Right of withdrawal	Assessment of personalization's impact on free choice – Provision of option to refuse personalization – Algorithmic literacy	Bowen (2004); Kent & Taylor (2002); Thaler & Sunstein (2008)	Purpose served by the first three dimensions
Anticipatory Responsibility	Prior impact assessment; Continuous monitoring; Reversibility	Ethical feasibility study – Real-time monitoring dashboards – Emergency shutdown protocols	Jonas (1984); Grunwald (2012); Ethics by Design; Jobin et al. (2019)	Encompassing envelope ensuring proactive activation of all dimensions
Privacy (Cross-cutting component)	Data protection; Genuine consent; Right of control; Risk assessment of violation	Clear privacy policy – Effective consent mechanisms – Right of deletion – Privacy impact assessment	Zuboff (2019); Solove (2013); GDPR	Permeates all five dimensions

Source: Prepared by the researcher – the theoretical framework proposed in the present study

Section Five: The Proposed Framework in Light of Existing Theories – A Critical Dialogue

First – Relationship to Excellence Theory

The proposed framework can be read as an extension and expansion of Excellence theory rather than a negation of it. Excellence theory established the principle of balancing interests between the organization and its publics. The proposed framework revisits the question: how can this balance be achieved when artificial intelligence is a party in the equation? The answer it proposes is that symmetry in the age of artificial intelligence necessitates additional commitments such as algorithmic transparency and informational justice, because technical asymmetry makes it the organization's duty to exert greater effort to restore balance.

Second – Relationship to the Dialogic Model

The framework intersects with the dialogic model of Kent and Taylor, particularly in the dimension of audience autonomy. However, it surpasses it in two respects: first, it takes into account that many communicative interactions are not dialogic in the assumed sense but rather automated; and second, it addresses the structural dimension related to justice in access to information and power structures.

Third – Relationship to AI Ethics

The framework draws on the growing literature in AI ethics, particularly the framework of Floridi and Cowls (Floridi & Cowls, 2019) and the global survey conducted by Jobin and colleagues (Jobin et al., 2019) of AI ethics principles, which identified 84 sets of ethical principles converging on five main axes: transparency,

justice, non-maleficence, responsibility, and privacy. The proposed framework intersects with these axes but reformulates them in the specific context of public relations as an institutional communicative practice with its own distinctive nature.

The framework also intersects with the guidelines of the European Expert Group (AI HLEG, 2019), which specified seven requirements for trustworthy artificial intelligence, including transparency, accountability, and fairness. However, these principles were formulated at a high level of generality that does not take into account the specificities of different applied fields, which is what the proposed framework seeks to overcome through contextual specification.

Fourth – Relationship to Critical Approaches and Justification of the Reformist Position

There is a significant intersection between the proposed framework and critical approaches (Holtzhausen, 2012; Edwards, 2018), particularly in the dimension of informational justice. However, the framework adopts a reformist rather than radically critical position that denies the possibility of any ethical practice within existing institutional systems. The justification for this choice is threefold: first, from a **pragmatic perspective**, the framework aims-among other things-to provide practical guidance for practitioners, a goal that conflicts with the principled rejection of institutional practice. Second, from a **philosophical perspective**, the framework adopts a position closer to "Critical Realism," which acknowledges the existence of unjust power structures but considers gradual change from within to be possible and legitimate. Third, from a **methodological perspective**, the five dimensions themselves (particularly informational justice) contain tools for structural critique, rendering the framework capable of exposing and challenging unjust practices without the need to adopt a discourse of wholesale rejection.

Section Six: An Illustrative Application Scenario

To illustrate how the proposed framework can be used to analyze a realistic situation, the following hypothetical scenario is presented, drawing its elements from actual cases:

Scenario Description

A major telecommunications company decided to deploy an integrated AI system for managing its public relations comprising: (a) a sentiment analysis system that monitors reactions on social media platforms in real time, (b) a personalization algorithm that designs different messages for audience segments classified according to their psychological and behavioral characteristics, (c) a chatbot that handles the initial response to customer complaints and inquiries, and (d) a generative model that drafts press releases and social media posts. After months of deployment, it became apparent that the system had been excluding rural residents from receiving new service offers because the training data were biased in favor of urban residents.

Analysis According to the Proposed Framework

Dimension	Evaluation Questions	Diagnosis in the Scenario	Recommendations
Algorithmic Transparency	Was AI use in audience interaction disclosed? Can the personalization logic be explained?	The chatbot's nature was not disclosed. The personalization logic was not announced. Press releases were not attributed to AI.	Place a clear indication of automated interaction. Publish a transparent policy on personalization logic. Disclose the use of generative AI.
Distributed Accountability	Who bears responsibility for excluding rural residents? Are there oversight mechanisms?	Design responsibility: the technology provider did not test for bias. Deployment responsibility: the practitioner did not review outputs. Governance responsibility: absence of institutional policy. Residual responsibility: the company is responsible by result.	Specify each party's responsibilities contractually. Establish an internal ethics oversight committee. Put in place compensation procedures for those affected.
Informational Justice	Does the system exclude certain segments? Do the data reflect audience diversity?	Clear exclusion of rural residents. Biased training data. Absence of a mechanism for involving the affected audience.	Audit training data and rebalance them. Conduct periodic bias testing. Involve representatives from rural areas in policy design.
Audience Autonomy	Does personalization respect the audience's capacity for free choice? Where does the influence fall on the spectrum?	The psychological personalization falls in the gray zone between nudging and manipulation. The audience is not given an option to refuse personalization.	Provide the option of receiving non-personalized messages. Review psychological classification criteria to ensure non-exploitation of vulnerabilities.
Anticipatory Responsibility	Was a prior ethical impact assessment conducted? Is there continuous monitoring?	No prior ethical assessment was conducted. Absence of output monitoring. No emergency shutdown protocol.	Mandate a prior ethical impact assessment before any new deployment. Establish a real-time monitoring dashboard. Put in place a correction and shutdown protocol.
Privacy (Cross-cutting component)	Was the data collected with genuine consent? Do individuals have the right of control?	Nominal consent through lengthy terms of use. Absence of a genuine option for data deletion.	Simplify the consent mechanism. Effectively provide the right of deletion, access, and correction.

