

12 Conversational Archetypes for Human-AI Interaction

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Abstract

Artificial Intelligence (AI), once exclusive to sophisticated technological spheres, now plays a transformative role across all aspects of society, driving significant progress and innovation. In this backdrop, basic conversational interface *aka* chat emerged as the easiest, and the simplest way to interact with AI systems. However, the current Human-AI conversations are fraught with a host of challenges necessitating a critical exploration into their design, approach, and implications. As AI technologies continue to permeate our lives, the need for seamless, intuitive, and human-like conversations is amplified. While our larger research embarks on a research study to suggest a conceptual framework to help design more effective and engaging Human-AI conversations, this paper focuses on a critical aspect that surfaced as a primary gap during our literature review. Conversations are effective and engaging only when their fundamental purpose is identified and understood by their participants. Hence, formulating a purpose driven conversational typology emerged as a key design imperative to inform an array of frameworks that could help create meaningful Human-AI conversations. This study evaluates a dataset of over hundred Human-AI and Human-to-Human conversations, proposing twelve conversational archetypes central to a conceptual framework intended to enhance Human-AI conversations. Employing a hybrid methodology that integrates content analysis with case study research, this paper examines the issue from a human perspective. It aims to provide a useful resource for designers, developers, researchers, and industry professionals who seek to foster deeper connections and trust in human-AI interactions.

Keywords: 12 Conversational Archetypes, Conversational Typology, Conversational Human-AI Interaction (CHAI), Human-AI Interaction, Conversational AI

1. Introduction

While the pace of AI technology evolution is frenetic, Human-AI conversations still lack the depth and latitude of human conversations. They are frustrating to use, poor at understanding context, and often leave users exasperated leading to conversational dead-ends. When AI interacts with humans in ways that resemble natural human communication, it makes technology more human-like. During our research to address these shortcomings, we have discovered that all Human-to-Human conversations are purpose driven whether indulging in just small talk or engaging in intellectual exchange of ideas. Human-AI conversations would need to be anchored in the same fundamental premise to cultivate stronger bonds and meaningful outcomes. This research paper addresses the need to identify and collate purpose driven conversational archetypes to embark on designing more effective and engaging conversational interfaces. The primary objective of this research was to investigate the current state of Human-to-Human and Human-AI conversations and identify their purpose, structure, strengths, weaknesses and challenges.

Secondly, classify these conversations into various archetypes and propose a conversational typology based on patterns of exchange. Thirdly contribute to the body of knowledge by creating generic models for all conversational archetypes. Through this exploration, the paper aims to establish a foundational framework for designing future Human-AI conversations. By examining the intricate dynamics of human communication, this research offers useful insights to designers, developers, researchers, industry professionals and academia with potential implications across a wide range of applications. The subsequent sections of this paper outline the current landscape of Human-to-Human and Human-AI conversations, drawing insights and synthesizing learnings into a purpose driven conversational typology.

2. The Power of Conversations

Conversations shaped our society, culture, and evolution. Conversations are one of the greatest inventions of mankind helping us spread knowledge, build relationships, and establish connections. Conversations evolved from a mere exchange of ideas to philosophical discourse, scientific inquiry, and political debate (Miller, 2007). Throughout history, human conversations have been pivotal in developing cooperation and collaboration as shared strategies and behaviors. Conversation evolved as the bedrock of social interaction, facilitating the expression of thoughts, emotions, and information among individuals (Dindia & Canary, 2006). Through conversations, individuals unveil their identities, disseminate their experiences, and strengthen connections with others. Psychologically, conversations contribute to a sense of belonging and fulfillment, enhancing one's well-being and social connectedness (Baumeister & Leary, 1995). In professional environments, strong communication skills, particularly the capability to engage in meaningful conversations, are highly valued and often linked to success and leadership (McCroskey, 1982). On a societal level, conversations mold cultural norms, collective identities, and social change movements, serving as catalysts for dialogue, empathy, and understanding across diverse communities (Miller, 2002). Moreover, conversations have far-reaching effects on individuals' cognitive, emotional, and social well-being, as well as broader societal dynamics. Engaging in meaningful conversations has been linked to enhanced cognitive functioning, including improved problem-solving skills, creativity, and critical thinking abilities (Dunbar, 1998). Conversations also play a crucial role in emotional regulation and support, providing individuals with opportunities to express their feelings, seek advice, and receive emotional validation from others (Reis & Gable, 2003). Furthermore, conversations were recognized as the driving force behind some of the social changes and transformative movements across history. Dialogue and discourse were instrumental in creating awareness, rallying solidarity and bringing about societal transformation to uplift marginalized communities (Branch, 2013). In essence, conversations have profoundly shaped our past, and continue to transform our present and future. Their power and significance in fostering empathy, and positive change in the world is immense.

3. Understanding Human-to-Human Conversations

Human-to-Human conversations are a complex phenomenon with several linguistic, cognitive and emotional layers influencing our relationships across sociocultural dimensions. At a structural level, Human-to-Human conversations use basic ingredients such as grammar, syntax, turn taking etc., to create coherent and relevant dialogue. At a conceptual level, conversations help exchange ideas, share information and express emotions. At a cognitive level, human conversations involve verbal and non-verbal cues, along with the seamless navigation and interpretation of meaning based on context. At an emotional level, human conversations provide a range of cues comprising intonation, facial expressions,

and body language. They have far-reaching effects on an individuals' cognitive, emotional, and social well-being. From a cultural standpoint, the conversations reflect shared values and social identities along with gender, age, race and class. Conversational patterns may vary across cultures, influenced by norms, values, and communication styles unique to each society (Hofstede, 1980). At a societal level, conversations reflect the prevailing power dynamics within a social milieu. Human conversations weave together these diverse dynamics, shaping the fabric of our social interactions that craft our cultures and individual identities across the ages. Conversations are also dynamic, fluid, and characterized by shifts in topics, tones, and participants' roles (Sacks et al, 1974). The Cooperative Principle highlights the underlying notions of effective communication, emphasizing the importance of relevance, clarity, and cooperation in sustaining meaningful conversations (Grice, 1975). In-depth understanding of these nuances would help in creating more effective Human-AI conversations.

4. What makes Human-to-Human Conversations tick?

Human-to-Human conversations transcend mere information exchange and embody a rich tapestry of emotions, ideas and sociocultural dynamics. The quintessential elements that make human conversations socially relevant, culturally sensitive and emotionally versatile contribute to the overall efficacy and effectiveness of conversations. The interplay of these implicit and explicit intricacies have made them seemingly simple yet extraordinary. At a structural level, the human conversations use syntax, grammar and semantics to build coherent interaction. And the mechanics of interaction such as turn-taking, repair, and adjacent pairs helps participants manage and structure their conversations emphasizing the organized nature of talk in everyday life (Sacks et al, 1974). The theory of implicature outlined how speakers often convey meaning beyond the explicit content of their utterances, relying on shared assumptions and conversational norms to achieve mutual understanding and coherence (Grice, 1975). Further, facial expressions play a pivotal role in universally comprehensible communication, often surpassing cultural boundaries (Ekman & Friesen, 1975). The theory of face-to-face interactions emphasizes that social interactions are structured around rituals and norms that maintain each participant's "face" as a social identity (Goffman, 1983). The nonverbal communication model suggests that words convey only 7% of a message, while tone of voice and body language contribute 38% and 55%, respectively, emphasizing the dominance of nonverbal cues in effective communication (Mehrabian, 2007). Beyond this, human conversations also leverage a diverse emotional spectrum, making them both powerful and significant in their impact. Emotional intelligence with the ability to recognize, understand, and manage one's emotions and those of others facilitates improved interpersonal relationships and mutual rapport (Goleman, 1995). Effective conversations are also marked by several key components, including empathy, authenticity, and reciprocity. Empathetic and active listening characterized by the ability to understand and validate others' perspectives, fosters trust and emotional connection (Rogers & Farson, 1987). Reciprocity, or the mutual exchange of ideas and contributions, is essential for maintaining balanced and engaging conversations, where all participants have the opportunity to contribute and be heard (Clark, 1996). The politeness theory proposes that individuals use various strategies to maintain social dignity and harmony balancing the demands of politeness against the needs of directness and efficiency in interaction (Brown & Levinson, 1987). In conclusion, the art of human conversation is a multifaceted phenomenon that shapes our society in profound ways. The sociocultural intricacies highlight how social norms, and power dynamics choreograph human conversations. By carefully deconstructing, examining, and analyzing human

conversations and their intricate social dynamics, we can develop advanced Human-AI interactions that mimic the depth, richness and efficacy of human conversations.

5. Methodology

This exploratory, qualitative study integrated content analysis and case study research to uncover insights that contribute to the broader understanding of Human-to-Human and Human-AI conversations. The rationale for this methodological choice lies in its ability to provide a comprehensive yet nuanced understanding of a field which has several layers of sociocultural dynamics. While content analysis served as the initial method for analyzing 100+ of existing Human-AI conversations at a broad level, the case study research allowed us to conduct in-depth studies in specific domains across varied sectors and geographies which led to the discovery of key themes, communication strategies, and patterns in Human-to-Human and Human-AI conversations. Semi-structured interviews with users and stakeholders helped gain additional insights into the motivations, challenges, and outcomes. The integration of content analysis and case study research enabled a comprehensive exploration of conversations offering valuable insights into the complexities of conversation design, and its implications for human behavior and stakeholder engagement. The case studies covered both Human-to-Human and Human-AI conversations in real-world settings in banking, insurance and healthcare domains in the US, Singapore, India and Indonesia. Qualitative data analysis techniques, such as thematic analysis and content analysis, are employed to analyze the collected data. The findings of this study revealed several concepts and structures that helped in arriving at a purpose driven conversational typology with 12 conversational archetypes. These archetypes cater to the specific understanding of the complexities and dynamics of each conversation type, offering useful insights for the design and improvement of Human-AI conversations.

