

# Mapping Personality Types and Cultural Dimensions: Implications for AI as an Evidence Base for Theoretical Meta-Analyses

# Paul Bitetto, Barry Anderson, Colin Benjamin

BrainPrint Pty Ltd, Integrated Thinking Technologies Pty Ltd, Life. Be in it. <sup>TM</sup>, Melbourne, Australia Email: info@brainprint.me

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# Abstract

Artificial intelligence (AI) has emerged as a significant field with diverse applications in various industries. As AI continues to evolve, researchers are exploring new approaches to enhance its capabilities. This article examines the different frameworks for personality types and cultural dimensions proposed by prominent scholars in the field of psychology and management studies. It highlights the similarities and differences between these frameworks and provides a mapping of their dimensions and polarities. The article then discusses the potential implications of these frameworks for developing AI systems that interact with individuals and groups from diverse cultural backgrounds. This analysis suggests that incorporating these frameworks into AI design and development can enhance the accuracy and effectiveness of AI systems in understanding and responding to human behaviours and preferences. By adopting an integrative perspective and advanced relational meaning system design, AI systems can facilitate unbiased interactions between machines and humans, considering cross-cultural nuances. The implications of AI and consciousness for understanding the mind, language evolution, and human culture are explored through an AI, NLP, and NLU lens. This research opens up new possibilities for developing culturally adaptive and effective AI systems, advancing our understanding of language processing and meaning, and fostering unbiased interactions between machines and humans. Further research is needed to develop an integrated theory that incorporates insights from neuroscience, philosophy, psychology, and other fields to comprehensively account for the objective and subjective experiences of consciousness. This paper contributes to the ongoing exploration of these topics and highlights the potential for AI to transform our understanding of the mind and improve human-machine interactions in a culturally sensitive manner.

#### **Keywords**

Artificial Intelligence, NLP, ULP, Agency, Brainprint, MindFlow, Advanced Relational Meaning System, Cultural Factors, Consciousness, Culturally Adaptive AI Systems

## **1. Introduction**

Humans share the same biology, the same brain structure, i.e., they have the same functional hardware. The brain processes chemicals and signals the exact way, yet any two individuals each have very different experiences to life, in the way they perceive and decide to make their choices, and deal with change and chance. In this regard, the "software" of the brain can be said to exhibit a unique "signature" or print for everyone.

The nature of language and that of culture are intertwined. The exact origins of language are difficult to pin-point, but there is consensus amongst scientists that language evolved gradually over the course of hundreds of thousands of years with the emergence of human ancestors.

The emergence of language is closely linked to abstract thinking, as language allows us to communicate complex and abstract ideas, express emotions and engage in abstract reasoning, and the ability to think abstractly is crucial for many aspects of human cognition, including problem solving, creativity and decision-making, and it is believed to have played a key role in the development of human culture and civilisation (Deacon, 1997).

Biologically (Pinker, 2010), our brains are alike and no different to when man was first etching carvings on the walls of caves but had not yet developed language more than 200,000 years ago. However, we can infer that there would have been a distinct difference between the cave artists, by looking at their respective artwork.

The cave paintings that were created by early humans thousands of years ago provide some insight into the evolution of art and the human brain, and according to Deacon (1997), provide evidence that early humans possessed a sophisticated ability to think symbolically and represent their world in visual form, thus providing a critical role in the evolution of human language, as the use of symbols to convey meaning. He further argues that an understanding of the co-evolution of language and the brain can help to shed light on the wide range of questions about human cognition and behaviour and can provide new insights into the nature of consciousness, meaning, and representation.

We posit, that our unique signature can be represented by our brainprint, as shown in **Diagram 1** for two individuals, and therefore represent a way of mapping human thinking in ways that can only improve the use of Artificial Intelligence (AI) technologies in the future.



**Diagram 1.** BrainPrint<sup>TM</sup> of two individuals (Western and Alternative).

#### 2. Brainprints

The brainprint is an analogy for neuromorphic, biomorphic, and sociomorphic individuation, personalisation, and agency, referring to unique patterns of neural connectivity and activity that shape an individual's thoughts, behaviours, and experiences.

