



# 1

## Theatricality in Deep History and the Human Brain

### A. Initial Questions, Terms, and Goals

1. Why study theatre history today—when information about the past is readily available on the Web and we are often more concerned about the present and future in our current “postmodern” era? It is important for artists to know the history of their art form. But are there other ways to benefit, too, from a deep yet global sense of theatricality and its many histories (or her-stories)?
2. We all engage in *creative play* as children, gaining a fuller sense of self (or possible selves) through imaginary interactions with others, sometimes with big people watching, providing a larger symbolic framework. Peers, parents, and other adults also model the roles we take, offering implicit scripts and explicit directions, along with costumes, props, and settings for meaningful identities. This play-acting as children and later in life involves our family, neighborhood, schools, and other communities, yet also television, movies, and interactive online media—expanding the arenas of our self and other awareness. It may also involve “deep play,” which performance theorist Richard Schechner explains as mischief, rebellion, games, and gambling with serious risks. Degrees of joyful or deep play continue from our youth into adulthood through formal theatre, sports, and videogames, on various stages with boundaries and rules.
3. Such theatric(k)s extend the animal drives of cooperation and competition from the nurturing, hierarchical, ego-creative, and traumatic

spaces of childhood to related arenas of adulthood. The art of theatre reflects this in a safe, entertaining, yet often challenging space, which draws on plays and traditions of the past, along with current cultural conflicts. Thus, *theatricality*—exemplified by the art of theatre—is key to our lives as human beings, as malleable animals with remnant instincts and moral rules, struggling to know who we are and what to do, while seeking a bigger meaning to it all.

4. We also have an “inner theatre” that produces various *dreams* each time we sleep, some of which we remember, from subconscious yet real energies within us. When we are actively involved in the art of theatre, onstage, backstage, or in the audience, we share a formal sense of play, in a *collective* dreamlike space. So, studying theatre history can help us understand the *conventions* of theatrical play in the past, affecting our practices today, and give us glimpses of the shared dreams and nightmares of our ancestors—or of their allies and rivals in other parts of the world. This relates to the larger sense of *theatricality* in religious, political, and military theatres, as well as the “presentation of self in everyday life,” involving backstage and onstage aspects (as sociologist Erving Goffman put it), in various cultures around the globe, across many generations.

**[How does your experience of theatre as an art form relate to performances in everyday life and your “inner theatre” thus externalized?]**

5. Each generation, including yours, defines what it values from the past, revising its history. So you are part of that project, now and in the future: choosing what to *learn* from theatre’s past, how to *reflect* on it, and where to *apply* it, through your inner and outer theatres of memories, dreams, everyday life, and art. This book offers a “treasure map” of global theatricality, sketched from its deepest history to initial extensions in screen media and current postcolonial developments. TIMELINES show the theatricality of geopolitics, with war, terrorism, and major cultural developments. Numbered paragraphs outline various theatre histories, for your further exploration online and in the library. Questions **in bold** suggest how you might reflect on present parallels, *making your own map* of global theatre histories, regarding the world around you and the theatre inside your brain.
6. Our understanding of theatricality in history comes through the art of theatre (from the ancient Greek *theatron* or “seeing place”), especially its Afro-Eurasian traditions, starting with ancient Egypt, Greece, and India. But theatricality extends globally and much further back in time, to the beginnings of humanity in our animal–human ancestry

(in Africa), through the evolving awareness of Self, performing with others for a transcendent Other. This awareness extends to our current screen devices with mass media, social networks, and virtual realities. Thus, *theatricality* has a specific meaning in this book, related to the broader notion of “performativity” in the field of performance studies. Theatricality is performance plus the awareness of audience, of role-playing and being seen or being in the role of watcher. It occurs even when you are alone with your dreams and imaginings, or when you hear the voice of yourself speaking to yourself, yet involving memories of others as absorbed personalities, and projections of an identity framework, in your *inner theatre*.

7. Try it now. Listen to that inner voice in your head, departing from these words—as you become the performer and audience of your thoughts. That is an aspect of the “theatre of the mind.” In this introduction, we will also consider the “theatre of the brain,” with specific neural functions akin to elements of external theatre today.
8. Through the traditional elements and developments of *theatre*, we can see its heritage as an art form: what we might use from the past or change. And yet, by also considering the prehistory, inner theatre elements, and current extensions of *theatricality*, we might view the lures and errors of the past being repeated in the present—with choices for the future. Thus, global theatre history acts as an uncanny *mirror*, revealing our repressive blind spots and stereotypical projections in wider arenas of theatricality today.
9. In common speech, the terms “theatrical” and “dramatic,” regarding everyday life, often suggest hyperactive pretense or false posturing, with stressful demands on others, as in the “kabuki theatre” of politics or “too much drama” at home. “Theatricality” can connote silliness and superficiality, as too pretentious and emotional. In written English, its earliest recorded use was in 1837, yet it has been used in so many ways since then as to become almost “empty of meaning,” according to some theatre scholars (Davis and Postlewait 1–2). It also relates to a longer history of “antitheatrical prejudice,” with insights and fears, from the ancient Greek philosopher Plato to various religious and secular censorings of theatrical activity as dangerous to society (Barish). And yet, it has come to mean an *awareness* of spectatorship and performance elements, through modern and postmodern “theatricalist” styles, against the realist paradigm of verisimilitude with a “fourth wall” at the edge of the stage.

10. Recognizing yet deepening such associations, this introduction investigates the significance of global theatricality in its “deep history” (Smail), regarding the animal-to-human evolution of our brains, bodies, and cultures. The next chapter then focuses on our ancestors’ early emergence of Self and Other awareness, of role-playing and being seen, with inner-theatre projections in prehistoric cave, temple, and domestic images. These artifacts offer evidence of collective meaning-making performances about nurturing yet deadly forces of nature and potential afterlife realms.
11. Reflect on how these *primal* elements of theatricality relate to your own life and to the *hyper-theatricality* of politics, mass media, and social networking today. Also, apply such connections to the mapping of various forms of theatre across cultures and time periods in the chapters ahead. Thus, you will engage your inner theatre with new perspectives on the theatricality of life: from bio-cultural identity needs to reflective stage/screen simulations, in changing social frameworks, from the *globe* of your brain to the world around you. Perhaps you will glimpse the playing out of your life story through such inner and outer, global contexts.

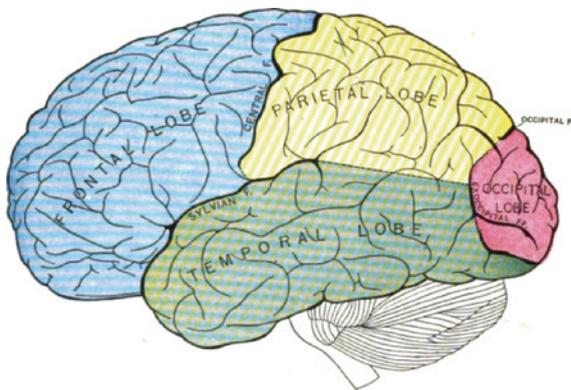
## B. Culture’s Cave and the Brain’s Inner Theatre (from Plato to Neuroscience)

1. In Plato’s *Republic* (380 BCE), the ancient Greek philosopher offers an allegory, through a dialog between his older brother Glaucon and his teacher Socrates, about people chained for their entire lives in a cave, facing a wall where they see a shadow play, not knowing any other reality. One such prisoner is released and forced to see the firelight and figures, behind the prisoners, which produces their shadow-life on the cave wall. Squinting and resisting this insight, the freed prisoner is then dragged out of the cave, resisting even more the pain of the sunlight. Eventually, he sees the truth outside the cave, as Platonic ideas, whose shadows are within it. He tries to save others in the cave, yet they resist like he did.
2. This allegory of the cave relates to Plato’s critique of theatre and other art forms as removed from the truth, even further than objects in reality, which are already just copies of ideal forms. Yet Plato’s student, Aristotle, suggested in his *Poetics* (335 BCE) a theory of “catharsis”

(from *katharizo*, “to wash”) as the purifying of emotions, such as pity and fear, through the structure of tragedy, as fictional representation.