6. The Current State of Human-AI Conversations

Human-AI conversations have evolved extensively over the last few years in various applications ranging from customer support to mental health chatbots. Technologies such as NLP and ML have taken the Human-AI conversations a notch higher from the early structured rule engine based chatbots. The most recent interfaces built on large language models have certainly made these interactions more engaging (Radford et al, 2019). However they are still far from being efficient, captivating and lifelike. This research outlines several challenges that even the most advanced Human-AI conversations today still struggle with. Based on our multiple case study analysis, these challenges can be broadly categorized into three principal domains: the Interactional Realm, the Emotional Realm, and the Ethical Realm. At the Interactional Realm, context awareness emerged as a formidable challenge for AI systems. Preservation of contextual understanding across conversations poses considerable difficulty, often resulting in misinterpretations or erroneous outputs. Maintaining coherence over extended conversational durations is also a daunting task (Holtzman et al, 2020). Furthermore, AI systems face challenges in understanding complex linguistic structures, including idiosyncratic expressions, dialects, and intonations, especially when text, voice, and gestures are integrated into a unified interface. At the Emotional Realm, the deficit in understanding and managing users' emotions, tailoring responses to individual preferences emerged as a substantial impediment confronting AI systems. At the Ethical Realm, the toxic impact of biases embedded through the training data of AI systems, has resulted in the propagation of misinformation, and distortion of reality (Bolukbasi et al, 2016). Ethical dimensions entailing privacy, data security, and consent, particularly in acquisition and management of sensitive personal data has become overwhelmingly onerous (Mittelstadt

et al, 2016). Besides, the imperative of transparency and trustworthiness of AI systems has escalated into a major concern (Bonnefon et al, 2018). The risk of over dependence on these systems, potentially leading to humans losing their autonomy, control and decision making authority looms large. In summary, the contemporary landscape of Human-AI conversations presents extensive interactional, emotional and ethical quandaries.

7. Conversational Social Dynamics Framework

The hybrid methodology of content analysis and case study research unveiled two significant insights from the outset. First, it highlighted that the core principles shaping human conversations are ingrained in interactional, emotional, and ethical realms. Second, it identified five essential dimensions that guide the progression of these conversations. The five dimensions are conversation management, expertise and competence, emotional intelligence, trust and credibility, and personalization. When these two insights were synthesized, the confluence of their constituent elements along with the phenomena that surfaced at their intersections, further unearthed novel and multi-layered facets with potential to substantially influence the dynamics of conversations. At the intersection of Emotional Realm and Ethical Realm lies the dimension of Emotional Integrity. Understanding and exploring this dimension is critical for Human-AI conversations as manipulation of emotions or using emotions to sway or control the outcomes could have major impact on conversations, leading to changes in behavior, decision-making, and relationships. At the intersection of Interactional and Emotional realms lies the dimension of Socio-Emotivity emphasizing the spectrum of emotional expression and suppression within social interactions. Suppressing emotions can harm human relationships by creating distance, misunderstandings, and unresolved conflicts. Conversely, expressing emotions unnecessarily can overwhelm others, causing discomfort and tension. Understanding these underpinnings is essential to resolving interpersonal conflicts in everyday conversations. The intersection of Interactional and Ethical Realms traces the dimension of Power Dynamics, which shapes the quality of our social fabric, influencing whether we treat each other with respect or disdain. Those with more power often set norms and expectations, while those with less power may conform or resist, leading to inequality, and conflict in human interactions. These dynamics are pivotal in fostering an environment characterized by inclusivity, fairness, and social justice, thereby influencing the quality of conversations. Finally, at the intersection of all three realms, we find a complex and nuanced dimension that investigates the interplay among emotions, social interactions and ethical considerations. This dimension named, Moral Ethicacy examines how our perceptions are closely tied to emotional reflections, ethical evaluations, and social contexts, shaping how we interpret and respond to experiences. Emotions color our judgments, ethics guide our sense of right and wrong, and social contexts provide the backdrop for our interactions, collectively forming our worldview and interactive behavior. Beyond these, the five essential dimensions revealed through the case study analysis provide the backbone of creating successful conversations in any domain. By mapping these five key dimensions with the three realms and their intersections led to the formation of a foundational framework that can potentially act as a guidepost to facilitate a more robust and informed exploration of conversational experiences. Through this prism, we can gain deeper insights into the underlying aspects that shape the human behavior illuminating the design of future Human-AI conversations. The interplay of these elements illustrated below, constitute the Conversational Social Dynamics Framework.

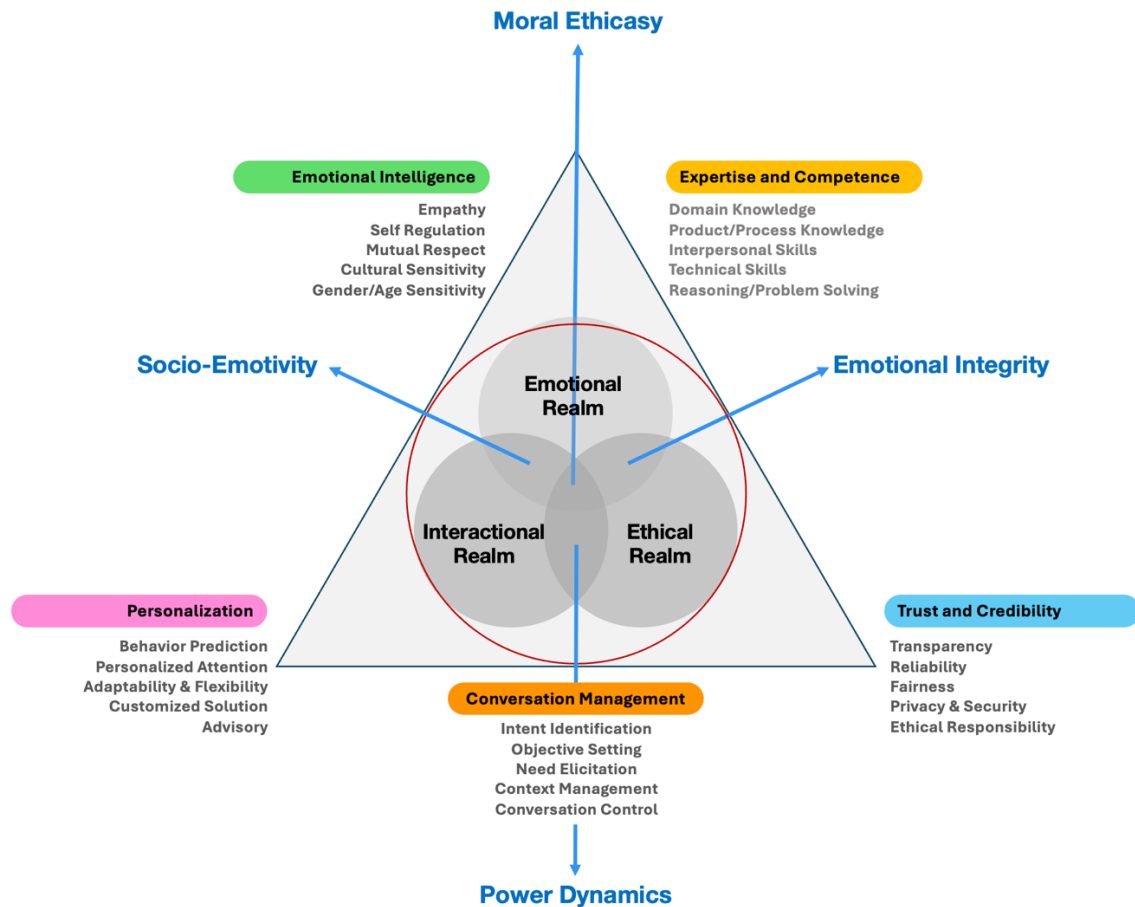


Figure 1: Conversational Social Dynamics Framework

8. Purpose Driven Typology of Conversations

The Conversational Social Dynamics Framework served as a reference point for a comprehensive understanding of the intricacies of human conversations and aided in identifying the purpose driven conversational archetypes and their constituent elements. Discerning the purpose of a conversation upfront exclusively underpins their design, implementation and evaluation. By grasping the purpose of conversations, designers and developers could align intentions with outcomes, crafting experiences that resonate with users at a deeper level. The significance of purpose extends beyond mere functionality; it serves as the bedrock of meaningful design intervention that incorporates emotional intelligence, ethical considerations, and social contexts. The study, anchored by the Conversational Social Dynamics Framework, has yielded insights culminating in the development of a detailed purpose driven conversational typology with 12 Conversational Archetypes. This typology recruits insights drawn from the Human-to-Human and Human-AI conversations to define and universalize the categories, distilling the essence of each of these archetypes to outline their structure and capture the salient inherent features. By integrating several key dimensions of Human-to-Human and Human-AI conversations, these archetypes would have a direct implication on the creation of next generation of conversational interfaces that transcend the mere utility and pave the way for more meaningful and transformative interactions with AI systems. The conversational archetypes also help in making better design decisions by providing a framework for understanding user needs, motivations, and behaviors. By using these common patterns, designers and developers can create more intuitive, and relevant experiences. These archetypes, while

unique in their own right, regularly converge in our daily lives, spanning both professional and personal environments. This convergence prompts us to seamlessly integrate a mixture of these archetypes into our conversations. Whether in social circles or familial environments, we navigate through a dynamic landscape where these distinct archetypes intersect, shaping our responses and behaviors in diverse situations. The figure below outlines the twelve conversational archetypes.