Brainprints provide a unique signature of an individual's cognitive and emotional makeup at one point in time, however, it is always changing much like flows and whirlpools in a river, driven by thoughts processes, decision points over space and time to achieve better outcomes for survival.

A dynamic approach to describing the thinking process is to use several Brainprints as slices, much like an MRi, and build a dynamic model which we term as MindFlows. This corresponds to our Cube of Consciousness in **Diagram 2**.

A MindFlow profile is modelled around the thought processes in the brain which lead to Nash equilibrium outcomes and homeostasis.

One of the biggest challenges is the assumption of a globally homogenous brainprint design for AI (a single neuromorphic simulation), which masks the diverse perspectives and experiences of people from different cultures. Western researchers' tendency to prioritise their own cultural values and presumptions, along with the lack of diversity in the AI development community, can limit the range of perspectives and experiences incorporated into AI models.

By understanding brainprints, AI models would more accurately capture individual differences and similarities, leading to more personalised and effective applications in the fields of healthcare, education, and entertainment.

By understanding the associated MindFlows, AI models can begin to provide a richer user experience and provide tools for understanding the nature of consciousness.

Additionally, the recognition of sociomorphic factors such as culture, gender, and socio-economic status in shaping brainprints can aid in developing more inclusive and equitable AI models that better serve diverse populations. As AI and Alternating Consciousness (AC) continue to transform our world, this paper emphasises the need for Natural Language Processing (NLP), Natural Language Understanding (NLU) and Hypertext and other AI technologies to accurately reflect diverse perspectives and experiences of people from different cultures around the world.

# 3. Artificial Intelligence

AI has revolutionised the way we interact with technology. As AI systems become more sophisticated and integrated into our daily lives, it is becoming increasingly important to ensure that they are designed and developed with an understanding of human behaviour and preferences. One key aspect of this understanding is personality types and cultural dimensions.

Different people and cultures have unique ways of Sensing, Thinking, Feeling and Perceiving, which can impact how they interact with AI systems. Therefore, it is essential to incorporate this understanding into the design and development of AI systems while leaving human research to focus on the Judging and iNtuitive creative aspects that require human agency, sense of mattering and ICE BREAKING capacity for Innovation, Creativity and Entrepreneurism (Benjamin, 2006).

These are various frameworks for understanding personality types and cultural dimensions. We examine the most prominent frameworks proposed by scholars in the fields of psychology and management studies. These frameworks include Myer-Briggs Type Indicator, Keirsey Temperament Sorter, Hofstede's Cultural Dimensions, Erin Meyer's Eight Dimensions of Culture, and John Holland's Six Workplace Types and Mentalities.

# 4. Personality Types and Cultural Dimensions

Personality types and cultural dimensions are two important factors that shape human behaviour and interactions. Personality types refer to the unique patterns of thoughts, feelings, and behaviours that characterise individuals, while cultural dimensions refer to the shared values, beliefs, and practices that characterise different cultures.

The study of personality types and cultural dimensions has been of great interest to scholars in the fields of psychology and management studies, and several frameworks have been proposed to conceptualise and measure these constructs. One of the most well-known frameworks for personality types is the Myers-Briggs Type Indicator (MBTI), developed by Isabel Briggs Myers and Katherine Cook Briggs (Myers & McCaulley, 1985).

The MBTI identifies 16 personality types based on four dichotomous dimensions: extraversion vs. introversion, sensing vs. intuition, thinking vs. feeling, and judging vs. perceiving.

Extraverts are outgoing and sociable, while introverts are reserved and introspective. Sensing types are practical and concrete, while intuitive types are imaginative and abstract. Thinking types are logical and analytical, while feeling types are empathetic and compassionate. Judging types are decisive and organised, while perceiving types are flexible and spontaneous. Another prominent framework for personality types is the Big Five Personality Traits, also known as the Five-Factor Model (FFM).