3. A similar but more systematic theory emerged in ancient India, through Bharata Muni and others, in the *Natya-Shastra* (meaning “Dance-Theatre Teaching or Scripture”) and later commentaries. It involved eight emotions refined through plays and performances, as *rasas* (flavors) tasted by spectators, at a resonant distance. A ninth *rasa* was added a thousand years later by Abhinavagupta: peace (*shanta*), as mindful awareness, refining spectators toward enlightenment, in communion with others and union with the divine.
4. Through neuroscience today, we might say that such *rasa*-catharsis involves “cognitive reappraisal” (Beauregard) with spectators activating their *inner character*, in the lateral prefrontal cortex (LPFC, on both sides of the forehead), to taste their resonant emotions as refined feelings, giving them choices in how to act in daily life, rather than being driven impulsively like the characters onstage. Thus, what Plato and Aristotle experienced in the ancient Greek *theatron*, like Bharata Muni, Abhinavagupta, and others in their cultures, led to various theories of theatricality in later periods, related to current neuroscience. Even the term “theory,” like “theatre,” comes from *théa* (view), as a way of seeing and interpreting evidence, in science and art.
5. Today, many screen devices engage us with shadow plays and virtual networks, addictively trapping us like prisoners in Plato’s cave. But when structured with tragic or tragicomic insights, stage and screen representations can free us, to some degree, from emotional blind spots, stereotypical projections, and illusory attachments. Such passionate yet ironic, perspective altering, and *rasa*-cathartic experiences challenge our ego and group identifications. So we may want to avoid the cognitive reappraisal like Plato’s resistant prisoners.
6. Indeed, much of mass media entertainment is “escapist” today, offering fantasies that enchain us, with vicarious thrills and godlike powers of surveillance and survival in virtual realms, to hide from the painful sunlight of our mortal and social vulnerabilities. We are drawn into many caves, with shadow-play screens competing for our eyes, interactions, and investments of time and money. Such high-tech caves also perform the “data mining” of our desires, divining where voters, consumers, and inner theatres are trending as a godlike mass audience. With so many *screen caves* today, what is our reality? How can psychology, neuroscience, and theatre help us to glimpse the bigger picture in the sunlight?

7. Over a century ago, Sigmund Freud noticed that his patients' memories, especially of childhood, were like "screens" with incidental details and fantasies displacing painful traumas, which then appeared in other repetitive ways, through verbal or bodily symptoms. Current neuroscience confirms that *all memories* are, to some degree, *fictional* reconstructions, changing each time an event is remembered, as neural circuits draw on traces of related experiences to stage the present consciousness of what was. We have about 87 billion neurons and 100 trillion connections in each of our heads, but over 90% of brain activity is "unconscious." Those circuits cooperate and compete for what is "staged" as *conscious* percept or concept at a given moment, according to cognitive scientist Bernard Baars, who uses theatre metaphors in his "Global Workspace Theory."
8. Percepts arrive a fraction of a second before a concept applies, as the gathering of sense data by "bottom-up" networks meets the focused attention of "top-down" networks (Austin). These top-down and bottom-up networks also relate to the left and right hemispheres of the brain's neocortex, with 10–14 billion neurons in the frontal and parietal lobes (Fig. 1.1) separated by a physical gap, yet joined below that by the corpus callosum. The left hemisphere's expectations, rules, and more verbal, analytical concepts often filter the right's contextual, more visual, mimetic sensations, except when new ideas and images arise in the circuits between them (Table 1.1). So, I call the left neocortex a "scriptwriter/critic" and the right a "mime-improviser/scene-designer." Likewise, neuroscientist Michael Gazzaniga calls the left hemisphere



**Fig. 1.1** Left side of human brain, with major lobes, by Henry Vandyke Carter (illustrator), in *Anatomy of the Human Body*, by Henry Gray, 1918

**Table 1.1** Brain hemisphere functions (based on McGilchrist—with inner theatre elements added in **bold**)

Left cortex ( <b>scriptwriter/critic</b> )	Right cortex ( <b>mime-improviser/scene-designer</b> )
<i>predator (focused, objectifying, tool-using)</i>	<i>prey or mate (broad awareness, life/death/sex-oriented)</i>
belief, competitiveness, conscious agency	care, cooperation, unconscious socio-environmental influences
abstract/analytical thinking [inhibiting →]	emotional/sensory intuition (ties to limbic/subcortical <b>stagehands</b> )
familiar, rule-based, orthodox ideas	“anomaly-detector” and Devil’s Advocate awareness of new
examining parts in a linear, categorical way	comprehending the whole in a cyclical, contextual way
sequential, cause and effect, literal language	deductive, parallel, paradoxical, and poetic associations
manipulation of known, static, isolated, general	care of individual, evolving, interconnected, incarnate beings
self-referential (thing/machine-oriented)	other-engaged (toward living-world), empathic
self-certainty, yet toward virtual, unrealistic	responsibility, shame, and guilt, but more realistic
optimistic, yet with projection and anger	melancholic, yet sensitive to tears and alert to change
denotation (with confabulation to repress)	connotation, appreciating ambiguous meanings, ironic humor
affinity to major keys and basic rhythms	minor keys, complex syncopation, and harmonic progression
concerned with social or willed emotions	primary-process, bonding, and unconscious emotions
focused attention, <i>grasping (right hand)</i>	sustained attention, <i>exploratory (left-side facial expressions)</i>
<i>looks at other’s mouth (detached from body)</i>	<i>looks at eyes during conversations</i>
identifies simple, easily categorized shapes	identifies complex, varied figures
produces schematic representations	produces depth in time/space (Self-image and theory of other’s mind)
more dopamine (pleasure) networks	more noradrenaline (excitatory) networks
parasympathetic (quiescent) nervous system ties	sympathetic (arousal) nervous system ties
schizophrenia, MPD, ASD, anorexia, BPD disorders	depression with anxiety disorders
<i>independent</i> self-regard, over-estimating abilities	<i>interdependent</i> self-critical, in social web, valuing harmony

the “interpreter”—with such left and right cortical differences found in 90% of people, including 60% of left-handers. (The left sensorimotor cortex is connected with the right side of the body and the right cortex with the left side.) We can thus apply Freud’s insight about “screen memories” to all percepts and concepts of the past, present, and future. The inner-theatre *staging* of consciousness focuses awareness like a “spotlight” (Baars). It often represses what is too painful or distracting, yet also retains such subconscious, *backstage* impressions, desires, and projections.

9. A generation after Freud, psychiatrist Jacques Lacan described the “mirror stage” of early childhood, between 6 and 18 months, when the baby notices itself in a mirror and performs for others’ reactions. The baby gains an imaginary sense of Self in the symbolic framework of rules and languages around it, which it learns more and more as it develops in later stages of life. Thus, according to current neuroscience, each of us bears a unique neural network from specific life experiences. Billions of neurons are “pruned” in the natural cell death (apoptosis) of unused areas and connections strengthened through increasing axon ties in circuits that are utilized. This refines our brain’s “wiring,” especially from childhood until our mid-twenties, when the frontal lobes mature, but also throughout our lives.
10. Numerous interactions with other people consolidate the circuits that become our mirrored sense of self: an “actor” with potential “characters” in various everyday scenes, through memories, fantasies, and dreams. One’s *inner actor*, performing characters in ordinary life, draws on others’ desires, which modeled and mirrored it earlier, in experience traces that can only be partly reconstructed as conscious memories. Yet the subconscious memory traces continue to influence percepts and concepts in each staging of the present, like an *inner audience* in the darkness, cheering for what appears in the “spotlight” of consciousness (Baars), through temporal lobes at the sides of your head, with their long-term, emotional memory, expectation, and intuition networks. (Although the spotlight is a modern device, theatre has always involved the audience focusing its attention, to make the present moment of performance appear.)
11. You also bear an *inner director*, with a sense of others’ minds that you theorize as ideal spectators, internalized as a superego. This “Theory of Mind” network about others’ perspectives has a hub in the dorsomedial prefrontal cortex (DMPFC), in your forehead, between your eyes. It is active, too, as a “default” system when the brain automatically shifts toward social interests while not focused on analytical tasks (Lieberman). This relates also to the *inner stage/production manager*,

as I call it, a network that monitors one's behaviors as proper or not, with its hub in the ventro-medial PFC (below the DMPFC). The *inner actor* of my self-knowledge has its hub in the medial prefrontal cortex (MPFC), between the DMPFC and VMPFC. The *inner character*, when I appear in a mirror, is most active in the LPFC on the sides of my head, as if the mask of Self attaches there. The right lower (ventro-) LPFC is also a key area for controlling impulses and changing left-cortical beliefs with new perspectives, like an *inner sound/light operator*.

12. These frontal networks connect with the *inner costume (body-image) definer/designer* in the parietal lobes behind them, with a bodily sense of self and other in space. They are also tied to many backstage operators, or *inner stagehands*, in various limbic and subcortical areas, involving bottom-up drives and emotion systems, through feedback loops with the neocortex (Pizzato, *Beast-People*). Use Table 1.2, with its summary of inner theatre elements, to consider how your brain interacts with the theatre histories mapped in this book, through the experiences in your life. Which conflicts are shown in theatres of the past, in their geopolitical contexts (in the TIMELINES), expressing inner and outer, individual and collective networks, with insights for ours today?