Figure 2: Twelve Conversational Archetypes

9. Twelve Conversational Archetypes

Each of these archetypes depicted above have a distinctive structure, a unique pattern and a typical exchange form. This section outlines each of the 12 archetypes and their idiosyncrasies. Their patterns have been extracted into generic constructs, although it's important to note that the outlined steps may not always occur in a linear fashion and can vary depending on the specific context and usage. Further, the participants in these conversations inherently recognize their role in each of these conversations and accept the norms, behaviours and values of these archetypes. They also dynamically adapt to individual characteristics and expectations in every conversation. Sometimes feedback, critique and backlash are inherent within a conversation leading to reception or disagreement of such inputs. This could further alter the structure prompting the rearrangement of elements. Personal values and beliefs also have a considerable impact on these archetypes. Each of these archetypes is represented below as distinct and unique constructs, with specific individual characteristics that set them apart from one another. While, depicting each of these models as they illuminate the unique characteristics and essential pattern of each type, their typical progression was plotted across opening, main business and closing of a conversational archetype. We have also mapped each of these distinct constructs with the key dimensions, namely Conversation Management, Expertise and Competence, Emotional Intelligence, Trust and Credibility and

Personalization that were derived from the Conversational Social Dynamics Framework. These archetypes are infused with a complex interplay of attributes, blending both universal and specific characteristics. This intricate combination enriches each archetype, allowing them to resonate broadly while also possessing unique traits that distinguish them individually.

9.1 Informational Conversation

Informational conversation is the simplest of all conversational archetypes and primarily involves gathering information or facts, representing the most straightforward type of conversations. The key indicators for this classification entail question-answer driven, topic specific interactions seeking certain precise details. Observations encompass obtaining clarifications, explanations, or instructions with the absence of any personal anecdotes. The language is cordial, and the communication style is inquisitive prioritizing clarity and brevity. Examples include seeking flight timings, asking for a recipe or checking out the price of a product. The following figure depicts the typical structure of an informational conversation.

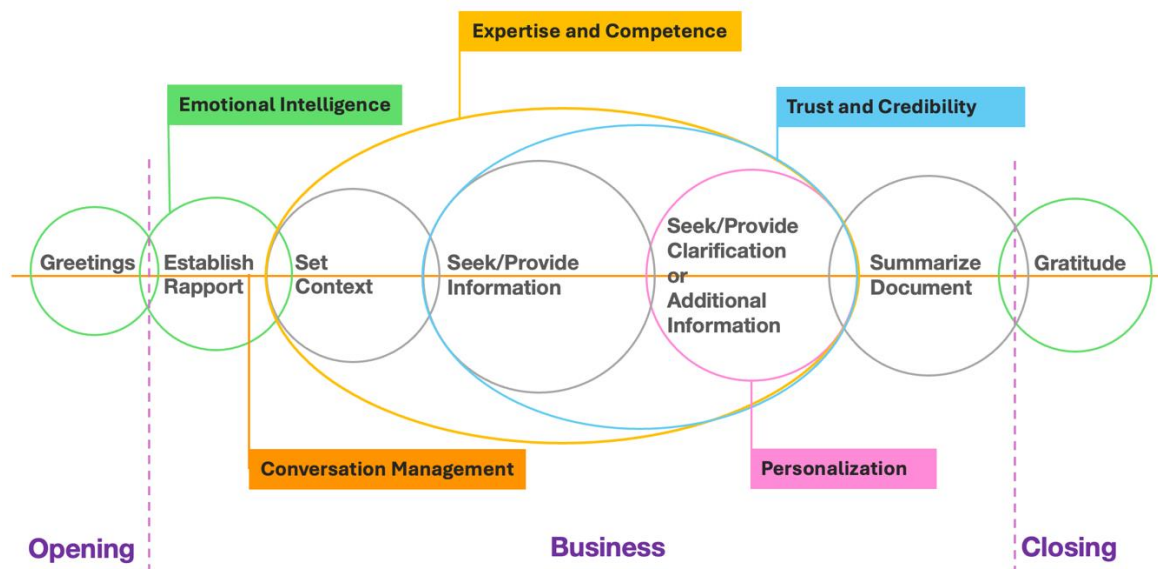


Figure 3: Informational Conversation Model

This is also one of the archetypes that surfaces across all other types frequently. The opening of an informational conversation usually involves establishing a positive rapport, with friendly greetings, a warm smile, and a welcoming body language. The business of conversation starts with setting the context, and directly seeking the necessary information. Where required, additional clarifications are sought, accompanied by follow-up inquiries. Throughout this exchange, the seeker of information demonstrates attentive engagement, evidenced by non-verbal cues such as nodding and direct eye contact. Subsequently, seekers often recapitulate the received information, either by paraphrasing or restating it, to ensure mutual understanding. The seeker of information upholds a respectful demeanour, conscientiously refraining from intruding upon personal boundaries and limiting inquiries to pertinent matters. The seeker also records the information through physical or mental notes depending on the complexity of information. Closure of this archetype includes expression of gratitude and defining any follow-up actions. Ethical considerations in this archetype include ensuring accuracy and transparency, respecting privacy, and promoting inclusivity.

9.2 Awareness Conversation

Awareness conversation aims to create awareness about a product, person, topic or even just an idea. Indicators of awareness conversations include highlighting a need or a problem, compelling message delivery, and sharing of data driven testimonials. Observations such as use of promotional language, repetition of key messages, persuasive skills and a call to action further solidify this classification. The language is clear and direct, the communication style is professional, and the choice of words is non-confrontational, non-judgmental and often clever. Examples include raising awareness about environmental crisis, animal welfare or about a product launch or publicising an event. Whether building awareness of a brand or changing perceptions about an issue, the objective of this archetype is to increase visibility, generate interest and drive action. The essence of this archetype hinges on delivering a compelling message that presents the value proposition of a product, person or idea in a captivating fashion. The message is also often wrapped in emotion to heighten the impact. Using data points through various media and other tools is also deployed in certain cases to evoke the expected outcome.

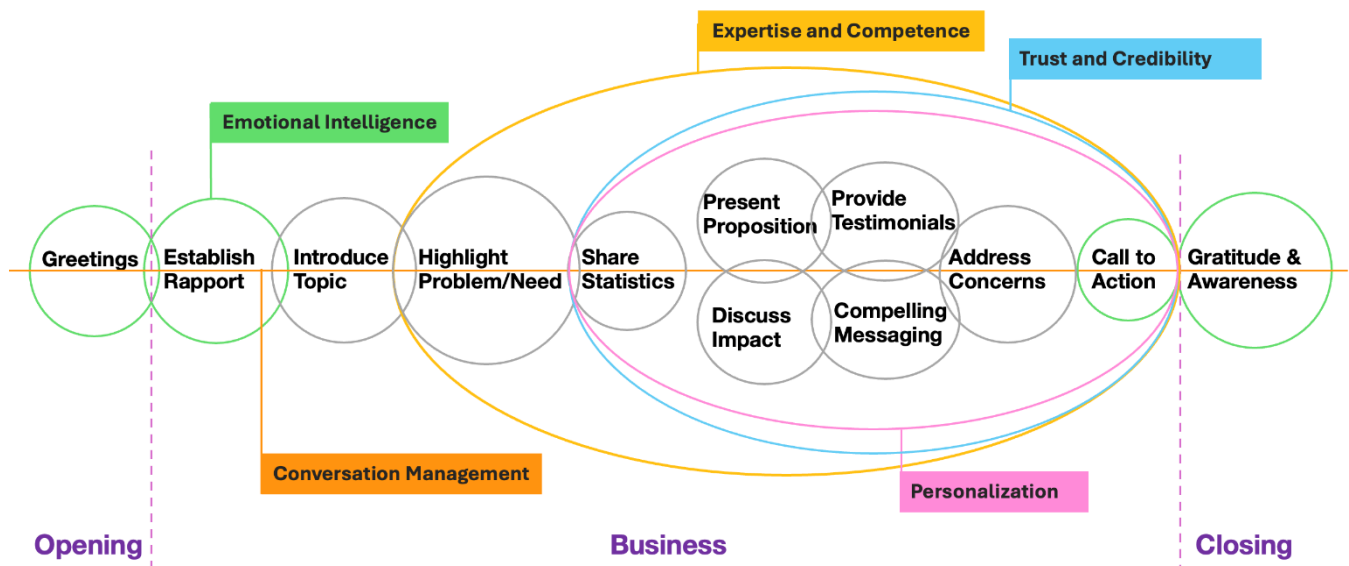


Figure 4: Awareness Conversation Model

The opening of an awareness conversation begins with greetings and establishing rapport. The business of this archetype starts with introducing the topic and then goes on to highlighting the problem or need. This is followed by sharing key statistics, presenting the proposition, discussing the impact, and providing evidence through testimonials. The conversation then addresses the concerns of the participant and delivers a call-to-action. The closing involves expressing gratitude and also rekindling the awareness. Since delivering a compelling message is pivotal for this archetype, creating trust and credibility become imperative for this conversation. Creating emotional engagement with the participants is also a critical component. Awareness conversation necessitates ethical mindfulness to ensure accuracy, respect, and non-exploitation. Striking a balance between transparency and sensitivity, acknowledging diverse perspectives, avoiding fearmongering, and promoting constructive action are its vital constituents.

