

The Two Modes of Intelligence – Simulation and Execution

We are the story we simulate and enact. In other words, human intelligence operates in two inseparable modes: an **internal narrative simulation** and an **external embodied execution**. The mind constantly composes an inner story—imagining, rehearsing, and editing possible versions of ourselves—while the body carries out actions that make that story real. Modern psychology even describes our identity as a “**narrative identity**,” an internalized and evolving life story that reconstructs our past and imagines our future to give us a coherent sense of self ([“First we invented stories, then they changed us”: The Evolution of Narrative Identity](#)). This essay reframes the two modes of intelligence, *simulation* and *execution*, as parts of one ongoing narrative process. Rather than treating thought and action as separate or opposing faculties, we will see them as deeply integrated through the stories we tell and live. In what follows, we explore how *attention*, *recursive rehearsal*, and *symbolic expression* within our simulations shape who we are, and how *embodied execution* turns our inner narratives into lived reality. Throughout, we emphasize the inevitability of narrative in cognition—internally in imagination and externally in behavior—grounding the principle that **we become the story we tell ourselves and act out** ().

Simulation: The Internal Narrative Engine

Simulation is the mind's ability to **model and rehearse experience** without directly enacting it. When we plan for the future, daydream, revisit memories, or consider others' perspectives, we are running mental simulations. These simulations are fundamentally narrative in nature: we string events together in sequence, populate them with characters (often ourselves as protagonist), and imbue them with intentions and emotions. Cognitive science supports this view — for example, the brain's *default mode network* is active during internally oriented thought like daydreaming, reminiscence, and future planning ([The default mode network: where the idiosyncratic self meets the shared social world - PMC](#)). In essence, our default mental activity is to conjure stories. We *imagine* situations, try out possibilities, and explore outcomes in the mind's theater.

Importantly, this internal storytelling is not a casual pastime but the very mechanism by which we construct identity. Psychologist Dan McAdams describes *narrative identity* as a person's internalized life story — a story that integrates “the autobiographical past and [the] imagined future to provide the self with temporal coherence and some semblance of unity and purpose” ([“First we invented stories, then they changed us”: The Evolution of Narrative Identity](#)). In other words, by continually narrating our own lives in our head, we connect who we were, who we are, and who we might become into a meaningful arc. Every remembered experience is woven into the storyline of “me,” and every anticipated plan is a **next chapter** we mentally draft. This

ongoing personal narrative is *recursive*: we revisit and revise scenes from our past, and we simulate possible future scenes, each time updating our sense of self.

Three cognitive processes are especially crucial in the simulation mode for shaping the self-story:

- **Selective Attention:** What we pay attention to in experience becomes the material for our narrative. As William James observed, “My experience is what I agree to attend to. Only those items which I notice shape my mind” ([Classics in the History of Psychology -- James \(1890\) Chapter 11](#)). By focusing on certain events or details and ignoring others, we effectively *edit* our life story in real time. For example, a person might experience ten different moments in a day but dwell on the one failure rather than the nine successes, thereby narrating a story of personal struggle. Attention is the spotlight that illuminates specific scenes of our internal movie, determining which moments get encoded as defining parts of “my story” and which fade out. Over time, these choices shape our personality and worldview – a mind attended by hope will craft a hopeful story, while one attended by fear crafts a fearful story.
- **Recursive Rehearsal:** Our minds have the remarkable ability to **replay and reimagine** scenes over and over. We practice conversations we intend to have, mentally reenact past events to understand them better, and picture ourselves in hypothetical situations. This recursive rehearsal refines the narrative of self. Each replay can alter nuances – perhaps in the retelling, we cast ourselves as more in control, or we find new meaning in an old memory. Neuroscience shows that imagining an act or recalling it activates overlapping brain circuits as doing it for real, indicating that mental rehearsal deeply imprints on the brain’s model of the world. In building identity, **repetition is reality**: the traits and themes we repeatedly envision about ourselves become more firmly believed. For instance, someone who frequently imagines overcoming challenges will reinforce a self-story as a “resilient survivor.” By recursively simulating our own behavior and experiences, we solidify an internal narrative of who we are.
- **Symbolic Expression:** Even in simulation mode, we often externalize bits of our story through **language and symbolism**. Talking to oneself, journaling, or creating art are ways the internal narrative finds outward form without full-scale action. Notably, *inner speech* (that voice in your head narrating your thoughts) is a symbolic tool that guides simulation. As cultural psychologist Jerome Bruner noted, culturally shaped **linguistic processes** guide the “self-telling” of life narratives, eventually structuring how we perceive reality (). By putting experience into words — even silently in our mind or on a page — we give it form and meaning in our story. For example, writing about a traumatic experience can help a person reconceptualize it as a *chapter* in their growth, rather than an unresolved chaos. In fact, constructing coherent narratives of personal events has been linked to improved well-being ([Relations Between Narrative Coherence, Identity, and Psychological ...](#)), underscoring that expressing our simulations in language can literally help *reshape the self*. Symbolic output during simulation acts as a bridge between thought and action: it is the **draft form** of enactment, allowing us to refine our

narrative before we live it out.