**Table 1.2** Inner theatre elements (applying the neuroscience of Baars, Lieberman, McGilchrist, and Newberg)

Neural network hub	Function	Inner theatre element
left cortex	abstract rules, verbal thought, and objective focusing	<i>scriptwriter/critic</i>
right cortex	contextual, visuo-spatial, and subjective openness	<i>mime-improviser/ scene-designer</i>
left and right parietal lobes	bodily sense of self and other in space	<i>costume (body-image) definer and designer</i>
temporal lobes and insula	memory, intuition, and meaning-making	<i>audience</i>
medial prefrontal cortex (MPFC)	inner knowledge of self, yet influenced by others	<i>actor</i>
dorsomedial prefrontal cortex (DMPFC)	"mentalizing" theories of others' minds	<i>director</i>
ventromedial prefrontal cortex (VMPFC)	monitoring one's own behaviors	<i>stage/production manager</i>
lateral prefrontal cortex (LPFC)	viewing/imagining one's appearance (in a mirror)	<i>character/mask (persona)</i>
right ventrolateral prefrontal cortex (rVLPFC)	control of impulses and actions	<i>sound/light operator</i>
limbic system and brainstem	primary emotions and survival/reproduction drives	<i>stagehands</i>

13. The staging of consciousness inside our heads and the presentation of self in everyday life are connected, as inner and outer theatres. They become illuminated by the art of theatre, reflecting other forms of theatricality across history. Yet how do the inner mirroring networks of our human brains relate to the *biological* evolution of our ancestors, from earlier mammals and primates? How did that evolution lead to the *cultural* development of shadow-screen caves, from deep history to recent technologies, with the Web now shaping our mirror-stage “selfies” and superegos, as collective theatres of consciousness that trap or free us?

## C. Deep-Historical, Bio-Cultural Identity Needs

1. Biological evolution involves *natural selection*. This means that random mutations in the genes produce creative options that are better for survival and reproduction in a given yet changing environment. *Sexual selection* also shapes each generation, through mating preferences in bodies and behaviors, such as the “costly signaling” of the peacock’s tail or the bowerbird’s courtship ritual of decorating a twig enclosure. With the complex theatricality of humans, appearance and performance in everyday life can lead to sexual selection for parenting each generation—with social ideals of attractiveness in arranged marriages, romantic love, or other forms of partnership. Thus, *social selection* becomes a powerful factor in our past inheritance and future legacies, as it may also be for many animal species (Roughgarden), yet with a symbolic difference in the inner and outer theatres of human reflectiveness.
2. With humans, evolution has four dimensions: (1) *genetic*, in the DNA code, (2) *epigenetic*, with chemical markers on the genes passed to offspring, (3) *social*, akin to but vastly more complex than in other primates, and (4) *symbolic*, with our changing cultural environments (Jablonka and Lamb). The symbolic dimension of human bio-cultural evolution creates tremendous achievements, through language, morality, art, and technology. Yet its power to bind people into mass ideologies also has a dark side. Groups become more conservative or progressive in their cultural changes—and come into conflict, projecting stereotypes and finding scapegoats to purify themselves. Nostalgia for a nation’s or ethnic group’s imagined greatness may create a progressive conservatism that demeans others, with a “Social Darwinism” that prioritizes fitness

for dominant cultural attributes, even to the point of eugenics or genocide. However, studying theatre history can reveal such dangers in group performances, with the tragic flaws of inner theatres networking together, from prior stages to today's playful, yet hyper-theatrical, mass, and social media.

3. Like other mammals, human offspring play. They are *rehearsing* survival skills, but in social and symbolic dimensions. *Dreams* may likewise be social skill rehearsals with symbolic elements, especially as “threat simulations” (Valli and Revonsuo). They are personal, *cathartic refinements* of daily experiences, desires, and emotions, consolidating memories through fantasies—akin to the art of theatre. Various *theatrical media*, developing historically from stages and screens to the Web today, share conscious dream worlds *collectively*, involving unconscious elements, identity needs, light and dark play, and changing cultural frameworks.
4. Cooperative and competitive group environments shape our childhood play, nightly dreaming, and various other forms of outer and inner theatres. We each contend for current significance and long-term value, through survival and reproduction drives that extend from biology to culture. These involve *bottom-up*, bodily, and emotional needs. Yet they also involve *top-down*, social, and symbolic demands—in a particular cultural framework, such as a game's arena and rules, or a theatre's setting and script. This gives us a sense of *identity* with others if we perform well. For we need more than just genetic survival and reproduction. We play, dream, and perform in daily life to become significant as an actor and character in different situations, with long-term influences, for a sense of purpose and meaning.
5. Some people even sacrifice their biological survival or potential to have offspring, sublimating those drives into *cultural ideals*, as when dying for one's country or choosing to have a career instead of children. A key chemical for such social and symbolic sublimations is the neuropeptide *oxytocin*. It acts as both a transmitter between brain cells and a hormone signaling between the brain and body—in the pleasure of *bonding* with loved ones or group members. But it also strengthens *antipathy* toward outsiders, encouraging cooperation within and competition between groups. Thus, our evolution from mammals and primates (with similar neuropeptides) gives us powerful, biochemical “stagehands” for our inner and outer theatres.

6. We also have remnant structures in our brains from early animal ancestors. Our deepest hindbrain areas, including the brainstem and cerebellum, show a kinship with *fish*. Our emotional limbic system (at the core of the brain) and temporal lobes (at the sides of the head, also with memory gateways) show a kinship with other *mammals*. Our parietal and occipital lobes (at the rear of the head) relate to our *primate* ancestors, coordinating the self/other and visual maze of living in trees. But these inner stagehands and audience circuits have been radically transformed, especially through ties to human prefrontal areas: the inner director, stage manager, actor, character, and operator networks.
7. Emotions, like yawns and laughter, are contagious—with inner stagehands signaling *between brains*. Such shared behaviors and feelings may be inherited from our mammal ancestors with strong social ties, as shown by herd animals, canines, and primates today. Human “emotional contagion” involves *automatic mimicry* through synchronized facial expressions, postures, gestures, and vocalizations, with or without a verbal, cognitive component (Hatfield et al.). These everyday theatrical interactions are crucial to the oxytocin-based bonds that form in couples and groups—against outsiders—as the stagehands in our brains signal, mostly unconsciously, to others’ inner theatres, through “neural resonance” (Prochazkova and Kret 101). Thus, human brains add to the mammalian and primate inheritance of emotional contagion: highly complex social networks and symbolic meanings. This occurs today through physical presence and screen media, especially with Facebook and Twitter, whose “massive-scale” networks affect users’ moods positively and negatively (Kramer et al.).
8. Technologies of inner/outer theatricality have multiplied from deep history to today: in person, onscreen, and online. We can alter others’ feelings in everyday life by performing positive moods, as an acting choice of cheerfulness and gratitude. However, negative feelings may also circulate, especially against stereotypical others, through the popular mode of “melodrama” onstage and onscreen, often with stirring melodies. Across many specific genres, melodrama features admirable heroes against evil villains, stopping their threats or getting violent vengeance. This was defined onstage in the 1700s–1800s and onscreen more recently, from movies and television to the shaming frenzies of social media. But this *melodramatic mode* can be found as far back as ancient Egyptian ritual theatre, with repeated battles between the gods Horus and Set, personifying good and evil, order and chaos, ruler and rebel. Look for such melodramatic *binaries* (and their comical

caricatures) throughout the periods outlined here. Consider the temptation toward similar stereotypes today, with projections onto leaders, scapegoats, and groups.

**[Whom do we idolize and demonize, through our melodramatic mass and social media, like plays in the past? Who benefits and who suffers, even when idealized?]**

9. Such *theatrical contagion*, whether in melodramatic, tragic, comical, or farcical modes, involves “mirror neurons” that we inherit from our primate ancestors. Discovered in macaque monkeys a few decades ago, mirror neurons activate *both* when the primate *makes* a goal-directed movement, such as picking up a peanut, *and sees* someone else (animal or human) make the same motion. Auditory mirror neurons activate with sounds for behaviors that are performed or heard. Canonical neurons are also involved in such self/other simulations, activated by typical objects for certain actions. Such neurons are located in the human premotor cortex, which directs bodily movement and produces verbal language in the left cortex. Our mirror neuron system is also connected with emotional contagion through deeper limbic areas, such as fear and disgust in the temporal lobes (amygdala and insula), with automatic mimicry evoked by facial expressions (van der Gaag et al.). Thus, our inner theatre, akin to a monkey’s, yet with a higher degree of reflective awareness, automatically *simulates* another person’s behaviors and feelings, sending signals *to perform them*. Other brain networks usually block the outer imitative movements and vocalizations, except in the disorders of echopraxia and echolalia. But internal mimicry is still involved, forming a basis for emotional contagion and interpersonal empathy.
10. The more *salient* the observed behavior (the more valuable to survival/reproduction in a biological or cultural sense), the more it may be simulated by the inner theatre, especially if it relates to personal experiences. Brain mapping studies with dancers watching dance videos or musicians listening to music (or even looking at sheet music) show more activation in their mirror neuron areas with a dance style they also perform or music they have played (Hyman). Thus, when we watch and listen to a performance, each of us brings a deeply animal–human, yet personal history to that vicarious experience. Through emotional contagion and mirror neuron systems, our subconscious stagehands mimic—while more conscious, inner theatre elements resonate with or critically recognize—the feelings, actions, characters, and story onstage or onscreen.