The Big Five dimensions are openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. Conscientiousness refers to the degree to which individuals are organised, responsible, and dependable.

Extraversion refers to the degree to which individuals are outgoing, assertive, and sociable. Agreeableness refers to the degree to which individuals are cooperative, empathetic, and kind. Neuroticism refers to the degree to which individuals are anxious, moody, and emotionally unstable.

# 5. Content and Personal Differences in Profiles

The content and personal differences in profiles are discussed further in this section.

# 5.1. Carl Jung

In **Table 1**, one can see that the western perspective places emphasis on individualism, rational and logical thinking, and a focus on the conscious mind, valuing empirical evidence and science. On the other hand, the alternative perspective focuses on the collective unconscious, incorporation of spirituality and mythology, the importance of the unconscious mind, belief in symbols and archetypes, towards the integration and wholeness of the self.

The western perspective values independence, self-reliance, and autonomy, while the alternative perspective values interconnectedness and intercedence of individuals within a collective group.

The alternative perspective values the spiritual, symbolic, and mythological dimensions of human experience, which are often overlooked in the Western perspective's emphasis on rationality and empiricism.

## 5.2. Myer-Briggs

In **Table 2**, the Western perspective places emphasis on facts and logic, focus is on external behaviours and clear-cut categories and definitions. In contrast, the alternative perspective recognises subjective experiences and emotions, seeks to understand internal motivations, and acknowledges the complexity and ambiguity of human experience.

**Table 1.** Jung's differences between Western (Jung, 1971) and Alternative Perspectives(Hillman, 1975).

Western Perspective	Alternative Perspective
Emphasis in individualism	Emphasis on collective unconscious
Rational and logical thinking	Incorporation of spirituality and mythology
Focus on conscious mind	Importance of unconscious mind
Emphasis on science and empirical evidence	Belief in symbols and archetypes
Limited view of the self	Focus on wholeness and integration

Western Perspective	Alternative Perspective
Emphasis on objective facts and logic	Recognition of subjective experiences and emotions
Focus on external behaviours	Understanding internal motivations
Clear-cut categories and definitions	Acknowledgement of complexity and ambiguity
Tendency to categorise and label	Emphasis on personal growth and development
Individualistic perspective	Focus on interpersonal relationships

 Table 2. Myer-Briggs differences between western and alternative perspectives (Schaubhut & Thompson, 2008).

The western experience tends to categorise and label individuals based on observable traits and behaviours, while the alternative perspective places a greater emphasis on personal growth and development, recognising that individuals are multifaceted and complex.

While the Western perspective takes an individualistic perspective, the alternative perspective places emphasis on interpersonal relationships and the importance of understanding and valuing other's experiences and perspectives.

## 5.3. Keirsey

In **Table 3**, the western perspective places emphasis on individualistic values, while the alternative perspective emphasis is on community values and the importance of empathy and interpersonal skills.

# 5.4. Cattell

In **Table 4**, the western perspective places emphasis on objectivity, focusing on measurable and observable traits, while the alternative perspective recognises the importance of subjective experiences and personal values.

The western perspective is one for empirical evidence and scientific methods, while the alternative perspective places greater emphasis on intuition and the ability to perceive and understand subjective experiences.

While in western perspectives there is a tendency to stereotype individuals and generalise, based on observable traits, the alternative perspective recognises the uniqueness of individuals and their personal values (hence emotional intelligence). These are contrasting approaches to understanding human behaviour and experience.

## 5.5. Nardi

In **Table 5**, the western perspective values logical thinking and the use of language to communicate and reason, while the alternative perspective recognises the importance of non-verbal communication and experiences.

Overall, a western perspective will place emphasis on language, logic and objectivity, while the alternative perspective recognises the importance of holistic thinking and the subjective experience.