Through attention, rehearsal, and symbolic expression, our inner narrative engine runs constantly. It not only reflects our experiences but actively **constructs** the self. We tell ourselves who we are, and in doing so, we become that story internally. Yet a story in the mind alone is not the end of the process—this brings us to the second mode of intelligence, execution, where the narrative is put on its feet.

Execution: Enacting the Narrative of Self

Execution is the outward mode of intelligence: our **actions, choices, and behaviors** in the world. On the surface, simulation and execution seem distinct—“thought” versus “deed.” However, when we frame human cognition narratively, execution is best understood as the *enactment* of the internal story. Our bodies and behaviors carry out roles in the plot that our minds have been composing.

Every deliberate action we take is typically preceded by some mental simulation (whether conscious or unconscious) of that action’s purpose and outcome. When I greet a friend with a smile, it’s not a random muscle movement; it’s guided by an internal understanding of a friendly interaction. In effect, I am acting out a tiny scene consistent with my narrative (perhaps “I am a sociable person who values friends”). Likewise, major life decisions—career moves, relationships, creative projects—are enactments of the life story we envision for ourselves. A person doesn’t move to a new city or pursue a medical degree in a vacuum; such actions make sense as *chapters in a story* the person has been internally narrating (e.g. “seeking adventure,” “fulfilling a calling to help others”). Execution actualizes these narrative threads in the material world.

Crucially, action feeds back into the narrative. Once executed, an action becomes a new experience, yielding consequences and feedback from the environment, which we then internalize. We observe the results of our behavior and incorporate them into memory: *Did the reality match the simulation?* This outcome might affirm our inner story or prompt us to revise it. For example, someone who identifies as a generous person (inner story) acts kindly (execution) and then sees the positive impact of that kindness, reinforcing the generous self-image. Or, if the outcome is unexpected (perhaps the kindness is taken advantage of), the person may tweak their narrative (e.g. “I need to be wisely generous”). In this way, execution and simulation form a continuous **feedback loop** shaping identity.

The inherent narrativity of execution is evident in how we interpret actions – both our own and others’. Bruner pointed out that to understand any human action, we place it in an *unfolding narrative context*: we ask *why* it happened, what it means for the person’s goals or character ([Bruner's Search for Meaning: A Conversation between Psychology and Anthropology - PMC](#)). In essence, we cannot help but see actions as part of a story. This applies reflexively to self-understanding as well: we explain and justify our own behaviors by weaving them into our

life tale (“I did that because I’m the kind of person who...,” or “that was a turning point for me...”). Thus, executing an action is never just a raw physical event; it is imbued with narrative significance. Our **attention** in execution mode often goes to the narrative consequences of our acts (we monitor how the story is playing out), and our **symbolic output** accompanies execution in forms like speech. For instance, when we act, we often narrate in parallel (“I’ll try doing this now”) or we later describe the act to others, which is literally storytelling the execution after the fact.

It is also useful to view execution through the lens of **embodied cognition**. Cognitive scientists Francisco Varela, Evan Thompson, and Eleanor Rosch famously defined cognition itself as “*embodied action*” ([Enactive Approach - an overview | ScienceDirect Topics](#)). From this enactive perspective, *doing* is a form of thinking. Our intelligent behavior is not something that happens after cognition; it is part and parcel of cognition. When you navigate a conversation or improvise in a dance, the intelligence isn’t pre-calculated entirely in your head then deployed – rather, your mind and body work together in real time to *enact* adaptive story-like patterns (taking turns speaking, responding to rhythm, etc.). The narrative doesn’t live in the head alone; it unfolds through **the whole organism in its environment**. In effect, we *perform* our identity. Just as an actor embodies a character from a script, a person embodies their self-narrative through actions. The *script*, however, is not fixed – it is continually rewritten by the outcomes of the performance.

The Recursive Loop of Self: Simulation <-> Execution

Rather than simulation and execution being two separate intelligences, they form a **recursive loop** that continuously produces and updates the narrative of self. The inner simulation feeds into outward execution, which in turn becomes new material for inner simulation. In this looping process, attention, rehearsal, and expression work in concert with perception, feedback, and adjustment:

1. **Attention guides experience:** At any given moment, what we notice or focus on (internally or externally) will influence both how we act and how we remember the event. For example, a musician on stage might focus on the joy of the music (attention to positive narrative), which leads them to perform boldly (execution), yielding a great concert that then reinforces their narrative of “I am a competent artist.” Conversely, if the musician’s attention fixes on a few anxious thoughts, their execution may falter, feeding a different self-narrative. Thus, controlling attention is a way of *steering the story* as it happens.
2. **Execution provides feedback for rehearsal:** After an action, we often reflect on it – essentially bringing the experience back into simulation for analysis. This is where **recursive rehearsal** picks up the new “footage” and replays it. We might rethink an argument we had (“What if I had said X instead?”), effectively simulating a rewrite of the script for next time. Our identity adjusts as we learn: “In that situation, I see I’m not as patient as I thought; I need to practice a calmer response.” We then *rehearse* that

improved response in imagination. In this way, each execution is a rehearsal for future ones, and identity is refined through each cycle.