11. Experiments show that our body-image and social projections are surprisingly *malleable*, as we mirror one another theatrically. If you put your hand under a table, with a rubber hand above it, and watch someone stroke that fake hand while yours is stroked in the same way unseen, you will probably start to feel that the rubber hand is your hand—even though you know it is not. If the experimenter then bends back the rubber fingers, or hits them with a hammer, your sweat levels will spontaneously increase, showing automatic bodily arousal in your *sympathetic nervous system*, perhaps with facial and vocal reactions, as if it were your hand (Armel and Ramachandran). Thus, actors onstage and onscreen can become extensions of our bodies, emotions, and identities—through the bottom-up neural circuits of our inner theatre, to the degree that the scriptwriter/critic (left cortex), *filtering* the mime-improviser/scene-designer (right cortex), allows that resonant connection.
12. Indeed, scientists have found that the right frontal and temporal lobes (with the inner audience of memory circuits) are activated by such “rubber hand illusions” (Tsakiris et al.). Similar tests with monkeys discovered that mirror neurons in the premotor cortex are also involved (Armel and Ramachandran), simulating the observed actions as vicarious experiences. Further experiments with humans find that looking down at one’s body, while wearing a head-mounted video display that shows a manikin instead, produces identification with the manikin in just one minute, even without touch—and a startle response when a knife is plunged into the manikin (Petkova and Ehrsson). Such “body-swapping” experiments show how taking on the point of view (POV) of a character onstage through the play’s dramatic focus, or onscreen with POV shots, might encourage viewers to feel their own bodies at risk in the show’s violence, as well as in other types of physical contact between characters, simulated in the spectator’s inner theatre.
13. “Enfacement” experiments with a viewer feeling her face touched, while she sees a face onscreen being touched in the same way, also produces strong identification, with feelings of similarity, attractiveness, and trustworthiness (Tajadura-Jiménez et al.). Yet such self/other merging of faces increases with the *beauty* of the face being viewed (van Leeuwen et al.), idealizing one’s inner character. Fear and happiness can also be evoked in the viewer with faceless, full-body *poses* of those emotions in photographs, triggering mirror neuron, emotional contagion (de Gelder et al.), as with Delsarte’s nineteenth-century acting

method or the stereotyped gestures of stage and screen melodrama. However, *racism decreased*, on implicit bias tests, in subjects who experienced a strong identification with a rubber hand of a different color than their own (Farmer et al.). Our unconscious social projections can be altered by mirror neuron, emotional contagion, and body-swapping identifications, evoked onstage or onscreen, if they go *against* our stereotyped expectations.

14. *Melodrama* often confirms stereotypes of good versus evil, evoking fear, rage, and revenge against objectified villains, in the vigilante violence of our screen media and videogames, which bleed into real life. But *tragicomic* twists of empathy and irony can change the viewer's perspective, with emotional resonance tasted at a distance, according to the theories of Aristotle, Bharata Muni, Abhinavagupta, and Bertolt Brecht. This relates to the reinterpreting and reimagining of aversive, sad, and erotic images (photos or videos), through mindful detachment, with "cognitive reappraisal" experiments finding the LPFC inner character activated, along with the medial PFC director, actor, and stage manager (Beauregard 176–80, 199–200). *In the chapters ahead*, notice how both possibilities develop, of tragicomic *rasa*-catharsis and melodramatic catharsis-backfire, from ancient to postmodern plays, through artistic practices, metaphysical or humanist frameworks, and political theatrics. Such developments might even become pieces of an *uncanny mirror*, reflecting the blind spots of today's inner theatres and social mass media caves.
15. Bio-cultural identity needs start with bodily *survival* drives. But they soon involve the pleasures of maternal *nurturing*, and yet traumatic pain in, or fears of losing such comforting, holding, and playful spaces in our childhood. We thus *cooperate and compete* with others (with peers and adults) for attention to our bodily, emotional, and social needs. Eventually, we are drawn into larger arenas of play, identity, and story—separating from maternal and childhood spaces, as imaginary ego realms, toward symbolic Self/Other frameworks, especially through abstract words and rules. But right-cortical, mime-improviser/scene-designer, *imaginary* networks are still involved in the further developments of Self, through left-cortical, scriptwriter/critic, *symbolic* circuits and their ties to other people.
16. These inner and outer, neural and social networks also involve deeper animal drives of limbic-audience and subcortical-stagehand, memory and emotion circuits, signaling from each person's past, between present brains. Such *real* drives and their edgy eruptions can cause symptomatic disturbances in daily life, at thresholds of the abject,

semiotic *chora*, a womblike “space of becoming” inside the mind, in language, and in the rituals of collective performance, also related to traditional female roles (Kristeva). And yet, these liminal or “liminoid” edges (Turner) may provide new revelations, especially with tragicomic insights, onstage or onscreen. Look for such transformative developments in the periods mapped by this book—especially regarding female, darker skinned, or underclass characters and artists, abjected by the dominant patriarchal culture, yet with inner theatres producing new views that are eventually valued.

17. Theatre often explores identity crises in characters’ lives, reflecting clashes in *cultural frameworks*, from the ancient Greek Oedipus and Indian Shakuntala to medieval English Everyman and Renaissance Hamlet, to Romantic heroes with conflicts of passion versus honor, to melodramatic, realist, anti-realist, absurdist, postmodern, and post-colonial egos. Yet plays and other records of performance practices from the past, especially those long ago, were preserved because they were valued by people in power—and by subsequent artists and historians who saw their relation to later stages. Likewise, each of our lives develops through stages of identity, with inner and group conflicts, performing possible selves for others in power, hoping to be *valued*. As you consider the various periods of theatre history, look for specific identity crises and clashing cultural frameworks that relate to your life today, especially what your generation might learn from the past, while acting in the present and building the future.
18. A significant step in our inner theatre development occurs at about 18 months of age (at the end of Lacan’s mirror stage) when babies turn from self-directed actions to “other-directed symbolic play,” such as putting a cup to a doll’s lips. After age two and a half, the child becomes aware of social norms, as well as others’ observations and judgments of its actions as good or bad, involving pride or shame. At age three to four, further “self-conscious evaluative emotions” develop, such as guilt and more complex embarrassment. And around age four, the child’s episodic memory begins to create a life story of past, present, and future (Feinberg 56–65).
19. Until age seven, the child also uses *denial* as a defense mechanism to protect its developing sense of Self. But then after age seven, with an increasing ability to “mentalize” (imagine others’ perspectives), unwanted emotions and thoughts become not only denied in one’s Self, but also *projected* onto others. An imaginary friend or enemy may also be created by the child, as playmate or monster, located in

a toy or projected as an invisible presence. Thus, key elements of the social, imaginary/symbolic brain develop early in childhood, with its metacognitive skills of self-reflection and other-perception, yet also its melodramatic stereotyping of good and evil, with an ego rejecting the bad in one's Self, and avoiding guilt, by projecting it on others. Notice this melodramatic tendency, on a collective scale, in the geopolitical rivalries and conquests listed in the TIMELINES of chapters ahead. Also notice the theories, artists, and plays that tried to expose such melodramatic dangers with tragic complexities and comic exaggerations.