**Table 3.** Keirsey differences between western (Keirsey & Bates, 1998) and alternative perspectives (Barrett, 2005).

Western Perspective	Alternative Perspective
Emphasis on individual values	Emphasis on community values
Focus on empirical evidence and measurable results	Incorporation of subjective experiences and intuition
Rational and logical thinking	Emphasis on emotions and empathy
Tendency to generalise and stereotype	Recognition of individual uniqueness
Importance of cognitive abilities	Emphasis on interpersonal skills

**Table 4.** Cattell differences between western (Cattell, 1965) and alternative perspectives(Maslow, 1968).

Western Perspective	Alternative Perspective
Emphasis on objective measures and quantifiable data	Recognition of subjective experiences and personal growth
Focus on observable behaviours	Incorporation of internal motivations and unconscious processes
Limited view of personality	Emphasis on complex and multi-dimensional personality traits
Linear and reductionist approach	Non-linear and holistic approach
Individualistic perspective	Recognition of cultural and environmental influences

**Table 5.** Nardi differences between western (Nardi, 2011) and alternative perspectives (La-koff & Johnson, 1999).

Western Perspective	Alternative Perspective	
Emphasis on logical and rational thinking	Emphasis on creativity and intuition	
Focus on measurable and quantifiable data	Recognition of subjective experiences and emotions	
Limited view of personality	Emphasis on multi-faceted and dynamic personality traits	
Tendency to categorise and label	Non-linear and holistic approach	
Individualistic perspective	Recognition of cultural and environmental influences	

# 5.6. James Lee Adams

In **Table 6**, the western perspective values rational thinking and empirical evidence, in contrast to the alternative perspective which looks at internal motivations, cultural and environmental influences on personality and behaviour.

# 6. Cultural and Contextual Differences in Profiles

Cultural dimensions have been conceptualised by several scholars, including Edward T. Hall, Fons Trompenaars, Geert Hofstede and more recently Erin Meyer.

Western Perspective	Alternative Perspective	
Emphasis on empirical evidence and rational thinking	Emphasis on subjective experiences and intuition	
Focus on observable behaviours	Incorporation of internal motivations and unconscious processes	
Limited view of personality	Emphasis on multi-dimensional and complex personality traits	
Linear and reductionist approach	Non-linear and holistic approach	
Individualistic perspective	Recognition of cultural and environmental influences	

**Table 6.** James lee adams differences between western (Adams, 2017) and alternative perspectives (Csikszentmihalyi, 1996).

## 6.1. Edward T. Hall

Edward T. Hall's framework emphasises the role of communication styles and non-verbal cues in the intercultural interactions. Hall identifies two types of cultures: high-context cultures, where much of the communication is implicit and relies on context, and low-context cultures, where communication is explicit and relies on verbal communication (Table 7).

He also identifies four dimensions of communications: monochronic vs. polychronic time, personal space, direct vs. indirect communication, and high vs. low context communication.

# 6.2. Fons Trompenaars

Fons Trompenaars' framework identifies seven dimensions of cultural diversity: universalism vs. particularism, individualism vs. communitarianism, neutral vs. emotional, specific vs. diffuse, achievement vs. ascription, sequential time vs. synchronous time, and internal control vs. external control (Table 8).

Universalism vs. particularism refers to the degree to which rules and standards are applied universally.

#### 6.3. David Keirsey

David Keirsey Temperament Sorter framework (Keirsey & Bates, 1998) for personality types was developed by psychologist David Keirsey. This framework identifies four temperaments: guardian, artisan, rational, and idealist.

Guardians are responsible and dependable, artisans are spontaneous and creative, rationals are analytical and logical, and idealists are empathetic and passionate.

# 6.4. John Holland

John Holland's Six Workplace Types (Holland, 1997) and Mentalities framework identifies six personality types that are well-suited for different types of work environments: realistic, investigative, artistic, social, enterprising, and conventional.

Realistic types are practical and hands-on, investigative types are curious and analytical, artistic types are creative and unconventional, social types are empathetic and supportive, enterprising types are outgoing and persuasive, and conventional types are detail-oriented and organised.

# 6.5. Geert Hofstede

Geert Hofstede's framework (Hofstede, 2001) identifies six dimensions that reflect cultural values and norms: power distance, individualism-collectivism, masculinity-femininity, uncertainty avoidance, long-term orientations, and indulgence-restraint (Table 9).