3. **Symbolic expression connects the loop:** Throughout the cycle, language and symbols serve as a connective tissue between inner and outer. We talk ourselves through tasks, we narrate our experiences to friends, we record our goals and memoirs. This constant narration ensures that the *story* remains coherent across simulation and execution. If something unexpected happens in action, we will update the narrative by talking about it, explaining it to ourselves (“It didn’t work out, but here’s what I learned...”). This is how we maintain continuity of the self despite change: by narrating the change, folding it into the plot. The *inevitability* of narrative here cannot be overstated – whether silently or aloud, we frame and reframe everything that happens in story form, keeping our sense of self unified.

Over time, the recursive loop of simulation and execution makes one thing clear: **the self is not a static entity but an ongoing story**. Philosopher Daniel Dennett captured this idea by describing the self as a “center of narrative gravity” – like a fictional character, it has no existence apart from the narrative that constructs it ([Dan Dennett – Self as a Centre of Narrative Gravity | Absurd Being](#)). We *are*, in a very real sense, the protagonist of a story our brain continuously writes, reads, and revises. This does not mean the self is an *illusion* in a dismissive sense; rather, it is a dynamic narrative reality. Just as the character Hamlet is “real” within Shakespeare’s play, our identity is real within the story woven by our biological and social existence. And just as a play’s meaning emerges through both the script (words) and performance (acting), our identity emerges through both modes: simulation (the internal script) and execution (the performed act).

Notably, this narrative view bridges subjective experience and objective action. We often treat thought as private and action as public, but narrative links them: the *meaning* of an action is private and public at once. My inner story gives meaning to what I do, and others interpret my deeds as part of a story they perceive about me. In social life, our personal narratives intertwine with larger cultural narratives. We enact roles in family stories, workplace stories, national or religious narratives. As Bruner observed, culture provides a stock of canonical narratives – templates for hero, caregiver, rebel, etc. – which individuals draw on in shaping their own life stories () (). Thus, the stories we simulate and enact are never created in isolation; they are influenced by the broader story-systems of our society. This cultural dimension adds another recursive layer: we internalize cultural narratives, enact them, and in doing so sometimes even modify those cultural narratives over time.

Conclusion

Human intelligence can be understood as an endless interplay between **simulation** and **execution – thinking and doing – unified by narrative**. Internally, we simulate our world not as cold data, but as lived stories: we cast ourselves as heroes or victims, we set goals and

imagine obstacles, we empathize by imagining others' stories. Externally, we execute actions that follow those narrative threads and express our chosen character, while the consequences lead us to revise the plot. Our cognition is inherently story-shaped; indeed, psychologist Jerome Bruner argues that humans have a primal "*readiness for narrative,*" a *predisposition to organize experience into narrative form* ([Bruner's Search for Meaning: A Conversation between Psychology and Anthropology - PMC](#)). We cannot help but think in stories any more than we can help seeing time as flowing or events as caused by prior events. Narrative is the **organizing principle of cognition** that makes intelligence *about something* meaningful.

When we embrace the notion that *we are the story we simulate and enact*, several profound insights emerge. First, personal development can be seen as **story editing**: by changing the narrative we simulate (shifting our attention, rehearsing new possibilities, reframing our past), we change our character in action. This is exactly why therapies and self-improvement efforts often focus on narrative—encouraging individuals to rewrite their internal stories and then live them out differently. Second, it highlights the unity of mind and body. Rather than mind being a control tower and body a separate vessel, the two cooperate as a storyteller and a performer bringing the story to life. Finally, it underscores human flexibility and creativity. A story is not a rigid program; it can always be told differently. Likewise, our intelligence is not fixed – we can imagine new endings and then *act* to make them reality.

In summary, **simulation and execution are two facets of the same narrative art**. Attention, memory, and imagination make us *authors* of an inner narrative; perception, action, and expression make us *actors* on the stage of the world. The self is continually composed at the intersection of these modes. We interpret our every experience as part of an unfolding plot, and we cannot do otherwise ([Bruner's Search for Meaning: A Conversation between Psychology and Anthropology - PMC](#)) ([Bruner's Search for Meaning: A Conversation between Psychology and Anthropology - PMC](#)). Rather than critiquing whether thought or action is superior, it is more illuminating to recognize their synergy: *thought prepares action; action inspires thought; together they form the ongoing story of one's life*. In the end, as Bruner eloquently stated, "*we become the autobiographical narratives by which we 'tell about' our lives*" (). Understanding intelligence in this unified, narrative-driven way affirms that who we are is quite literally the story we continually weave—internally in mind and outwardly in deed—forever a work in progress, and profoundly human.

Sources:

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