

Culture Without Obstacles: A Naturalistic Reconstruction of the Concept of Culture in Anthropological Schools

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Abstract. The concept of culture has occupied a central position in anthropology since the discipline's origins, yet its theoretical meaning and explanatory status have shifted widely across schools of thought. Classical evolutionism, diffusionism, Boasian culturalism, British functionalism, culture-and-personality, structuralism, Marxist anthropology, cultural ecology, symbolic and interpretive traditions, practice theory, feminism, poststructuralism and postcolonial approaches have proposed divergent frameworks for defining culture. Despite their differences, these traditions converge on a shared methodological commitment: the rejection of naturalistic explanation and the reification of culture as an autonomous symbolic or ideological realm insulated from biological and cognitive processes. Against this consensus, the present article proposes a naturalistic reconstruction grounded in evolutionary psychology, cognitive anthropology, behavioral ecology and cultural evolution theory. Culture is defined as a population-level system of socially transmitted information implemented by evolved cognitive mechanisms and structured by selection processes operating across ecological and institutional environments. By critically engaging each major anthropological tradition, the article demonstrates that their descriptive insights can be integrated within a unified causal framework without sacrificing historical contingency, symbolic meaning or attention to power relations. The naturalistic approach restores culture to its place as a legitimate scientific object of inquiry continuous with the biological and cognitive sciences.

Keywords: Culture • Naturalism • Evolutionary Anthropology • Cultural Evolution • Cognitive Anthropology • Anthropological Theory

1. Introduction

The concept of culture has occupied a central position in anthropology since the discipline's emergence as a distinct field of inquiry. Yet despite more than a century of theoretical debate, no stable consensus has been reached concerning what culture is, how it operates, or how it should be explained. Competing schools have alternated between idealistic interpretations that detach culture from biological causation and materialist frameworks that collapse cultural phenomena into economic or environmental determinants. In nearly every iteration, culture has been endowed with explanatory autonomy: treated either as a symbolic order floating above cognitive mechanisms or as an ideological reflex imposed by structural conditions independent of individual psychology. The result has been an enduring fragmentation of anthropological theory, with rich descriptive traditions coexisting alongside unresolved causal ambiguities.

Early evolutionism framed culture as a unilinear process of civilizational progress culminating in industrial modernity (Tylor, 1871/1958; Morgan, 1877/1964). While this approach recognized the universality of human nature, its teleology misrepresented cultural diversity as developmental delay rather than as stable variation shaped by differential selection across ecological contexts. Boasian historicism dismantled this progressivist narrative and grounded anthropological inquiry in rigorous ethnography and methodological relativism (Boas, 1911). Yet its rejection of general causal explanation replaced evolutionary distortion with theoretical abstention, transforming history into a default explanatory substrate and rendering cross-cultural regularities philosophically suspect. The emergence of functionalism acknowledged adaptive coherence in cultural systems yet assigned causality to social wholes rather than to psychologically mediated individual strategies, masking the motivational dynamics of cultural production beneath equilibrium metaphors (Malinowski, 1944; Radcliffe-Brown, 1952).

Subsequent attempts to incorporate psychological explanation fared little better. The culture-and-personality school relied heavily on Freudian psychodynamics, attributing cross-cultural variation to culturally induced neuroses or personality syndromes unsupported by empirical psychological research (Benedict, 1934; Mead, 1928). Structuralism shifted attention back to cognition but proposed abstract unconscious symbolic grammars without biological or experimental grounding, substituting formal

algebra for mechanistic explanation (Lévi-Strauss, 1963). Marxist anthropology redirected analytical focus to political economy, exposing class domination and colonial exploitation but bypassing psychological mediation by treating ideology as a deterministic consequence of productive relations (Engels, 1884/1972; Wolf, 1982; Harris, 1979). Cultural ecology pursued adaptive explanation through environmental correlation yet reduced culture to system-level adjustment, overlooking the role of strategic cognition and learning biases (Steward, 1955; White, 1959).

