

# Human Cognition and its Evolutionary Roots

John A Challoner, July, 2025

## 1. The Cognitive Triad

Across more than a century of psychological theory and therapeutic practice, one pattern keeps recurring: the human mind is not a singular, unified thing, but a dynamic interplay between three distinct internal voices or functions. This pattern appears in diverse traditions and frameworks, often developed independently and in different contexts, yet converging on a remarkably similar structure.

Freud's foundational model of the psyche proposed three key components: the Id, representing our instinctual drives and impulses; the Superego, the internalisation of moral norms and societal rules; and the Ego, which mediates between these two and adapts our behaviour to the demands of external reality. (Freud, 1923)

Several decades later, Eric Berne, working within what became known as Transactional Analysis, proposed a similar triadic model of human personality. In his framework, later explored more deeply by R.D. Laing and others in the field of interpersonal communication, individuals operate from three ego states: the Child, representing spontaneity and emotion; the Parent, internalised authority and values; and the Adult, the rational, problem-solving part of the self. (Berne, 1961) (Laing, 1965) Communication, in this view, involves interactions not just between people, but between the different ego states within and across individuals.

More recently, in systems thinking, leadership psychology, and ecological consciousness, we find another triad: Ego, Eco, and Intuitive Intelligence. (Goleman, Boyatzis, & McKee, 2002) This framework distinguishes between:

- Ego intelligence, associated with individual agency, focus, and goal-setting;
- Eco intelligence, attuned to systems thinking, empathy, and interdependence;
- And Intuitive intelligence, encompassing insight, creativity, and holistic awareness.

It is important to note that the term “ego” is used in all three of the frameworks discussed, but with distinct meanings. In Freud's model, the “ego” is the rational mediator between instinctual drives (Id) and internalised norms (Superego). In Transactional Analysis, “ego states” refer to three broad modes of functioning, Parent, Adult, and Child, with the *Adult* state playing a role similar to Freud's ego. In the ego-eco-intuitive intelligence model, “ego intelligence” refers to the cognitive style oriented toward individual agency, goal-directedness, and boundary maintenance. While these uses overlap in associating “ego” with *self-regulation*, they emerge from different traditions and should not be assumed to mean the same thing. In this article, we use the full descriptive terms (e.g., “Freud's ego”, “Berne's ego state”, “modern ego intelligence”) to preserve clarity and avoid confusion.

Although these three models emerge from different traditions, each presents the human mind as a layered, internally differentiated system. The similarity across these models raises a

compelling question: are we, through various lenses, intuitively identifying something real about the structure of human cognition?

To explore this question further, we can bring in yet another perspective: Alderfer's ERG theory of motivation. (Alderfer, 1969) Alderfer reformulated Maslow's hierarchy of needs into three broad domains:

- Existence needs, which relate to survival and physiological well-being;
- Relatedness needs, which reflect our desire for social connection and belonging;
- And Growth needs, the human drive for development, fulfilment, and personal meaning.

Each of these need domains maps strikingly well onto the triads already described. Together, they suggest a convergent structure, not merely in our ways of understanding ourselves, but in the very architecture of the human mind.

## 2. The Evolution of a Layered Mind

To understand why this triadic structure recurs so consistently, we can turn to evolutionary biology and cognitive science. The human brain is not a monolithic organ; it is a layered system, developed over millions of years through the accumulation and integration of successive adaptations. (MacLean, 1990)

- At its core lies the brainstem and limbic system, which govern basic survival functions, instinctual reactions, and emotional responses. This is our existence layer, aligned with Freud's Id, Berne's Child, and the modern concept of ego intelligence, particularly in its drive-based form and concerned with immediate agency, protection, and gratification.
- Around this core evolved the neocortex, enabling social learning, communication, and empathy. This is the relational layer, associated with Freud's Superego, Berne's Parent ego state, and modern eco intelligence; all structures that internalise and manage the expectations of others.
- Finally, the most recent evolutionary development is the prefrontal cortex and default mode network. (Damasio, 1999) These regions support self-awareness, abstract thought, future planning, and the ability to observe and regulate one's own cognitive processes. This is the reflexive layer: Freud's Ego, Berne's Adult, and the modern intuitive intelligence, i.e., the integrative mind in the ego-eco-intuitive model.

These cognitive systems did not replace one another; rather, they accumulated and integrated, forming a recursive hierarchy of mental processing. Each layer has its own distinct functions, yet interacts continuously with the others.