9.3 Transactional Conversation

Transactional conversations help fulfil tasks and accomplish various types of transactions usually through

use of systems with authentication. Transactional conversations focus on immediate execution of tasks, usually lacking any emotional engagement. Indicators involve goal-driven exchanges, sharing personal details, seeking clarifications, providing final approval, and obtaining confirmation. Observations include directive language with brief responses and minimal elaboration. Limited and appropriate disclosure of personal details prioritizes information security over relationship-building. The communication style is typically straightforward, and task-oriented with precise instructions. Language is clear, direct and concise. These transactions are diverse and the examples include transferring money, renting a car, booking a flight, paying utility bills, renewing a driving license, trading in stock market, or even seeking a particular type of blood from a blood bank. In this archetype, the conversation begins by establishing the transactional objective. The business of the conversation follows with exploration of available alternatives and the selection of preferences. Subsequently, details of the transaction are outlined, and payment methods are invoked if needed. After a final review, the participant confirms the transaction. The closing may or may not involve any expression of gratitude.

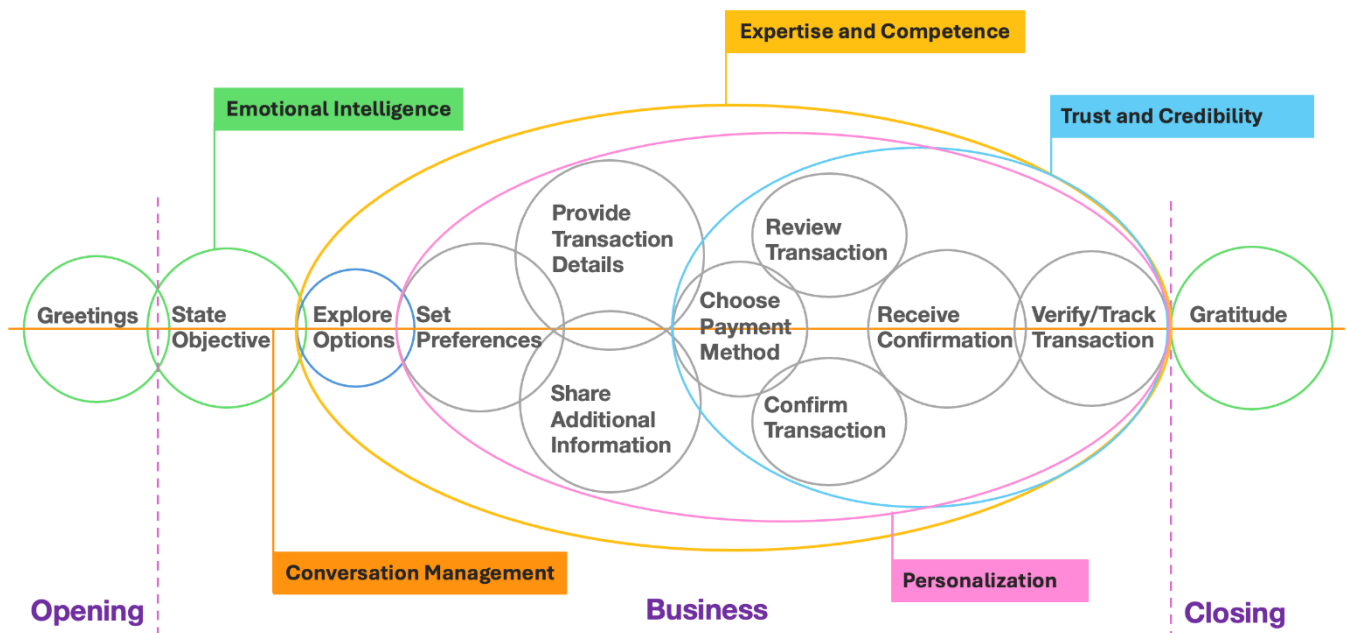


Figure 5: Transactional Conversation Model

While this archetype provides a general framework for conducting various transactions, specific processes may vary depending on the service, platform or context. As transactional conversations aim to simplify processes and reduce friction, there seems to be a need to provide implicitly guided navigation. Context switching also becomes very important to address relevant and non-relevant questions through intent deviation, throughout the transactional conversation. Ethical considerations in transactional conversations involve ensuring data privacy, security of personal and financial information.

9.4 Casual Conversation

Casual conversation is an informal exchange and its primary purpose is to create a spontaneous human connection. Indicators for casual conversations include engaging in light topics revolving around everyday events or shared interests with minimal personal disclosure, and relaxed body language. Observations reveal the use of informal language and fluid topic changes, with conversations typically lacking depth

and often punctuated by laughter. There is little effort to extend the conversation beyond its immediate purpose. Language tends to be informal, featuring colloquialisms and slang. Communication often includes less structured sentences and friendly interruptions. Expressions and tone clearly convey emotions, enhancing spontaneity and personal connection. These light-hearted conversations range from conversations around the water cooler in the office or between strangers on a train to a casual countenance in a supermarket. The opening usually consists of greetings and small talk about weather, current events, sports, movies or politics. The business of conversation starts with an ice-breaker such as making a generic observation or a wisecrack. Conversation quickly moves into sharing thoughts or opinions on either side. Participants also reflect on their shared experiences and may digress into another topic or usually wind down the conversation. Sharing personal anecdotes and stories is a common theme. Throughout the conversation, participants maintain an informal tone, using humour, empathy, and active listening to engage with each other.

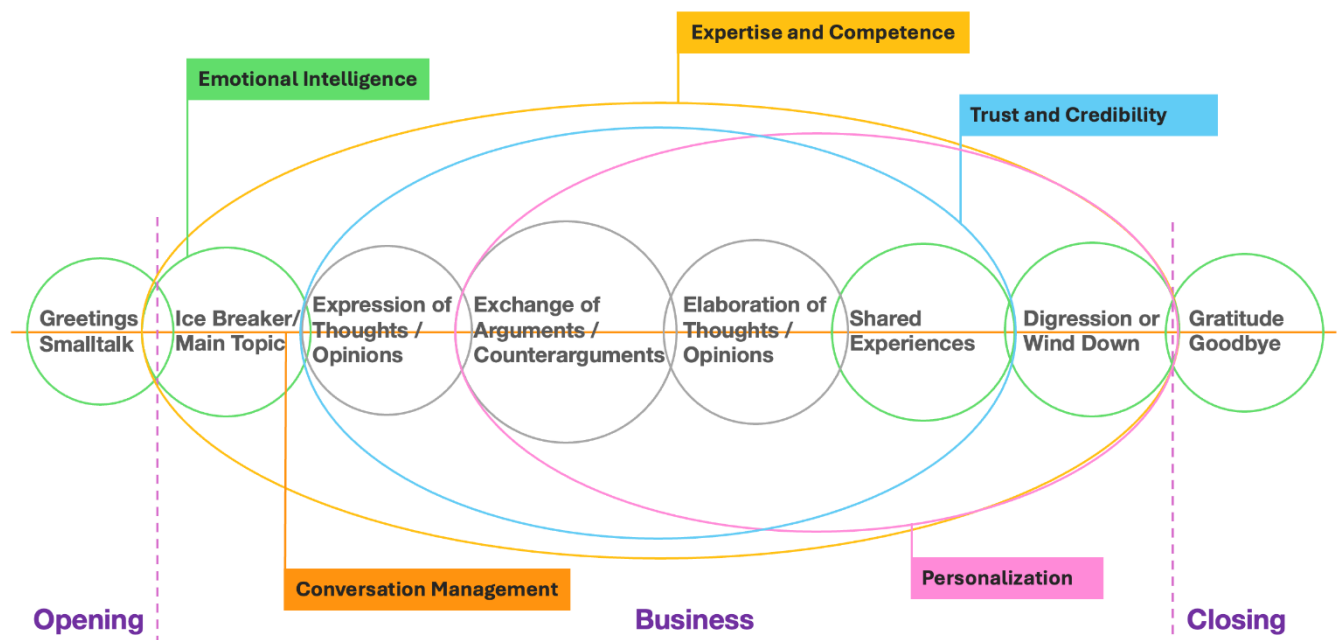


Figure 6: Casual Conversation Model

An important aspect of casual conversations is that the participants value genuine sharing of their true thoughts and feelings, rather than trying to impress or conform to social expectations. Sharing authentic experiences during casual conversations fosters a sense of belonging, enhances socializing and networking, and provides relief from the daily pressures of life. The pitfalls of casual conversations point to situations where they can lead to misunderstandings due to ambiguous language or tone. They can even inadvertently perpetuate stereotypes or biases if not mindful of language or opinion choices.

9.5 Analytical Conversation

The key objective of an Analytical conversation is to critically examine and discuss a topic, problem, or situation in depth. Analytical conversations are characterized by probing questions, systematic examination, logical reasoning, and evidence-based arguments. Indicators typically encompass structured analysis, critical thinking, data interpretation, and causal relationships. The language used is clear, formal,

and technical devoid of subjectivity. Communication tends to be detail-oriented, emphasizing evidence and logical reasoning. The style is methodical, aiming for objectivity, and often incorporates diagrams, graphs, or other visual aids to bolster the points made. Emphasis on validity rather than opinion suggest the traits of an analytical conversation. They help individuals gain deeper understanding of the subject to facilitate problem solving by identifying underlying causes, patterns, and potential solutions to complex issues or challenges. They also allow development of informed strategies, weighing alternatives in objective decision-making.