Power distance refers to the extent to which people in a culture accept and expect inequality and power differences. Individualism-collectivism refers to the degree to which people in a culture prioritise individual autonomy versus group harmony.

Table 7. Edward T. Hall's cultural dimensions (Hall, 1976).

Cultural Dimension	ltural Dimension High-Context Culture	
Communication	Indirect, implicit	Direct, explicit
Context	Implicit	Explicit
Time	Flexible, polychronic	Rigid, monochronic
Space	Personal	Impersonal
Relationships	Based on trust	Based on rules

Table 8. Trompenaars' cultural dimensions (Trompenaars, 2012).

Cultural Dimension	High-Context Culture	Low-Context Culture
Neutral vs Emotional	Neutral	Emotional
Specific vs Diffuse	Specific	Diffuse
Achievement vs Ascription	Achievement	Ascription
Sequential vs Synchronous	Sequential	Synchronous
Internal vs External Control	Internal	External

Table 9. Geert Hofstede's cultural dimensions (Hofstede, 2001).

Cultural Dimension	High-Context Culture	Low-Context Culture
Power Distance	High	Low
Individualism	High	Low
Masculinity/Femininity	Masculine	Feminine
Uncertainty Avoidance	Low	High
Long-Term Orientation	Future-Oriented	Present-Oriented

Masculinity-femininity refers to the degree to which a culture values assertiveness and competitiveness versus nurturance and compassion. Uncertainty avoidance refers to the degree to which a culture tolerates ambiguity and uncertainty.

Long-term orientation refers to the degree to which a culture values long-term planning and persistence over short-term results. Indulgence-restraint refers to the degree to which a culture values self-expression and enjoyment versus restraint and strict social norms.

#### 6.6. Erin Meyer

Erin Meyer's Eight Dimensions of Culture (Meyer, 2015) is another framework of cultural dimensions. Meyer, an expert in cross-cultural communication, identifies eight dimensions that reflect cultural norms and behaviours: communication, evaluation, perspective, time, trust, hierarchy, task and relationship.

Communication refers to how people in a culture communicate with each other. Evaluation refers to how people in a culture give and receive feedback. Perspective refers to how people in a culture view the world and their place in it. Time refers to how people in a culture manage and perceive time.

Trust refers to how people in a culture build and maintain trust in relationships. Hierarchy refers to how people in a culture view and navigate power and authority. Task refers to how people in a culture prioritise and approach work. Relationship refers to how people in a culture build and maintain personal relationships (**Table 10**).

The tables highlight the cultural dimensions identified by each of these writers, providing insight into how different cultures view communication, relationships, power, time, and space.

It is important to note that these dimensions are not fixed and that cultures can change over time. However, understanding these dimensions can help individuals navigate cross-cultural interactions and work more effectively with people from different backgrounds.

#### 7. Applications and the Cube of Consciousness

In **Diagram 2**, we apply Erin Meyer's Cultural Dimensions to our Advanced Relational Meaning System (A.R.M.S) along with other layers which include the MBTI Types, the other dimensions, aligned to the Colourgrid<sup>TM</sup> coding and sequence, including Miller's Living Systems Theory.

The  $4 \times 4$  matrix of 16 preferences can be grouped into four cubes (the "Cube of Consciousness" **Diagram 3**), each representing Deductive, Inductive, Transductive, and Abductive preferences to thinking, which aid in developing a white-box approach.

#### The Cube of Consciousness

The CUBES are presented as Blue, Yellow, Red, and Green Quadrants, described in **Table 11** as four main perspectives and applied in **Table 12** in our discussion

on the potential applications in AI technologies, including NLP, NLU and Hypertext.

Table 10.	Erin me	yer's cultural	dimensions.
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Cultural Dimension	High-Context Culture	Low-Context Culture	Reactive Culture
Communication style	Clear, direct	Animated, expressive	Harmonious, indirect
Attitude towards time	Punctual	Flexible	Fluid
Attitude towards change	Pragmatic	Optimistic	Fatalistic
Attitude towards rules	Follow rules	Change rules	Bends rules
Attitude towards hierarchy	Respectful	Tolerant	Disrespectful



Diagram 2. Cube of consciousness.