This relationship can be summarised as follows:

Evolutionary Layer	Function	Freud	Transactional Analysis	Modern Ego/Eco/Intuitive	Alderfer's Needs
Survival	Instinctual drives and emotional impulse	Id	Child	Ego Intelligence	Existence
Social	Norm learning, empathy, adaptation	Superego	Parent	Eco Intelligence	Relatedness
Reflexive	Integration, self-regulation, growth	Ego	Adult	Intuitive Intelligence	Growth

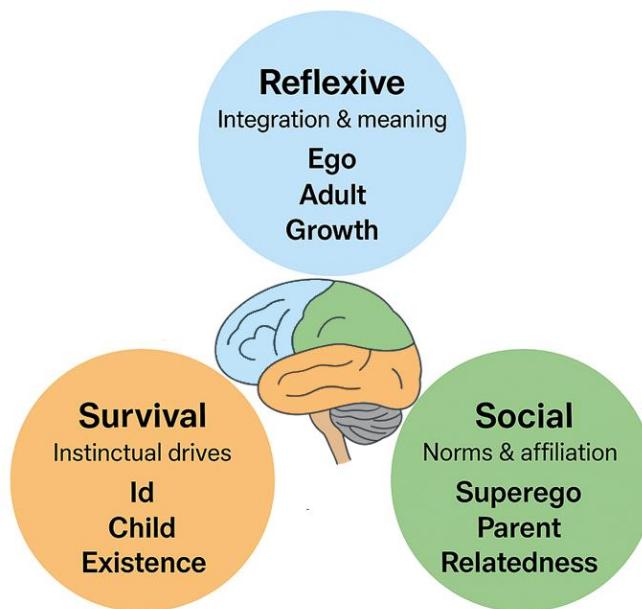


Figure 1 – The Triadic Personality Structure and Principal Brain Locations

From this perspective, the recurrence of these triads is no coincidence. They reflect the real structure of the human mind as a multi-level system, composed of interdependent but functionally distinct components. Each layer corresponds not just to a cognitive style, but to an evolutionary adaptation, a motivational orientation, and a mode of engagement with the world.

### 3. Reflexivity, Observation, and Human Connection

Recognising this structure is not merely an academic exercise. It has profound implications for how we understand ourselves and relate to others.

First, it helps us make peace with internal conflict. We often feel torn between what we desire, what we believe we ought to do, and what we aspire to become. These inner tensions are not

flaws to be eliminated; they are the natural result of a layered, adaptive mind, each layer responding to different kinds of pressure, need, or opportunity.

Second, this understanding elevates the importance of reflexivity: the ability to observe and reflect on our own mental state (Archer, 2003). Reflexivity allows us to ask: “Which part of me is active right now?” Is this decision being driven by fear, by habit, by relational anxiety, or by deliberate intention? The more we practise recognising these layers, the more effectively we can bring them into balance, and the more aligned we become with our deeper values and long-term goals.

Third, it enhances our capacity for empathic observation. Just as we can identify the voice dominating within ourselves, we can learn to read others’ dominant cognitive modes. Are they speaking from a place of hurt? Are they enforcing a learned norm? Are they engaging in genuine, present reflection? This skill improves not just communication, but the quality of human connection.

Finally, it offers guidance for how we structure the systems in which we live and work. Whether in education, governance, or organisational design, healthy systems are those that support existence, relatedness, and growth; attending to all three layers of human motivation and cognition. A school that fosters curiosity but ignores emotional safety will fail. A government that prioritises order but suppresses development will breed stagnation. A relationship that meets physical needs, but silences inner growth will feel hollow.

To live well as humans, we must recognise that we are three minds in one: instinctive, social, and reflexive. The wisdom of maturity lies in the ability to honour each of these, and to navigate among them with clarity, compassion, and grace.

### Conclusion: The Many Within Us

What began as isolated theories: Freud’s psychoanalysis, Berne’s ego states, Alderfer’s needs, and more recent systemic models, turns out to converge on a shared intuition: that human cognition is structured, layered, and inherently triadic.

When we become aware of these layers, we gain not just insight, but agency. Reflexivity and observation allow us to respond rather than react, to grow rather than merely adapt, and to connect rather than collide.

By coming to terms with the many within us, we make it possible to meet the many within others and in doing so, create a more human world.

### References

1. **Freud, S. (1923).** *The ego and the id*. London: Hogarth Press.  
– For Freud’s model of the Id, Ego, and Superego.
2. **Berne, E. (1961).** *Transactional analysis in psychotherapy: A systematic individual and social psychiatry*. New York: Grove Press.  
– For the Parent, Adult, and Child ego states.
3. **Laing, R. D. (1965).** *The divided self: An existential study in sanity and madness*. London: Penguin.  
– For the application and expansion of ego states in interpersonal dynamics.

4. **Alderfer, C. P. (1969).** *An empirical test of a new theory of human needs.* *Organizational Behavior and Human Performance*, 4(2), 142–175.  
– For the ERG (Existence, Relatedness, Growth) theory.
5. **Goleman, D., Boyatzis, R., & McKee, A. (2002).** *Primal leadership: Realizing the power of emotional intelligence.* Boston: Harvard Business Press.  
– Source of the ego/eco/intuitive intelligence triad, especially in leadership psychology.
6. **MacLean, P. D. (1990).** *The triune brain in evolution: Role in paleocerebral functions.* New York: Springer.  
– For the evolutionary model of the brain (reptilian/limbic/neocortex), foundational to understanding the layered mind.
7. **Damasio, A. (1999).** *The feeling of what happens: Body and emotion in the making of consciousness.* New York: Harcourt.  
– For neuroscience on emotion, cognition, and the integration of self-awareness.
8. **Archer, M. S. (2003).** *Structure, agency and the internal conversation.* Cambridge: Cambridge University Press.  
– For reflexivity and meta-reflexivity as a sociological-cognitive process.