This scenario demonstrates how the framework can function as a comprehensive diagnostic tool that reveals the intertwined ethical gaps in AI-based public relations practice, while simultaneously providing practical guidance for reform.

Section Seven: Theoretical and Applied Implications

First – Implications at the Theoretical Level

1- **Redefining "excellent practice":** It is not sufficient for public relations to be symmetrical and dialogic; it must also be algorithmically transparent, informationally just, accountable, and respectful of audience autonomy.

2- **Revising the concept of the audience:** The audience has also become a source of data, a subject of algorithmic classification, and a party to interactions whose technical nature it may not perceive.

3- **Bridging the gap between two fields:** The framework connects the literature of public relations ethics with the literature of AI ethics.

Second – Implications at the Level of Professional Practice

A guiding checklist for ethical decision-making according to the proposed framework:

- **At the transparency level:** Does the audience know it is interacting with an AI system? Can the general bases of algorithmic personalization be explained? Is content produced by generative AI disclosed?
- **At the accountability level:** Is there a clear specification of who bears responsibility for each stage? Are there effective internal oversight mechanisms? Are there procedures for correction and compensation when harm occurs?
- **At the justice level:** Have the algorithms in use been tested for bias? Do the training data reflect the diversity of the target audience? Are affected groups involved in policy design?
- **At the autonomy level:** Where does the practiced influence fall on the informing-persuasion-nudging-manipulation spectrum? Is the audience given a genuine option to refuse personalization and tracking? Are there efforts to enhance algorithmic awareness among the audience?
- **At the anticipatory responsibility level:** Was a prior ethical impact assessment conducted? Are there continuous monitoring mechanisms? Is there a capacity for reversal and correction when unforeseen harms emerge?
- **At the privacy level (across all dimensions):** Was the data collected with genuine informed consent? Do individuals have an effective right to access, modify, and delete their data? Is the data used exclusively for the stated purposes?

In terms of **professional organization**, the five dimensions can form a basis for developing updated ethical codes for professional associations in the field of public relations. Current codes, such as the code of the International Public Relations Association (IPRA) and the code of the Public Relations Society of America (PRSA), do not contain sufficient provisions related to artificial intelligence and the digital environment.

In terms of **education and training**, the framework affirms the necessity that public relations curricula include courses that combine technical competence with ethical awareness.

Third – Implications at the Level of Future Research

The framework opens several research pathways, including: the empirical study of the extent of public relations organizations' compliance with algorithmic transparency standards; the study of audience perceptions of the ethicality of interaction

with AI systems; comparison between regulatory frameworks in different countries; and the development of quantitative measures for evaluating ethical performance. It also calls for qualitative studies that explore the lived experience of practitioners in confronting ethical dilemmas, and cross-cultural comparative studies that test the suitability of the proposed dimensions for non-Western cultural contexts.

Section Eight: Limitations of the Study and Future Horizons

This study is subject to a number of limitations that should be transparently acknowledged:

1- **Absence of empirical testing:** The proposed framework remains a theoretical construct that needs to be tested in diverse real-world contexts; the presented application scenario does not substitute for field research.

2- **Western dominance of review sources:** Despite reference to non-Western approaches, the review was primarily based on English-language and Arabic-language literature, which may cause the framework to lose some cultural specificities of Asian, African, and Latin American contexts.

3- **Rapidity of technological development:** The field of artificial intelligence is characterized by exceptional rapidity of development-particularly in the area of generative AI-which may render some technical assumptions in need of continuous revision.

4- **The problematic of tension between ethical requirements and economic pressures:** The study did not treat with sufficient depth the problematic that compliance with the framework's requirements (such as full transparency or prior impact assessment) may lead to additional costs and competitive disadvantages, thereby necessitating future research into appropriate economic and regulatory incentives.

5- **Variation of regulatory frameworks among nations:** The study did not address the fundamental differences between countries' legal systems regarding data protection and AI regulation and their impact on applying the proposed framework.

Nevertheless, these limitations do not diminish the foundational value of the framework but rather open promising horizons for its development and deepening.

Conclusion

This study sought to address a theoretical problematic of considerable urgency concerning the ethical grounding of public relations practice in an age in which artificial intelligence has become a central agent in the communication process. It proceeded from a critical narrative review of classical and contemporary theoretical frameworks in public relations ethics (87 scholarly works published between 1984 and 2025), and concluded that these frameworks-despite their richness-suffer from conceptual, structural, and epistemological deficiencies that limit their capacity to respond to the qualitative problematics posed by artificial intelligence. It then iden-

tified five principal ethical problematics relating to transparency, autonomy, justice, responsibility, and privacy, before proposing an integrative theoretical framework comprising five interrelated dimensions (graduated algorithmic transparency, distributed communicative accountability, informational justice, audience autonomy, and anticipatory responsibility) with the integration of privacy as a cross-cutting component permeating all dimensions.

This framework is not the end of the journey but rather the beginning of a theoretical trajectory that requires enrichment, deepening, and confrontation with empirical reality. Ultimately, the stakes are not technical so much as they are humanistic and value-laden, as they concern the nature of the relationship we wish to bind institutions to the societies in which they operate, and the limits that technology should not transgress regardless of its capabilities.

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