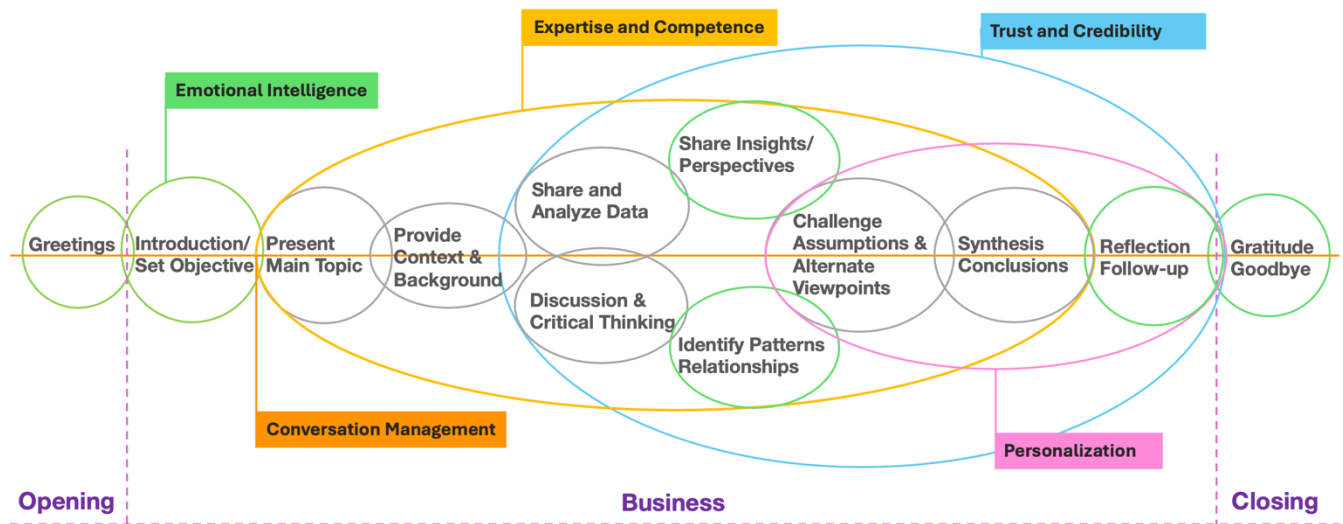


Figure 7: Analytical Conversation Model

These conversations range from economic policy analysis, literary critique, business strategy discussions, to even job interviews and courtroom discussions. The analytical conversations aim to enhance understanding, inform decision-making, solve problems, and drive improvement in various domains, including business, science, academia, policy-making, and everyday life. It is a fundamental tool for making sense of the world around us and driving progress through critical thinking. The opening of these conversations comprise of introductions and objective setting. The business of conversation starts with the presentation of the main topic with context and background information. Participants then present and analyze data discussing insights, perspectives, and observations. The conversation then typically moves into identifying patterns or relationships and involves challenging assumptions and exploring alternative viewpoints. The underlying tenet of this archetype is to maintain objectivity and comprehensiveness. Pitfalls of analytical conversations include oversimplification, confirmation bias, and missing contextual nuances. Ethical considerations that must be kept in check are transparency in data sourcing, acknowledging biases, and ensuring the responsible use of analytical findings to avoid misinformation or harm.

9.6 Resolution Conversation

The purpose of resolution conversation is to address and resolve conflicts, disagreements, or disputes in a constructive and effective manner. Resolution conversations help in solving problems, grievances, and misunderstandings. They also promote trust and cooperation while preventing smaller problems escalating

into serious issues. Indicators of this archetype include clear articulation of the problem, precise identification of the issue, a problem-solving orientation, focus on factual details, and the presentation of feasible solutions. Traits that lead to this classification include a polite demeanor, the use of objective and constructive language, and careful listening. The communication style is empathetic, designed to acknowledge and validate the feelings of the aggrieved party.

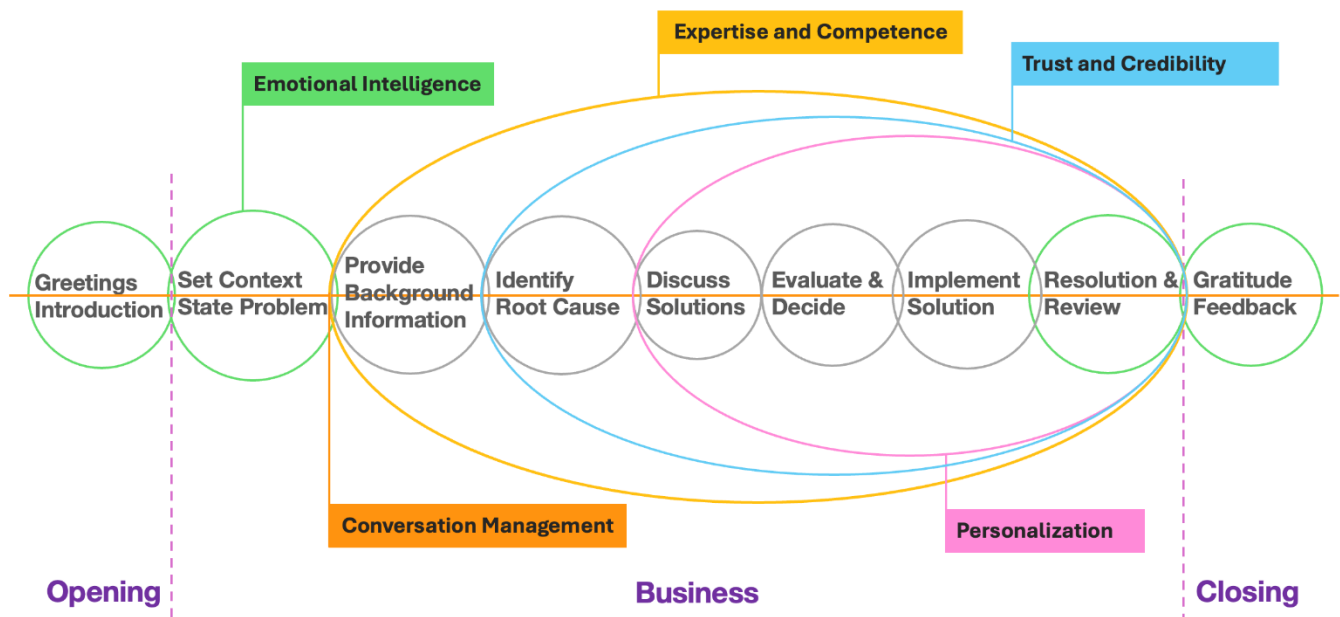


Figure 8: Resolution Conversation Model

Resolution conversations aim at a solution or outcome that effectively addresses the issue at hand. Resolution conversations can vary greatly depending on the nature of the problem and the context in which they arose. These conversations typically address scenarios involving dissatisfied customers who have encountered issues such as defective products, service disputes, billing errors, delivery problems or fraudulent activity. Resolution conversation involves various processes, techniques, and strategies aimed at arriving at a mutually satisfactory solution. This archetype starts with a quick opening of introductions and moves to the main business of context setting, problem definition, identifying the root cause and finding potential solutions. And the closing typically involves expression of gratitude and feedback sharing. This conversation involves a dynamic and iterative process that requires flexibility and adaptability, providing empathetic support throughout the conversation with active listening and collaboration. The individuals seeking the resolution are often under emotional stress and need constructive engagement. Pitfalls of resolution conversations include overlooking underlying issues, offering temporary fixes, or neglecting long-term solutions. Ethical considerations involve honesty, fairness, confidentiality, and prioritizing the customer's interests.

9.7 Persuasion Conversation

Persuasion conversation constitutes an approach aimed at impacting the beliefs, attitudes, decisions, or behaviors of individuals or groups. This conversation involves the strategic use of communication to encourage acceptance of a particular standpoint, initiate specific actions, modify opinions, instil beliefs,

or facilitate product sales. Indicators of persuasion conversation include deployment of a compelling narrative, adept handling of objections, showcasing benefits, emotional appeals and providing social proof or testimonials. Observations leading to this classification include fostering desire, creating urgency, and articulating a clear call to action. The communication style employs rhetorical strategies like storytelling and analogies, which resonate with common interests. The tone tends to be respectful and engaging. Persuasion Conversation is one of most powerful archetypes to influence and convince others effectively whether it's for persuading someone to buy a product, support a social cause, vote for a candidate, or even win over a family member. The ability to influence the decisions and actions of others is deemed an essential leadership skill, pivotal for inspiring, motivating, and aligning individuals with a collective vision. Moreover, it can be used to promote positive changes, such as encouraging a healthier lifestyle or promoting environmental conservation.