20. Our ancestors developed highly reflective, hyper-theatrical brains, especially through the social and symbolic dimensions of evolution, producing great achievements, from agriculture, temples, cities, and wheeled vehicles to modern science, skyscrapers, online worlds, and spaceships. But humans have also caused much suffering through warrior cultures and conquering empires arising from agricultural settlements, with ritual sacrifices to dead leaders and unifying gods, ethnic genocides, slave labor, and weapons of mass destruction. The TIMELINES of this book map the treasures and tragedies of such historical developments, as do the numbered paragraphs that follow. Pick what interests you to research further, *creating your own map* for learning, reflecting on, and applying the details of theatre's histories, through the globe of your brain.
21. We play many interactive *roles* in daily life, improvising yet discerning a *script* in retrospect, through our inner theatres. The nurturing support of parents becomes internalized, as inner *chora* and mirrors, with the continuing oxytocin pleasures of group and pair bonding, through peers and romantic partners, as we perform more independent, symbolic identities, involving judgment and rivalry. Thus, each of us seeks a personal meaning to our lives, building memories through connections with other people into a specific, bio-cultural *story*. Likewise, we seek collective meaning through group identifications with and against certain people in the past, through theatrical reflections in *history*. With a big-brain wildness beyond instinctual limits, we are still evolving cultural ideals as inner/outer frameworks to restrain and extend our remnant animal drives. Your study of theatre history *plays a part* in that evolution of social, symbolic norms—with each generation's reaction to the goals and errors of the past changing their legacies, for better or worse, in the future.

## D. Tragic Flaws in Being Human

1. The subcortical/limbic, right-cortical, and left-cortical networks of our inner theatre reflect not only our animal to mammal and primate evolution, but also the cultural developments of our ancestors, with tremendous achievements and yet tragic flaws. Our two-legged, tool-making, hominin relative, *Homo erectus*, developed a “mimetic” culture about two million years ago, with a “kinematic” imagination. This involved gestures and tones for communication, with this “birth of the actor” relating to mime and “pretend play” today (Donald 263–73). Such mimetic expression and prosody, including facial recognition in a mirror and emotional sounds in verbal language, are centered in the right cortex (Keenan; Bryan), relating also to musical theatre. The *mimetic dimension* continues to be a key element of our inner and interactive theatres today, through the right-cortical, holistic, contextual mime-improviser/scene-designer. But humans have extended it in prodigious, hyper-theatrical ways, especially through recent technologies: from stage to screen to immersive virtual worlds with empowering insights, yet seductive dangers, as in Plato’s fabled cave.
2. About a half million years ago, our direct ancestor, *Homo sapiens*, developed a “mythic” culture, with oral language and narrative thought (Donald). This initiated our heritage of storytelling and character-impersonation, building on mimetic skills, from deep history into the recorded traditions mapped in the chapters ahead. The mythic stage in human evolution involved fundamental changes in the vocal tract and brain, with an “invasion” of the left cortex by *verbal* language networks, replacing spatial self-other perception, which became more specialized in the right cortex (LeDoux 303, 318). These related areas on each side of the brain include mirror neuron systems (Lametti and Mattar), with those on the right also active for prosody in language and making new metaphors through poetic imagery (Cardillo et al.).
3. With the development of mythic culture, distinctive *binary, causal, and abstractive* networks evolved in the left cortex (Newberg et al.). Struggling to survive and reproduce as hunter-gatherers a half million years ago, our ancestors identified nurturing or threatening forces in nature, regarding personalities they loved or feared who had died—as good or evil causing, spiritual characters in a cosmic theatre. This again involved the balancing act between left and right cortical networks. A “Devil’s Advocate” in the right cortex offers alternative, *holistic*

views, or erupts with *mischievous* impulses, against the dominant, *orthodox* rules and narrative filters of the left cortex (Ramachandran and Blakeslee 135–47; Feinberg). Thus, the right-cortical mime-improviser/scene-designer and left-cortical scriptwriter/critic compete, as well as cooperate, through the *mimetic and mythic dimensions* of culture, from deep history to our mass theatrical media today.

4. A further stage in human evolution, “theoretic” culture, started about 40,000 years ago, with Ice Age cave paintings and mobile figurines, continuing throughout the history of art and technology to the present. This involved the “externalization of memory ... [using] symbolic devices to store and retrieve cultural knowledge” (Donald 262). It also demonstrated a new inner theatre with the brain’s “cognitive fluidity” between previously distinct networks for natural history (knowledge of the environment), social intelligence (communication), and technical intelligence (with artifacts made from mental templates), involving “symbolic meanings” in art (Mithen 163–65).
5. Yet, externalized memory fields can become a dangerous “Trojan Horse,” through the brain’s cognitive fluidity, “a device that invades the innermost spaces of the mind. It can play our cognitive instrument, directing our minds toward predetermined end states along a set course” (Donald 316). Like the huge wooden horse with hidden soldiers, offered as a gift by archaic Greeks to get inside the Trojan walls, theatricality in art and technology may slip inside a person’s mind or group’s ideology.
6. This may involve challenging, *rasa*-cathartic, perspective-altering insights, as with the plays treasured by theatre artists and historians. But theatre’s past and our current hyper-theatrical media also include polarizing stereotypes of good versus evil, with vengeful, self and other sacrifices, which *chain* us, as in Plato’s cave. They also *train* us with lustful, violent desires, even when we leave such virtual spaces of *entertainment* (“that which holds between”) and enter the theatres of everyday life, with neural circuits rewired.
7. Neuroscientist Matthew Lieberman finds a “Trojan horse self” in what I call the *inner actor* network, with a hub in the MPFC, which soaks up social influences, “without us realizing where these foundational world-views came from” (235). Lieberman’s studies mapped the MPFC of college students while giving them health messages about using sunscreen or quitting smoking. MPFC activation predicted their later performance of such advised behaviors, better than their reported “beliefs and intentions”

of what they would do (197–200). Thus, positive marketing, or propaganda, changed their inner theatre into the future, “in a way that drives behavior but, at the same time, in a way they are unaware of.” How much is our *inner actor*, the private network of self, *directed* by others’ influences, especially through theatrical media?

8. In humans, the animal drives of survival and reproduction have extended, with our greater awareness of death’s inevitability, toward material and spiritual *greed* for transcendent power. Trojan Horses of religious, political, and artistic memory (and marketing) fields have slipped into many minds, evoking sacrificial ideals, from ancient gods and empires to modern goods and media. A group’s mythic history can demand *sacrifices* for a greater sense of belonging and meaning in one’s life, serving the group leader (alive or divinized) and focusing resentments on certain *scapegoats*, as past villains or current threats. This melodramatizing temptation occurs throughout history, often with tragic results—and currently with fears about immigrants as criminals and terrorists. So it is crucial for your generation to view the mimetic, mythic, and theoretic dimensions of theatricality, in history and today, with critical eyes. As you read the pages ahead, look for achievements to embrace and perpetuate, with great plays, insightful styles, and engaging techniques. But also consider the errors of the past, especially when they repeat. Must they?
9. In his *Poetics*, where Aristotle suggests an ancient theory of catharsis, he describes the hero as being of admirable qualities, yet with a *tragic flaw*: an error in judgment (*hamartia*, missed aim) that causes suffering for himself and others. Aristotle refers to Sophocles’s *Oedipus the King*, from a century before, with the problem-solving, society-saving courage and yet excessive *hubris* of the hero to discover the killer of the previous king, while initially scapegoating his apparent rivals. This increases the sympathy and fear in spectators, as the hero’s flaw and its catastrophic consequences are gradually revealed toward the play’s climax. With increased cathartic awareness, viewers might change their impulse to idolize flawed leaders and to repeat such sacrificial errors. **[Which leaders today are idolized, and yet make errors, like Oedipus, ironically related to the abilities and achievements for which they are admired?]**
10. The repeated errors of leaders and groups in human history point to a common tragic flaw: our fundamentally insecure egos. We are normally born at about half the corresponding development of other apes (Cozolino 21). We should be in the womb for 18–24 months to have

their newborn coordination and physical maturity. Such a *normal prematurity* of birth, in our two-legged, big-brained species, created a different significance to the emotionally contagious, mirror neuron, touching, and holding interactions of babies with parents, which involve right-cortical, mimetic “attunement” (191–96). It created a greater dependence on *multiple* caretakers, leading to strong mimetic and mythic bonds in our cultural connections (Hrdy). Thus, each of us is thrust into a *theatre of caretakers* who are sometimes nurturing in positive ways and sometimes not—with further traumatizing conflicts in the home and elsewhere.