**Diagram 3.** Framework for erin meyer's cultural dimensions and miller's living systems theory.

#### **Table 11.** The cube perspectives.

#### BLUE—Inductive

Hierarchical, with a preference for centralised decision-making and a focus on individual achievement and outcomes. Communication would be indirect and high context, with an emphasis on relationships and personal connections. Trust would be built through rapport and mutual understanding, and conflicts would be resolved through compromise and negotiation rather than direct confrontation.

#### YELLOW—Transductive

Confrontational, with a focus on direct communication and a willingness to challenge others' ideas. It would also value egalitarianism and participatory leadership, with a focus on collaboration and shared decision-making. Negative feedback would be given directly and openly, based on principles and facts, and trust would be built through transparency and honesty. This profile would also be more willing to take risks and embrace uncertainty, with a focus on experimentation and innovation.

#### **RED**—Abductive

**GREEN**—Deductive

Overall, this profile would be task-oriented, focused on achieving objectives in a structured and organised manner, while also valuing cooperation, consensus, and avoiding conflict.

Relationship-based, with a preference for indirect and polite communication to maintain harmony and avoid confrontation. It would also value trust and cooperation, with a focus on building rapport and relationships. Negative feedback would be given indirectly and subtly, and time would be viewed as flexible and fluid. Trust would be built through personal relationships and connections, and conflicts would be resolved through compromise and consensus-building.

Table 12. AI Technology, application, and black box vs white box perspectives.

NLP, NLU and Hypertext Extensions	Black Box Neuromorphic Mimic of a Dualist Mechanism of Mind	White Box Universalist and Bio-evolutionary Perspectives	Integrative Perspectives with Advanced Meaning Systems Design
Development of more accurate and comprehensive natural language understanding systems.	Advancement in understanding how the brain processes language and meaning.	Exploration of the neural basis of consciousness and the nature of subjective experience.	Creation of culturally adaptive natural language systems that can understand different languages, dialects, and accents.
Increased focus on multimodal NLP, incorporating vision, sound, and other modalities.	Investigation of the relationship between language and consciousness.	Development of theories of mind that account for both universal and cultural aspects of consciousness.	Integration of cultural dimensions of meaning into natural language systems, including cultural norms, values, and beliefs.
Enhancement of NLU systems to handle more complex and abstract concepts.	Creation of artificial neural networks that simulate the workings of the brain.		Development of natural language systems that can understand and respond to social emotional cues, including sarcasm, humour, and politeness.
Improvement of natural language generation systems to produce more human-like output.	Investigation of the relationship between language and consciousness from a philosophical perspective.	Examination of the neural basis of language and how it is processed in the brain.	Advancement in the design of conversational agents that can engage in complex and nuanced dialogue with humans.
Development of more advanced chatbots and conventional agents.	Exploration of the implications o a black box neuromorphic mimic of a dualist mechanism of mind.	language and its impact on	Incorporation of social and cultural factors into natural language systems to improve their accuracy and effectiveness.
Incorporation of ethical considerations into NLP and NLU systems design.	Examination of the implications of artificial intelligence and machine consciousness for our understanding of the mind.	Investigation of the relationship between consciousness and the brain, and how this relationship can be modelled in AI systems.	Development of natural language systems that can recognise and respond appropriately to ethical and moral dilemmas.

The six sides of the cube represent different perspectives relating to attention, selection, cognition, emotion, integration, and homeostasis. The six perspectives are identified by different colours: blue, green, red, yellow, black, and white. Blue is the identification of untapped needs, green is creating new growth potential, red is integrating intelligent relationships, yellow is mobilising strategic life forces, black is critical thinking and cautiousness, and white is creative, positive, and optimistic thinking.