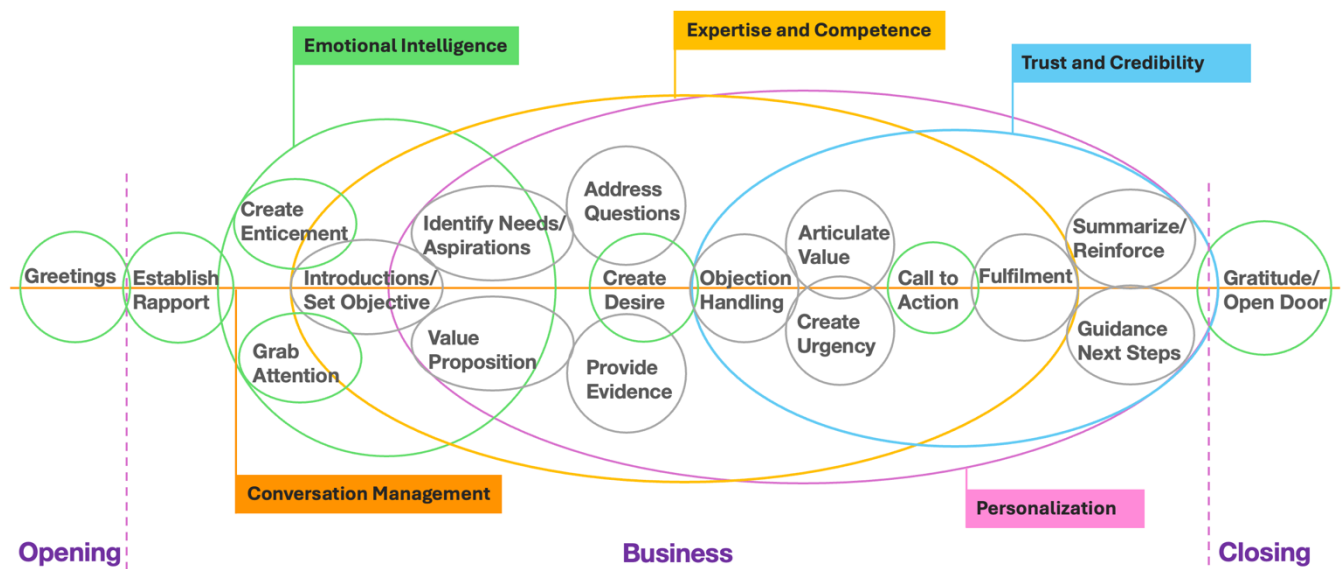


Figure 9: Persuasion Conversation Model

The persuasion conversations open with establishing rapport crucial for creating a conducive environment. Typically, the business of the conversation commences by capturing the attention of the participant or generating an initial allure. The conversation then immediately switches into introductions, setting objectives, and identifying needs or aspirations. Subsequently, a value proposition is articulated, substantiating claims with empirical data, managing any objections, and clearly stating the benefits. Throughout these conversations, a sense of urgency is strategically instilled in the participants. The conversation then culminates into a call-to-action, while guiding the participant towards the next steps. The conversation generally concludes by expressing gratitude and maintaining an open channel for future interactions. Establishing emotional affinity is crucial in persuasive conversations, making it one of the most frequently exploited archetypes. Persuasive conversations, when conducted irresponsibly or unethically, can lead to adverse outcomes, including manipulation, deception, and coercion. These practices raise significant ethical concerns, particularly when they compromise individual autonomy and rights, steering participants toward harmful decisions. Such manipulative practices are often evident in certain political campaigns, celebrity endorsements, and sales pitches that rely on deception and false

promises. To ethically persuade others, establishing trust and credibility is essential, along with respecting the autonomy of participants by offering choices and enabling informed decisions.

9.8 Advisory Conversation

Advisory conversation is a structured interaction designed to offer counsel or recommendations that help people make decisions, solve problems, or enhance their circumstances. Such conversations frequently transpire among peers, family members, mentors, or experts. Indicators of advisory conversations include goal setting, strategic thinking, analytical discussions, and dialogues that are both flexible and action oriented. Key observations pointing to these characteristics encompass providing guidance, maintaining confidentiality and trust, and sharing new insights to enable informed decision-making. Language is professional, supportive and jargon-free. Communication style is empathetic and suggestive aiming to build trust. Advisory conversations offer diverse viewpoints, insights, and solutions previously unconsidered by the recipient, spanning areas such as financial, career, health, and even interpersonal relationships. These conversations also enable goal attainment, learning, risk mitigation, and emotional support, ultimately leading to desired outcomes.

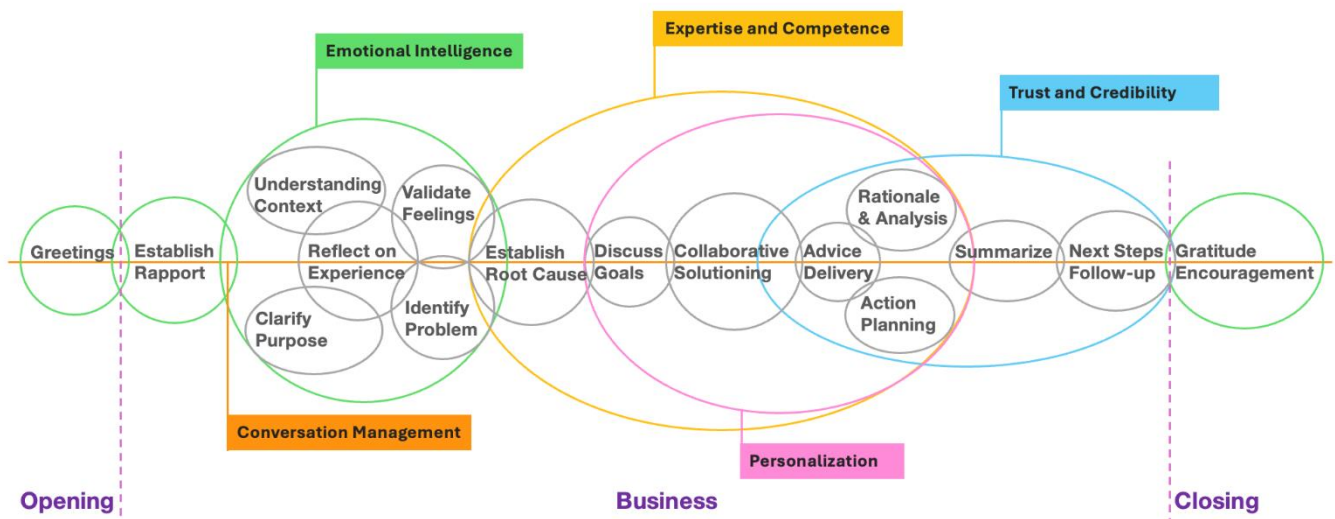


Figure 10: Advisory Conversation Model

Advisory conversations typically commence by building rapport. The business of this conversation begins with understanding the context, clarifying objectives, reflecting on previous experiences, and acknowledging emotions. Identification of the root cause leads to discussions about its underlying causes and the goals of the participant. Subsequently, a collaborative phase of solution development ensues, wherein advice and its rationale are shared. The conversation then progresses to action planning, summarization, and establishing accountability, which includes outlining next steps and scheduling follow-up sessions. Typically, these interactions conclude with expressions of gratitude and encouragement. However, it is crucial to critically evaluate and judiciously apply advice, considering the source and one's personal circumstances and values. Advisory conversations often contain biases and subjectivities, potentially skewing perspectives and not necessarily aligning with the participant's best interests. Conflicts of interest may compromise the impartiality and integrity of advice, thus affecting its

trustworthiness. Divergent values can lead to ethical dilemmas, underscoring the importance of transparency and integrity in advisory roles.

9.9 Educational Conversation

Educational conversations are multi-layered and embody wide-ranging goals and objectives across different contexts and societies. They essentially help in the acquisition of knowledge or skills and also in personal development, career preparation and economic empowerment. Indicators of an educational conversation include personalized interaction, direct instruction, active participation, and continuous progress monitoring. Observations such as engaged discussions, guiding questions, instant constructive feedback, instructional adjustments, and immediate assessment led to the classification of this archetype. The language is formal and academic, using precise, subject-specific vocabulary. The communication style is authoritative yet approachable, with a choice of words that promotes clarity and understanding to align an individual's learning pace and style. Educational conversations are powerful tools to achieve societal progress, global development and promotion of innovation. They serve as the cornerstones of a thriving, equitable, and sustainable society, laying the foundation for a brighter future for all. An educational conversation involves various components that facilitate learning and knowledge acquisition. These components can vary depending on the context, participants, and objectives of the educational experience.

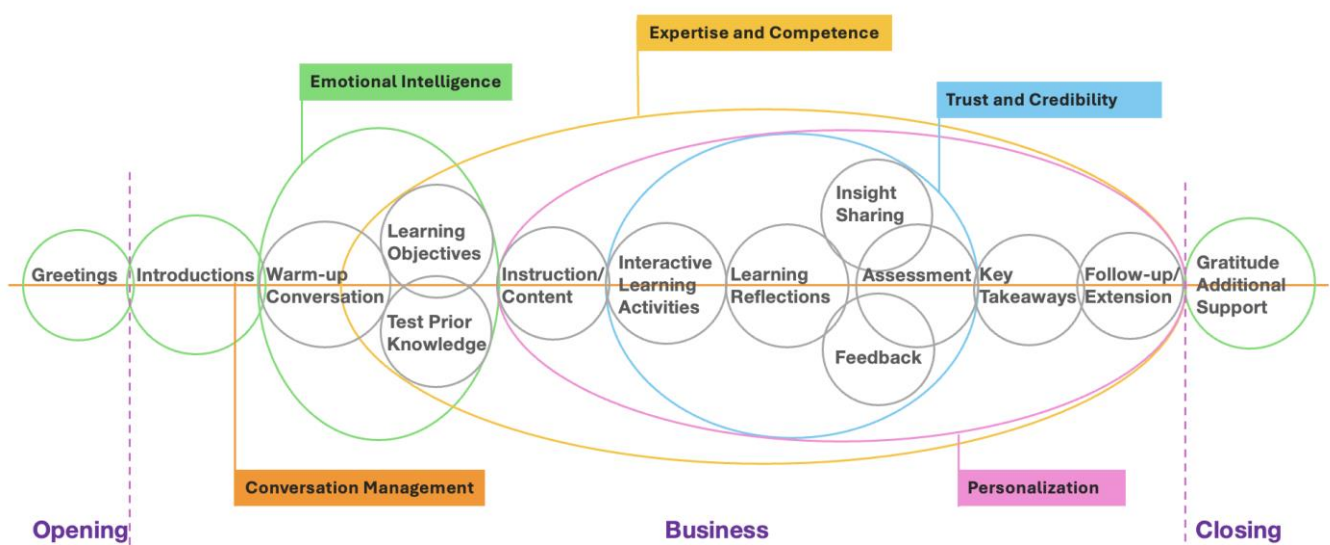


Figure 11: Educational Conversation Model

Educational conversations are shaped by the educational setting, subject, participant demographics, and pedagogical approaches. Typically, the openings commence with introductions if participants are unfamiliar, followed by the business of the conversation with a warm-up and the setting up of learning objectives. The conversation then progresses into content delivery, intertwined with interactive activities. Subsequently, a reflective discussion on observations and insights occurs, leading to assessments and feedback. The conversation culminates with the identification of key takeaways, a follow-up discussion, and closure that includes expressions of gratitude and offers of further support. This structured approach of educational conversations supports comprehension, retention, and application of knowledge and skills.