11. Along with prematurity of birth, humans evolved extended youthfulness (neoteny). We look like young apes, even as adults, with round heads and flat faces (de Waal, *Our* 240). Unlike other primates, our faces are mostly bare of hair, with red lips and big eyes that have white instead of brown sclera, enabling our emotional expressions and interest-pointing gazes to become more theatrical through our ancestors’ mimetic communications (Tomasello et al.). We have thus extended primate playfulness into our adult lives, through various stage and screen media, especially in recent periods of history.
12. Experiments have shown that children will imitate adult actions more precisely than young chimps, who emulate the goal, but skip unnecessary steps. This instinctual *over-imitation* in children, ritually repeating all the details of adult behaviors, creates a “ratchet effect” (like gears) in learning social tools and rules, increasing the spread of distinctive cultural influences to the next generation (Tomasello). This enables conservation as well as rapid change in human social theatres. For example, the San Bushmen in southern Africa (considered further in the next chapter) have conserved and refined their traditional techniques for hunting and gathering food in a natural environment for thousands of years. They are not “primitive” but advanced in adapting to the Kalahari Desert where, for 10 months of the year, there is no surface water available (Davis 21).
13. There was a radical change in many cultures around the world, however, when they started developing agriculture about 11,000–5,000 years ago. They created new social environments with fixed settlements, religious hierarchies, and progressive technologies, often in conflict with other territorial groups. Especially in the last 400 years, Euro-American (Western) cultures have stressed ego *independence*, through imaginary and symbolic role models, rapidly creating new worlds and notions of “freedom,” reflected in changing theatrical styles.

Other cultures have continued to stress *interdependence* and social “harmony,” through responsibilities to family and ancestors, maintaining traditional theatre practices over hundreds of years. These often involve gods and spiritual forces, as considered in the pages ahead on Asian and indigenous performances.

14. From primal animal-spirit visions to “big gods” (Norenzayan) to current mass media idols, humans extend their *hollow yet inflated egos*, with real-life consequences in political, war, and terrorist theatres. Idealizing the egos around us, from parents and peers to politicians and celebrities, helps shore up our own ego defenses of denial and projection. But it also creates public pressures on “stars” to perform in divine ways. They sometimes betray their believers with scandalous failings and then are enthusiastically denigrated, as with the recent fall of former media heroes due to sexual misconduct. Yet our idolized leaders may also hide their tragic flaws and vulnerabilities by directing melodramatic blame on others, as scapegoats to be bullied.
15. Humans are great cooperators, evolving from small hunter-gatherer bands to cities with millions of people. Yet our over-imitation and cultural absorption as children, along with playful mischief and rebellion, lead to our hyper-theatrical awareness of mortality, social identity, and story performing as adults—through competition within and between our brains’ inner-theatre networks. *Mimetic desires* for being like others we admire, and having what they have, or being desired like them, may turn into *rivalry* against them (Girard). With our oxytocin bonding pleasures, groups and their leaders become stronger through such rivalry, especially with a perceived threat from a villain or injury to be avenged.
16. The hero-victim-villain formula of *melodrama* emerges in families, school fights, gang violence, political debates, destructive wars, and terrorism. Often this involves the binary, causal, abstractive (good versus evil, patriarchal), myth-making networks of our left-cortical scriptwriter/critic. But notice in the pages ahead how historical developments in geopolitics, as well as theatrical practices and plays, also reflect a *tragicomic awareness* of such mimetic rivalry flaws. This may involve more right-cortical, holistic, contextual, mime-improviser/scene-designer networks, within and between brains, offering alternative, Devil’s Advocate views that are not seen as purely evil. Yet sub-cortical, emotional-drive stagehand and temporal-lobe, memorial audience networks are also involved in the creative achievements and

- destructive flaws of being a big-brained, prematurely born, ratchet-effective, group-bonding, hyper-theatrical human.
17. The human theatre of everyday life vastly extends the mimetic rivalry of other apes, through our inflated, yet vulnerable, ego and group identities. This involves not just survival and reproduction as vital drives, but also *territoriality* and *hierarchy*. Chimpanzees in the wild patrol the edge of their group's territory. If they find a lone chimp, even a former member and kin, they might kill, tear apart, and eat the outsider (Wrangham and Peterson 5–18). Chimp groups also cross borders to raid other groups, killing rival males and females with infants, or taking females to breed (Boehm 345). Within their group, chimps sometimes become extremely violent, with a drive for fairness turning into vengeance and with male coalitions dethroning the alpha leader (de Waal, *Our*; Whyte). Yet chimps reconcile after fights, even with kisses, and show not only *reciprocal* altruism (such as grooming another chimp to get some food shared later in return), but also *empathetic* altruism (bringing an old female some water from mouth to mouth) through perspective taking and targeted helping (de Waal, *Age, Primates*; and “Putting”). Bonobos, a related species, have female-dominated hierarchies with multiple sexual encounters in and between groups, rather than violent male rivalries, perhaps showing another potential from our common ancestor six million years ago.
  18. In humans, with much larger groups than other apes, mimetic rivalry can lead to the “social drama” of a breach, rising to a crisis, and then a redress with splitting or reintegration (Turner). Splits within and conflicts between groups may produce repeated acts of such social drama, with “reciprocal violence” between factions, as each side asserts its notion of fairness by attacking the other in revenge for losses suffered (Girard). But the destructive potential of endless reciprocal violence, involving righteous rage on both sides, may be redirected toward a “scapegoat” inside or outside the group, whose family and friends are not powerful enough to seek vengeance in return.
  19. Such scapegoating also relates to the ancient Greek notion of *katharsis*, with the actor onstage performing a tragic character, purifying the audience through fictional scapegoating. The Greek term *katharsis* is akin to *katharma*, the object taken from a sick body to represent spiritual evil in a healing rite. Thus, the stage actor as *katharma* is also a *pharmakos* (poisonous scapegoat), becoming *pharmakon* (poison yet cure), in a creative, fictional reflection of shamanic rites, providing tragicomic insights with the character's abjection (Girard 286–90).

20. The objectifying of characters onstage, especially as melodramatic villains or farcical fools, reveals a danger in the popular appetite for such poisons (and their pharmacies) in theatre history. Ancient Rome exemplified this, with criminals (including Christians) put to death in the arena, eaten alive by wild animals, as entertainment for others' voyeuristic, sadistic pleasures. Such poisonous objectifying becomes even more addictive today, with the "easy violence" of movies, television dramas, and videogames, accessible *daily* on many public and private screens, which also display fear-mongering news media, home accident videos with laugh tracks, and algorithm-built hate groups. Thus, the desire to "blow off steam," by venting emotions through such theatres, can produce cathartic backfire, poisoning instead of curing social discourse and behavior, by objectifying scapegoats onscreen and in real life—even to the point of purging them to purify one's national or racial identity (Pizzato, *Inner* 238–42). This may involve group myths about being treated unfairly, but with the potential to be "great again," through powerful leaders.
- [How are certain people scapegoated today, like and unlike a character as *katharma* and *pharmakos* in ancient Greek theatre or a criminal executed in the Roman games, and who benefits?]**
21. The expectation of *fairness* with food rewards has been found in various animals: wolves, coyotes, dogs, ravens, and monkeys (Brosnan). The "Moral Foundations Theory" of psychologist Jonathan Haidt points to such animal drives, especially in apes, as the basis for moral emotions and ideals in humans: supporting fairness through anger, guilt, and gratitude; minimizing suffering through compassion; being loyal to group bonds through pride and rage at others; respecting hierarchy through fear; and maintaining cleanliness through disgust (or purification rites). Haidt also defines the moral ideal of "liberty" in his list of six ethical principles, researching how they are valued across the political spectrum. So I have added the animal drive of "fighting for freedom" through rage, in my chart of Haidt's foundations (Table 1.3).
22. Haidt's online research with tens of thousands of survey participants (at [YourMorals.org](http://YourMorals.org)) finds that *libertarians* prioritize freedom, *liberals* value freedom, fairness, and care, and *conservatives* emphasize all six moral foundations, including loyalty, authority, and sanctity. But each political faction defines freedom (liberty) in different ways (see [www.MoralFoundations.org](http://www.MoralFoundations.org)).

**Table 1.3** Moral foundations theory with binary frameworks [plus added elements in brackets] adapted from Haidt, *Righteous Mind* (125), plus Haidt and Joseph, “Intuitive Ethics”

Ape [or animal] observations	Human emotions	Moral binary (good/evil)
[fighting for freedom]	[rage]	liberty/oppression
supporting fairness	anger, gratitude, guilt	fairness/cheating
minimizing suffering	compassion	care/harm
being loyal to group bonds	group pride, rage at traitors	loyalty/betrayal
respecting hierarchical authorities	respect, fear [& awe]	authority/subversion
maintaining cleanliness	disgust [& awe]	sanctity/degradation

23. This also relates to the work of linguist George Lakoff, who finds that liberals use metaphors of government as “Nurturing Parent” while conservatives use a “Strict Father” model, with different emotions involved—akin to right-cortical nurturing and left-cortical judgmental networks. Such animal and family foundations for *morality* transform into diverse frameworks with religious and secular ethics across the globe, based in group-sustaining drives of territorial safety and hierarchical order.
24. Notice the different *moral frameworks* in theatre history, referring back to the chart here. These involve *changing* theatrical ideals of an inter- or in-dependent self, regarding the Other of prehistoric animal–human spirits, ancient gods, an almighty medieval God, Renaissance Humanism, Enlightenment Deism, Romantic passion versus honor, modern realist and anti-realist abstractions, absurdist emptiness, and postmodern diversities with a mass media audience gaining godlike powers.  
**[Which moral ideals do you value onstage, onscreen, and in everyday life—related to those in Haidt’s theory with corresponding animal emotions?]**
25. The animal–human drives of survival, reproduction, territoriality, alliance/hierarchy, nurturing, and play also involve, from primates to humans: grooming (or gossip about social fitness) and avoidance of loss through transcendent meaning or purpose. Even before today’s online social media, the research of psychologist Robin Dunbar found that over 60% of human speech was used for *gossip*. (More recent studies say 80–90%.) He theorized that verbal gossip evolved from manual *grooming* in our early ancestors, who built alliances, like current

primates, by picking and eating insects off one another's hairs and then exchanged such favors for further benefits, such as food sharing and sexual activity.