# 8. Discussion of AI Potential

AI has become an increasingly significant field in recent years, with applications in diverse areas such as healthcare, finance, transportation, and entertainment. As AI continues to evolve, researchers and practitioners are exploring new approaches that go beyond traditional computational methods.

One area of focus is the integration of neuro, bio and socio-morphic extensions of AI, which seek to incorporate insights from the fields of neuroscience, biology, and social sciences into AI systems. These extensions aim to create more sophisticated and nuanced AI systems that can better model human behaviour and decision-making.

In exploring these extensions, researchers have drawn on insights from a range of thinkers and disciplines. For example, the work of Jungian psychologists has informed the development of AI systems that model the collective unconscious and archetypes, while the ideas of philosophers such as Chalmers (1995), Dennett (1992), and James Lee Adams have contributed to the development of "black-box" orientations that seek to better understand the inner workings of AI systems.

The integration of neuro, bio, and socio-morphic extensions of AI has opened up new possibilities for the development of more sophisticated and nuanced AI systems. One important area of focus is the incorporation of cultural factors into AI models, which can improve the accuracy and effectiveness of natural language systems. Cultural theorists such as Erin Meyer, Hofstede, and Trompenaars have contributed valuable insights in this area.

**Table 12** outlines some of the key areas of development in NLP, NLU and hypertext extensions of AI, as well as black box neuromorphic mimic of a dualist mechanism of mind, universalist and bio-evolutionary perspectives, and sociocultural perspectives with advanced meaning systems design. These areas of development reflect the diverse perspectives and approaches that researchers are taking in the effort to create more sophisticated and nuanced AI systems.

# 9. Conclusion

The observations of scientists such as Baars (1998), Koch (2019), Nardi (2011), and Edelman and Tononi (2001) have helped inform efforts to model the human brain AI system, while the work of cultural theorists such as Erin Meyer (2015), Hofstede (2001) and Trompenaars (2012) has informed efforts to incorporate cultural factors into AI models.

In conclusion, the integration of neuro, bio, and socio-morphic extensions of AI holds tremendous potential for the development of sophisticated and nuanced AI systems. By incorporating insights from neuroscience, biology, social science and cultural theories, researchers are striving to create AI models that better emulate human behaviour, decision-making, and language processing.

The exploration of cultural factors in AI models, informed by cultural theorists such as Erin Meyer, Hofstede and Trompenaars, has highlighted the importance of understanding cross-cultural nuances and promoting unbiased interactions between machines and humans. This emphasis on cultural adaptability can lead to more effective natural language understanding systems and improved accuracy in AI technologies.

Through an advanced relational meaning system design and integrative perspective, AI can be utilised to delve into the realms of consciousness, language evolution, and the impact of language on human culture. By employing AI, NLP and NLU, researchers can take a white-box approach to uncover the intricate mechanisms of the mind, enhance our understanding of language processing and explore the relationship between language processing, and explore the relationship between language and consciousness.

In summary, the convergence of AI, neuro, bio, and socio-morphic extensions, and cultural perspectives has paved the way for remarkable advancements in AI technologies. By embracing an integrative approach and considering diverse factors, we can foster the growth of AI systems that are not only sophisticated and nuanced, but also culturally adaptive, facilitating unbiased and meaningful interactions between machines and humans.

This interdisciplinary exploration holds immense potential for transforming our understanding of the mind, language evolution, and the nature of consciousness itself.

# **Further Research**

Further research in the fields of neuroscience, philosophy, psychology, and other relevant disciplines will contribute to the development of an integrated theory that merges western and alternative insights. This theory would encompass information processing, neural dynamics, self-organisation, and global workspace theories, offering a comprehensive framework to account for both the objective and subjective experiences of consciousness.

The Brainprint and MindFlow, merging western and alternative insights from neuroscience, philosophy, psychology, and other fields pave the way for an integrated theory that incorporates aspects of information processing, neural dynamics, self-organisation, and global workspace theories. Such a theory would incorporate insights from both perspectives to fully account for objective and subjective experience of consciousness.

# **Conflicts of Interest**

The authors declare no conflicts of interest regarding the publication of this paper.

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