However, care must be taken to ensure that the educational approach aligns with the learner's preferred style, as otherwise it may hinder the learning process. Biases creeping into educational conversations can also impact the learning experience and perpetuate inequalities or misunderstandings. Ethical considerations should prioritize respect, inclusivity, transparency, and fairness, fostering an environment where participants feel valued, and heard.

9.10 Negotiation Conversation

Negotiation conversation is a dynamic exchange aimed at reaching a mutually acceptable compromise. It is one of the key conversations in business, diplomacy, law, and even personal interactions. It facilitates conflict resolution through collaboration and cooperation. Key indicators of a negotiation conversation include setting clear objectives, presenting initial demands, stating positions, and employing problem-solving strategies. Communication style is typically direct, and assertive. The language is precise, tone assertive yet respectful, voice confident and composed, and words strategic and empathetic. Demonstrating a willingness to compromise, resolving deadlocks, emphasizing common interests, and showing flexibility with inclusive, diplomatic language and forward-looking conditional phrases are crucial traits for this archetype. In essence, negotiation conversations act as strategic tools to navigate conflict-laden human interactions. Overall, the goals that participants seek to achieve in negotiation conversations are influenced by a complex interplay of individual motivations, organizational priorities, external constraints, and relationship dynamics, all of which shape their behaviors, decisions, and strategies throughout the negotiation process. The examples vary from simple tasks like renting an apartment and negotiating salaries, to complex negotiations such as nuclear deal discussions, international peace talks, and climate agreement treaties.

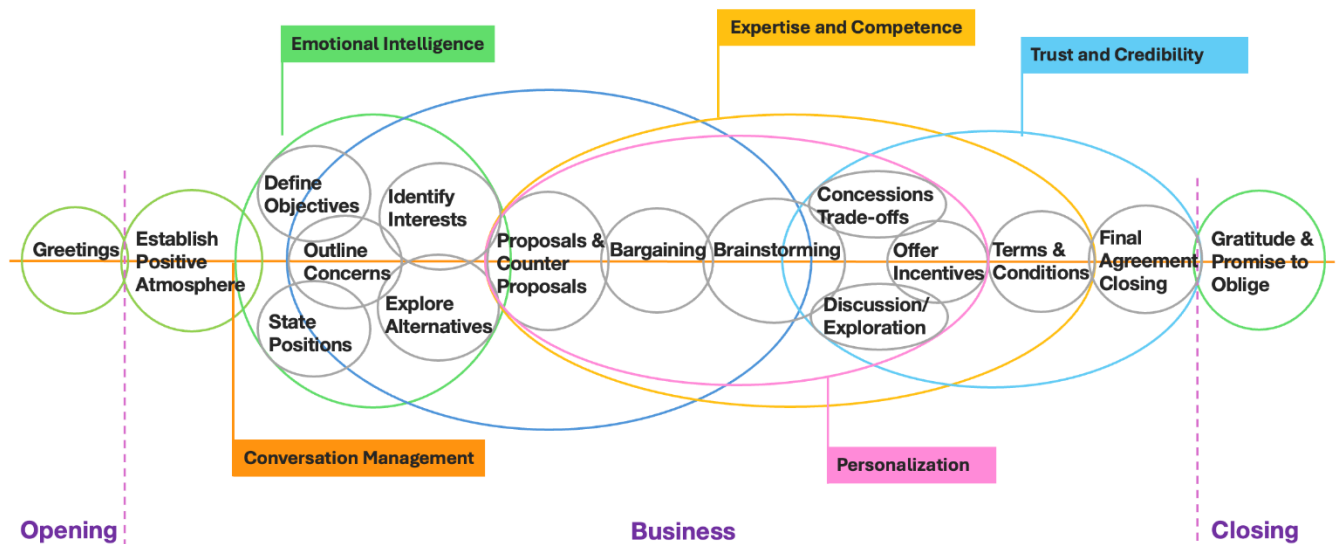


Figure 12: Negotiation Conversation Model

The structure of a negotiation conversation is influenced by the context and desired outcomes, yet it typically follows a recognizable pattern. Initially, a positive atmosphere is established to open the conversation. The business of conversation begins by defining objectives, stating positions, and addressing concerns. The conversation progresses through stages of identifying interests, exploring alternatives, and engaging in a series of proposals and bargaining. Subsequent phases involve making trade-offs and

concessions, culminating in a final agreement with specific terms and conditions. The negotiation conversation concludes with expressions of gratitude and commitments to uphold the agreement. Thus the overarching dynamics of this archetype are three fold. First, establishing mutual respect, trust and relationship building. Second, adaptability and flexibility to achieve cooperation and collaboration. Finally the ethical considerations such as equity, fairness and power dynamics influence the negotiation conversations considerably. Negotiation conversations need to be designed with a view to avoiding unintended consequences such as information asymmetry, legal complications, and emotional strain.

9.11 Motivational Conversation

Motivational conversations are influential dialogues designed to inspire and direct individuals towards specific goals, directing their actions, desires, and behaviors. Indicators for motivational conversations include setting goals, pinpointing obstacles, tackling challenges, crafting collaborative solutions, and forming action plans. Features such as recounting inspirational stories for positive reinforcement, celebrating past achievements, employing positive and supportive language, using strategic pauses for reflection, emphasizing future possibilities, and maintaining a calm, empathetic tone also distinguish these conversations. Communication style is affirmative and personalized leading to self-discovery. Motivational conversations are shaped by biological, psychological, social, and environmental factors. Their purpose is to inspire, maintain, and guide behavior towards meeting specific goals. They serve as catalysts for improved performance, wellbeing, personal growth, or for instilling a sense of purpose to motivate individuals in various situations, including sports achievements, career transitions, academic challenges, or personal development.

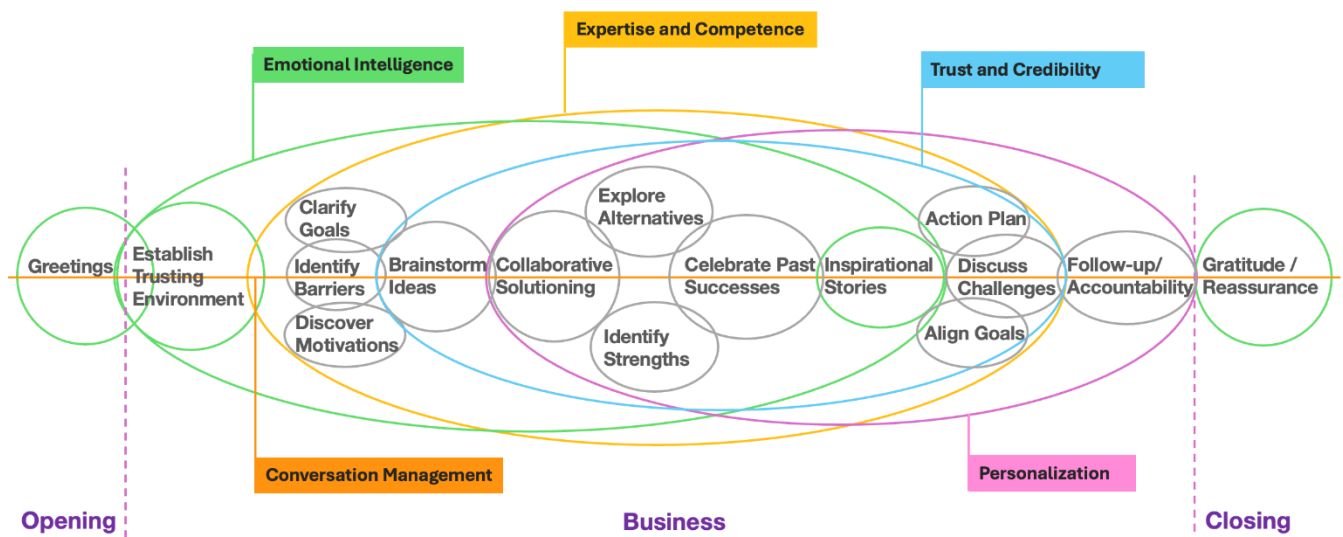


Figure 13: Motivational Conversation Model

A motivational conversation typically begins by establishing a trusting environment. The business of conversation starts with exploring goals while addressing both internal and external challenges. This conversation features collaborative brainstorming and exploring alternative solutions. Key elements include recognising strengths, celebrating past achievements, and leveraging inspirational stories to establish a foundation for motivation. The conversation also involves establishing specific and time-bound goals, incorporating mechanisms for accountability and follow-up. Effective closure of the conversation

features expressions of gratitude and reassurance, reinforcing a positive and supportive relationship that fosters self-belief. This conversation is one of the most life changing conversations as it could empower individuals to align with their hidden talents or stated aspirations. Leading by example is a key requirement for the motivator in these conversations. Participants in motivational conversations must remain vigilant against potential pitfalls, including the risks of fostering excessive dependency, promoting superficial solutions, and displaying inauthentic behavior. It is crucial to ensure alignment of goals, guard against unrealistic expectations, and avoid dismissing or undervaluing negative emotions.

9.12 Intellectual Conversation

An intellectual conversation is a dialogue marked by the discussion of sophisticated concepts, complex ideas and critical thinking, involving a high degree of cognitive engagement. An intellectual conversation is characterized by its depth, showcasing logical reasoning, critical thinking, and the exploration of alternative perspectives. Such discussions are marked by drawing attention to evidence, synthesis of knowledge, and critical evaluation, all contributing to a collaborative ideation process. Traits such as open-ended questions, the use of formal language, specialized and technical vocabulary, and a structured argumentative approach define these conversations. Communication style is formal, precise and measured. Additionally, reflective pauses, references and allusions, and respectful disagreement further reinforce the intellectual nature of the dialogue. Participants in intellectual conversations engage deeply with topics often requiring substantial knowledge and expertise across various fields such as philosophy, science, literature, politics, ethics, and art. These interactions, crucial for personal, academic, professional, and societal development, stimulate cognitive growth and innovation through the respectful exchange of ideas, leading to new insights and solutions.