26. As our big-brained, mostly hairless ancestors evolved, with premature-birth vulnerabilities, such group connections became even more vital. They were facilitated by mimetic gestures, as well as touch, and then by the mythic dimensions of symbolic abstractions, which gave *transcendent* meaning to social gossip about “us” versus “them.” Eventually, the art of theatre *displayed* what people gossiped about, giving more godlike (yet illusory) power to spectators, as voyeurs of intimate intrigues onstage. In the chapters ahead, explore how such developments are reflected in the mimetic desires and rivalries of plays in each period, involving group alliances and hierarchical conflicts through gossip and scapegoating—in *social or cosmic* dimensions, with religious and secular performances. Use Table 1.4 to consider how

**Table 1.4** Transformations of animal drives to human emotions and cultural values (with positive and negative aspects)

Animal drives	Primal emotions	Cultural extensions	Social emotions and goals	Religious ideals
seeking beyond loss	hope/grief	imagine past/future	long-term meaning	holy purpose
<b>primate</b> grooming	trust/alienation	communal gossip	mimetic likes/dislikes (fitness)	good/evil
playfulness	humor/rebellion	sports, art, and media	creative freedom and fantasies	spiritual powers
alliance and hierarchy	fairness/rivalry	laws and rulers	loyalty and awe or envy	morality
<b>mammalian</b> care	empathy/control	self-sacrifice	kinship and reciprocal altruism	charity
territoriality	security/rage	border trade/war	nostalgia/defensiveness	sacred spaces
reproduction	love/lust	cooperative legacies	pride/greed	missions, rites, and believers
survival	desire/fear	ego with conflicts	joy/anxiety	afterlife reward/punishment

from Competition & Cooperation in human evolution:

bipedal, bigger cortex, premature birth, multi-parenting, extended youth, abstract language, & self-awareness

with pleasure/pain signals of arousal/quiescent systems extending toward ecstasy, as holy or addictive

plays, styles, and periods that interest you also reveal animal drives, primal emotions (perhaps shared with animals as “moral foundations”), human cultural extensions, social emotions, and religious values. See how these relate to the secular meta-fictions of our current mass media marketplace and social media gossiping (Harari). Are we sacrificing ourselves to *new gods*, through theatrical voyeurism, exhibitionism, fetishism, and degrees of sadomasochism—on our life stages and proliferating screens, as a “society of the spectacle” (Debord)?

27. Every cultural framework demands some form of *sacrifice* for each person to belong within its moral system, even when a group rebels with subversive play, creating immoral rites and rules of membership, against a bigger frame. In modern Western cultures, we each learn as a child to sacrifice playful pleasures (which also tempt us later) by wearing clothes in certain ways, using utensils to eat particular foods, depositing our waste products correctly, and performing other proper behaviors for those watching. We each gain social rewards by learning to perform the way that the Other desires. We continue to sacrifice pleasures (or indulge in them, which also involves sacrifices), as our identities develop in widening arenas of daily performances, especially regarding gender, race/ethnicity, class, and age.

**[Which sacrifices do you make in conforming to or rebelling against certain identities today, like and unlike those in theatre history?]**

28. Such rites of *moral and clean acting*, with perverse and abject alternatives, vary across cultures. And yet, the art of theatre, throughout its history around the world, explores the *cracks* in moral frameworks, whether social or metaphysical, by focusing on *crises* within and between characters. So use theatre history, along with the plays you encounter, to see how the tragicomic flaws in being human become *social constructs* with compelling emotions, yet cruel sacrifices, which might be *changed*. What can you discover in mapping the past, from our deep history to specific simulations and their cultural frameworks? How does that offer new views of what you experience onstage or on the many screens in your life? Are those screens Platonic caves *trapping* you, with addictive, shadowy attachments, or *openings* to transcendent pleasures and truths that are worth their sacrificial demands—like the cave, outdoor, and built theatres of our ancestors?
29. The mapping of theatricality in this book does not claim to be complete. But it draws on a consensus found in textbooks, encyclopedias, specific studies, and online sources cited in the references (with credit also due to Wikipedia’s many authors). Until recent audio-video documentation,

historical records of theatre mostly represented people *in power*, yet with hints of others, too. This is akin to the staging of consciousness by the brain's inner theatre with alternative feelings, images, and ideas at the edges of the stage. What can you glimpse at the edges of the historical record that is mapped here, in the creases of its geopolitical theatres of race, class, gender, and age ideals, which may be changing today?

30. Theatre emerged, in various places and times, through *ritual efficacy* (repeated actions for desired effects), often regarding departed ancestors and divine spirits, believed to be watching and sometimes intervening. Yet theatre also developed through *secular entertainment* for popular audiences, involving social and political dimensions of the Other. Notice in various periods, theories, and plays how *the edge of the stage* is drawn, between performers and watchers, framing ritual participation in transcendent realms or different aspects of belief, engagement, perversity, and critical distance with the “what if” onstage. Look for marginalized groups appearing at the stage edge, too. For example, in ancient Egyptian drama, how did spectators participate at various sites along the Nile River, with offerings to the pharaoh? How did audiences in ancient Greece, arrayed along the hillside above the orchestra and stage, join the chorus and actors vicariously, in a place sometimes used for democratic meetings, yet in the context of a religious festival, with a statue of the theatre god also watching (and men playing women's roles)? In medieval Europe, how were viewers connecting with good and evil figures, in comic and serious scenes, with plays that mixed different time periods, in churches, in public squares (sometimes with raucous “devils”), or on wagons and platforms, involving a cosmic framework? From early modern to postmodern plays, with various styles and staging methods, how were spectators *positioned* in relation to the hero—as godlike, ghostly, choral, or alienated watchers, inside or outside the protagonist's head?
31. In its ritual, art, and entertainment forms, *theatricality shares and heals* the hole in being human. But it *may also worsen* the hollow ego of a big-brained, prematurely born, perpetually alienated, unfinished yet playful animal. This tragic flaw of theatricality, as cure yet poison, arises from our self-sacrificing, mimetic rivalry, and group scapegoating drives—in ordinary life and our hyper-theatrical politics. So, as you explore historical developments in tragedy, comedy, melodrama, and farce (while reading specific plays), consider the potential for emotional engagement and distancing insights. But also watch for the *stereotyping* of subjects as objects, in the cathartic backfire of moral righteousness, with *projections* from the brain's inner theatre.

32. Through mirror neurons, emotional contagion, and memory-marketing fields, the Trojan Horses of theatricality may confirm implicit biases, invoke righteous stereotypes, and produce scapegoating attitudes in real life. However, theatricality in history can also act like the Fool in Shakespeare's *King Lear*, entertaining yet challenging those in power, from rulers in the past to the mass audience today. Or it can be used as a safety valve by those in power (or by the audience), to release the pressure of collective concerns, without actual change. As you explore the deep and recorded histories of theatricality, *remap* them through your generation's current concerns. Find uncanny reflections in the pages ahead, and in related plays, to become aware of the Platonic caves around you—in the complex sense of *rasa*-catharsis as clarifying, not just purging emotions. And thus, play the role of a wiser fool, in your inner and outer theatres of everyday life, questioning the sacrifices made to those in power through instinctual drives, cultural norms, addictive pleasures, and habits of thought.