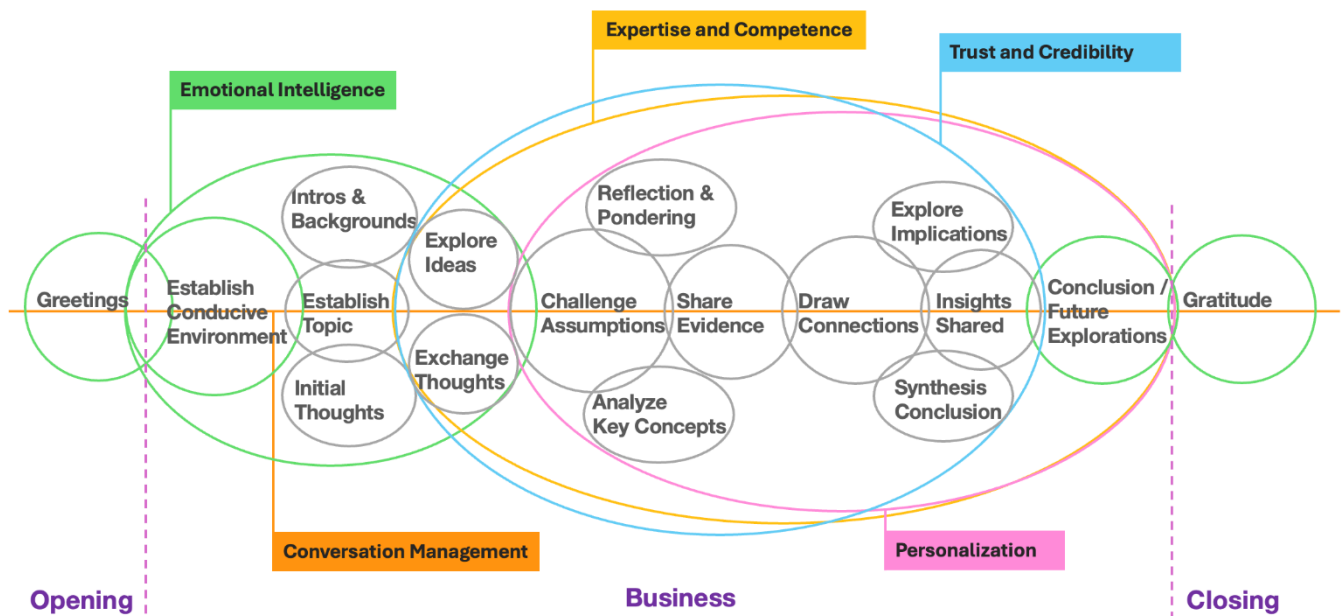


Figure 14: Intellectual Conversation Model

The opening of an intellectual conversation begins with establishing a conducive environment. The business of this conversation begins with participants introducing themselves and sharing their backgrounds. Then the primary topic is initiated with participants sharing their initial thoughts or relevant

perspectives on the subject, promoting a lively exchange of ideas and a critical examination of underlying assumptions. Subsequently, participants delve deeper into key concepts and theories, shape relevant evidence, and examine the implications of interconnected ideas. The discussion concludes with participants synthesising insights and drawing conclusions. The closure of this archetype is marked by expressions of gratitude and contemplation of future discourses. Overall, participants in intellectual conversations focus on creating an environment that encourages deep exploration, respectful interactions, and meaningful engagement with the topic. Examples of this archetype include philosophical debates on ethics, discussions of quantum mechanics, literary analyses, and ethical issues of emergent technologies. While intellectual conversations offer notable benefits, they are not without pitfalls. Challenges such as intellectual arrogance, polarization, the formation of echo chambers, and the absence of actionable outcomes can undermine the efficacy of these conversations. Participants must remain vigilant against these risks to foster an inclusive and intellectually enriching conversation.

10. The Intricate Overlap of Conversational Archetypes

The 12 conversational archetypes serve as foundational templates to inform the design and development of Human-AI conversations. These archetypes, though unique in their structure, characteristics, and applications, frequently intersect and overlap, creating multifaceted conversations that resemble a rich tapestry. For instance, basic informational conversation is not confined to a singular archetype but can manifest across various forms, such as the persuasion conversation or a resolution conversation. Similarly, elements of persuasion conversations may be detected within motivational or negotiation conversations. Casual conversations may spontaneously arise within any of these archetypal frameworks. Furthermore, traces of analytical conversations are frequently observed within archetypes such as resolution, persuasion, negotiation, or intellectual conversation. Additionally, nuances of educational conversation often permeate awareness conversations. At the core of these overlaps lies a dynamic interplay among distinct archetypal energies. These instances illustrate just a few ways in which distinct archetypes can intersect and conjoin within a single type, resulting in conversations that are both nuanced and multi-dimensional. This intricate overlap of archetypes reflects the depth and complexity of the human conversations. By recognizing and embracing these overlapping patterns, we can achieve a greater sense of wholeness and authenticity to Human-AI conversations. These archetypes serve not only as symbolic representations but also as tools for the evolution and transformation of Human-AI conversations. The interplay among archetypes can differ significantly based on individual contexts, sociocultural factors, and specific interaction journeys. Incorporating and harmonizing this interplay of archetypes in the design of Human-AI conversations can enhance authenticity and foster more humanlike experiences.

11. Conclusion

This exploratory qualitative study, utilizing integrated research methodologies of content analysis and multiple case studies, revealed the complex and significant challenges of current Human-AI conversations. The case studies consisted of Human-to-Human and Human-AI conversations in real-world settings across multiple industry verticals and geographies. The study identified key challenges in Human-AI conversations across three major realms: interactional, emotional, and ethical. Beyond these broad areas, five essential dimensions emerged as the quintessential pillars to anchor the design of future Human-AI interactions: conversation management, emotional intelligence, expertise and competence, trust and credibility, and personalization. The intersections of these elements further revealed novel and multi-

layered facets culminating in the development of a Conversational Social Dynamics Framework. This framework served as a foundational model for creating a detailed purpose driven conversational typology exposing 12 Conversational Archetypes grounded in social, cultural and psychological contexts. This typology universalizes Human-AI conversation patterns to aid in understanding user needs, motivations, and behaviors thereby facilitating targeted design interventions. The research also aimed to distil the essence of each of the 12 archetypes, outlining their structure and capturing the salient features inherent in each of conversation. Although these archetypes are generic in their patterns and structure, they can be dynamically applied across various contexts, cultures, and needs. With purpose as the cornerstone, the 12 Conversational Archetypes serve as essential tools applicable across various domains—including professional, personal, and entertainment sectors—as well as diverse cultures and geographies. The study also underscores the critical role of ethical and emotional considerations in Human-AI conversations, highlighting issues such as privacy, bias, and human autonomy. Addressing these challenges is paramount in designing AI interactions that are both authentic and conducive to fostering trust and societal acceptance. This research provides critical insights for designers, technologists, and policymakers engaged in influencing future Human-AI interactions. The broader aim of this study is to enrich academic discourse while providing practical frameworks for redefining Human-AI conversations. By aligning AI systems with archetypal models, we can enhance their humanlike qualities, thereby strengthening emotional bonds and increasing user engagement.

12. Limitations

While the proposed 12 Conversational Archetypes provide a foundational framework for enhancing the understanding of complex requirements of Human-AI conversations, it is crucial to recognize their inherent limitations and the intricacies involved in their application. Archetypes are conceptualized as universally acknowledged symbols and motifs that emerge from the collective unconscious and serve as pivotal instruments across diverse disciplines, including psychology, literature, and marketing (Jung, 1969). However, archetypes have been subject to considerable critique due to their intrinsic reductionism and generality, which may lead to an oversimplification when applied to complex individualistic behaviors or cultural nuances. Further criticisms pertain to the potential stifling of creativity and innovation by promoting predictable patterns of thought and design, potentially inhibiting novel approaches. Additionally, the predominantly Western origin of archetypes presents a cultural bias, raising questions about their global applicability and relevance across different cultural contexts. Moreover, the subjective interpretation of archetypes can result in inconsistencies in their application and understanding, thereby diminishing their utility as analytical tools. To mitigate these limitations, it is essential to employ archetypes with discernment and complement them with other analytical strategies, ensuring a more robust and nuanced approach in scholarly and practical applications.

13. Future Work

In advancing the research on AI systems that can interpret and respond to human emotions with increased sophistication, the 12 Conversational Archetypes, rooted in a purpose-driven conversation typology, serve as an essential framework to guide these investigations. Future research should further investigate the complexities of archetypal dynamics within varied cultural and interdisciplinary contexts. It is imperative for scholars to explore the context-dependent variability of archetypes, recognizing their diverse manifestations across different social settings. Additionally, a critical evaluation of the biases and

stereotypes inherent in archetypal models is necessary to ensure that research efforts are inclusive and culturally sensitive. Employing qualitative research methodologies, such as in-depth interviews, ethnographic studies, and narrative analysis, will provide a deeper insight into how individuals interpret and internalize archetypal identities, thereby enhancing our understanding of human behavior and cultural expressions. Interdisciplinary collaboration among psychologists, sociologists, computer scientists, ethicists, and designers is crucial for comprehensive advancements in this domain. Addressing these challenges and opportunities is essential for fostering more effective and beneficial interactions between humans and artificial intelligence in the future.

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