**[How do specific stage and screen performances, from past to present, heal or worsen our hyper-theatricality, with cathartic awareness or backfire?]**

## References

- Armel, K. Carrie, and V. S. Ramachandran. "Projecting Sensations to External Objects." *Proceedings of the Royal Society of London B* 270 (2003): 1499–1506.
- Austin, James H. *Selfless Insight*. Cambridge: MIT Press, 2009.
- Baars, Bernard. *In the Theater of Consciousness*. Oxford: Oxford University Press, 1997.
- Barish, Jonas. *The Antitheatrical Prejudice*. Berkeley: University of California Press, 1981.
- Beauregard, Mario, ed. *Consciousness, Emotional Self-Regulation, and the Brain*. Amsterdam: John Benjamins, 2004.
- Boehm, Christopher. "Egalitarian Behavior and the Evolution of Political Intelligence." *Machiavellian Intelligence II*. Ed. Andrew Whiten and Richard W. Byrne. Cambridge: Cambridge University Press, 1997, 341–64.
- Brosnan, Sarah F. "Nonhuman Species' Reactions to Inequity and Their Implications for Fairness." *Social Justice Research* 19.2 (2006): 153–85.
- Bryan, Karen L. "Language Prosody and the Right Hemisphere." *Aphasiology* 3.4 (1989): 285–99.
- Cardillo, Eileen R., Christine E. Watson, Gwenda L. Schmidt, Alexander Kranjec, and Anjan Chatterjee. "From Novel to Familiar." *Neuroimage* 59.4 (2012): 3212–21.
- Cozolino, Louis J. *The Neuroscience of Human Relationships*. New York: Norton, 2006.
- Davis, Tracy C., and Thomas Postlewait, eds. *Theatricality*. Cambridge: Cambridge University Press, 2003.

- Davis, Wade. *The Wayfinders*. Toronto: House of Anansi, 2009.
- Debord, Guy. *The Society of the Spectacle*. 1967. New York: Zone Books, 1994.
- de Gelder, Beatrice, Josh Snyder, Doug Greve, George Gerard, and Nouchine Hadjikhani. "Fear Fosters Flight." *Proceedings of the National Academy of Sciences of the United States of America* 101.47 (2004): 16701–6.
- de Waal, Frans. *The Age of Empathy*. New York: Random, 2009.
- . *Our Inner Ape*. New York: Penguin, 2005.
- . *Primates and Philosophers: How Morality Evolved*. Princeton: Princeton University Press, 2006.
- . "Putting the Altruism Back Into Altruism." *Annual Review of Psychology* 59 (2008): 279–99.
- Donald, Merlin. *A Mind so Rare*. New York: Norton, 2001.
- Dunbar, Robin. *Grooming, Gossip, and the Evolution of Language*. Cambridge: Harvard University Press, 1996.
- Ehrsson, H. Henrik. "The Concept of Body Ownership and Its Relation to Multisensory Integration." *The New Handbook of Multisensory Processing*. Ed. Barry E. Stein. Cambridge: MIT Press, 2012, 775–92.
- Farmer, Harry, Ana Tajadura-Jiménez, and Manos Tsakiris. "Beyond the Colour of My Skin." *Consciousness and Cognition* 21 (2012): 1242–56.
- Feinberg, Todd E. *From Axons to Identity*. New York: Norton, 2009.
- Gazzaniga, Michael S. *The Ethical Brain*. New York: Dana, 2005.
- Girard, Rene. *Violence and the Sacred*. 1972. Baltimore: Johns Hopkins University Press, 1977.
- Goffman, Erving. *The Presentation of Self in Everyday Life*. New York: Penguin, 1956.
- Haidt, Jonathan. *The Righteous Mind*. New York: Random, 2013.
- Haidt, Jonathan, and Craig Joseph. "Intuitive Ethics: How Innately Prepared Intuitions Generate Culturally Variable Virtues." *Daedalus* 133.4 (2004): 55–66.
- Harari, Yuval. *Sapiens: A Brief History of Humankind*. New York: Harper, 2015.
- Hatfield, Elaine, John T. Cacioppo, and Richard L. Rapson. *Emotional Contagion*. Cambridge: Cambridge University Press, 1994.
- Hrdy, Susan Blaffer. *Mothers and Others: The Evolutionary Origins of Mutual Understanding*. Cambridge: Harvard University Press, 2009.
- Hyman, Ira. "Listening to Music and Watching Dance Using Mirror Neurons." *Psychology Today*. 9 August 2012.
- Jablonka, Eva, and Marion J. Lamb. *Evolution in Four Dimensions*. Cambridge: MIT Press, 2005.
- Keenan, Julian Paul. *The Face in the Mirror*. New York: Harper, 2003.
- Kramer, Adam D., Jamie E. Guillory, and Jeffrey T. Hancock. "Experimental Evidence of Massive-Scale Emotional Contagion Through Social Networks." *Proceedings of the National Academy of Sciences* 111.24 (17 June 2014): 8788–90.
- Kristeva, Julia. *Powers of Horror*. New York: Columbia University Press, 1982.
- Lacan, Jacques. *Écrits*. Trans. Bruce Fink. New York: Norton, 2006.
- Lakoff, George. *Moral Politics*. Chicago: University of Chicago Press, 1996.

- Lametti, Daniel R., and Andrew A. G. Mattar. "Mirror Neurons and the Lateralization of Human Language." *Journal of Neuroscience* 26.25 (2006): 6666–67.
- LeDoux, Joseph. *The Synaptic Self*. New York: Penguin, 2003.
- Lieberman, Matthew. *Social*. New York: Random, 2013.
- McGilchrist, Iain. *The Master and His Emissary*. New Haven: Yale University Press, 2009.
- Mithen, Steven. *A Prehistory of the Mind*. London: Thames and Hudson, 1996.
- Newberg, Andrew, Eugene d'Aquili, and Vince Rause. *Why God Won't Go Away: Brain Science and the Biology of Belief*. New York: Ballantine, 2002.
- Norenzayan, Ara. *Big Gods: How Religion Transformed Cooperation and Conflict*. Princeton: Princeton University Press, 2013.
- Petkova, Valeria I., and H. Henrik Ehrsson. "If I Were You: Perceptual Illusion of Body Swapping." *PLoS One* 3.12 (December 2008): 1–9.
- Pizzato, Mark. *Beast-People Onscreen and in Your Brain*. Santa Barbara: Praeger, 2016.
- . *Inner Theatres of Good and Evil*. Jefferson, NC: McFarland, 2011.
- Prochazkova, Eliska, and Mariska E. Kret. "Connecting Minds and Sharing Emotions Through Mimicry." *Neuroscience and Behavioral Reviews* 80 (2017): 90–114.
- Ramachandran, V. S., and Sandra Blakeslee. *Phantoms in the Brain*. New York: Morrow, 1998.
- Roughgarden, Joan. *Evolution's Rainbow*. Berkeley: University of California Press, 2004.
- Schechner, Richard. *Performance Studies: An Introduction*. New York: Routledge, 2013.
- Smail, Daniel Lord. *On Deep History and the Brain*. Berkeley: University of California Press, 2008.
- Tajadura-Jiménez, Ana, Matthew R. Longob, Rosie Colemana, and Manos Tsakiris. "The Person in the Mirror." *Conscious Cognition* 21.4 (December 2012): 1725–38.
- Tomasello, Michael. *A Natural History of Human Morality*. Cambridge: Harvard University Press, 2016.
- Tomasello, Michael, Brian Hare, Hagen Lehmann, and Josep Call. "Reliance on Head Versus Eyes in the Gaze Following of Great Apes and Human Infants." *Journal of Human Evolution* 52 (2007): 314–20.
- Tsakiris, Manos, Maike D. Hesse, Christian Boy, Patrick Haggard, and Gereon R. Fink. "Neural Structures of Body Ownership." *Cerebral Cortex* 17 (October 2007): 2235–44.
- Turner, Victor. *From Ritual to Theatre*. New York: Performing Arts Journal, 1982.
- Valli, Katja, and Antti Revonsuo. "The Threat Simulation Theory in Light of New Empirical Evidence." *American Journal of Psychology* 122.1 (2009): 17–38.
- van der Gaag, Christiaan, Ruud B. Minderaa, and Christian Keysers. "Facial Expressions." *Social Neuroscience* 2.3–4 (2007): 179–222.
- van Leeuwen, M. L., H. Veling, R. B. van Baaren, and A. Dijksterhuis. "The Influence of Facial Attractiveness on Imitation." *Journal of Experimental Social Psychology* 45 (2009): 1295–98.
- Whyte, Chelsea. "Chimps Beat Up, Murder, and Then Cannibalize Their Former Tyrant." *New Scientist*. 30 January 2017. <https://www.newscientist.com/article/2119677-chimps-beat-up-murder-and-then-cannibalise-their-former-tyrant/>.
- Wrangham, Richard, and Dale Peterson. *Demonic Males: Apes and the Origins of Human Violence*. Boston: Houghton Mifflin, 1996.