The interpretive and poststructural turn consolidated anthropology's epistemological withdrawal from causation altogether. Culture was reconceptualized as discourse or "webs of meaning" demanding hermeneutic interpretation rather than explanation (Geertz, 1973). Practice theory and poststructural frameworks expanded this approach by theorizing embodied dispositions, habitus, and ideological power relations while rejecting any form of psychological or biological explanatory grounding (Bourdieu, 1977; Giddens, 1984). Feminist and postcolonial anthropology enriched ethical critique by centering gender hierarchies and colonial violence but frequently maintained explicit hostility toward biological explanation, limiting causal depth in situations where evolved strategies of mating competition, coalitional psychology, and intergroup conflict demonstrably structure power dynamics (Ortner, 1974; Wolf, 1982).

Across these traditions, a recurrent pattern emerges: culture is alternately elevated beyond biological explanation or reduced beneath it, but almost never integrated with it. Psychological mechanisms governing learning, memory, motivation, prestige imitation, norm internalization, and coalition formation are routinely excluded from theory-building. Culture is portrayed either as symbolic self-generation or as infrastructural reflex, yet the cognitive processes that transform material incentives into beliefs, moral emotions, institutions, and political loyalty remain conceptually peripheral. This persistent bifurcation between meaning and causation constitutes what may be termed the "fetishism of culture." Culture becomes a reified explanatory entity rather than an evolutionary process requiring explanation itself.

Contemporary evolutionary and cognitive anthropology offer a fundamentally different approach. Culture is conceptualized as a population-level system of socially transmitted information constrained by evolved learning architectures and shaped by selective retention, modification, and extinction across generations (Boyd & Richerson, 1985; Richerson & Boyd, 2005; Henrich, 2015). Transmission is governed by biased

social learning mechanisms—prestige bias, conformity bias, success imitation, moral emotional reinforcement—rather than by random copying or interpretive consensus (Henrich & McElreath, 2003). Cultural stability emerges from interaction among learning biases, institutional enforcement, demographic competition, and ecological payoffs. Meaning is acknowledged as a real psychological phenomenon but situated within natural cognitive processes;

Symbols persist because they exploit attentional biases, agency detection, emotionally charged narrative structures, or moral intuitions that regulate cooperation (Boyer, 2001; Haidt, 2012; Norenzayan, 2013). Power relations are explained through dominance hierarchies and prestige systems rooted in evolved coalitional psychology rather than through discursive abstraction alone (Boehm, 1999; Henrich & Gil-White, 2001). Gender asymmetries and kinship structures reflect differential parental investment strategies interacting with cultural regulation (Trivers, 1972; Hrdy, 2009). Religious cohesion and ideological commitment form through supernatural monitoring intuitions and identity fusion mechanisms regulating large-scale cooperation (Norenzayan et al., 2016; Whitehouse, 2021). Cultural and genetic evolution interact reciprocally over extended historical timescales, exemplified by the transformation of Western cognition under medieval kinship institutions and educational regimes documented in WEIRD psychology research (Henrich, Heine, & Norenzayan, 2010).

The present article advances a systematic reconstruction of the anthropological concept of culture under this naturalistic theoretical paradigm. Rather than dismissing prior schools wholesale, the analysis critically engages each major tradition, extracting their descriptive contributions while identifying their shared explanatory deficit: the failure to integrate evolved psychological mechanisms into cultural theory. Classical evolutionism, Boasian historicism, functionalism, culture-and-personality approaches, structuralism, Marxist anthropology, cultural ecology, symbolic and interpretive frameworks, practice theory, feminism, and postcolonial studies are each examined as partial explanatory attempts constrained by methodological blind spots.

Against this fragmented legacy, the paper proposes a unified model in which culture is defined as socially transmitted information instantiated within evolved cognitive architectures and structured by selection processes operating across ecological and institutional environments. This naturalistic framework preserves historical contingency, symbolic complexity, and political power while restoring causation to anthropology. Culture ceases to be a fetishized abstract domain and becomes an

empirically tractable evolutionary process continuous with biology and cognitive science. In doing so, the article seeks to reposition anthropology as a cumulative explanatory science of human behavior and social organization, capable of advancing integrated theory rather than perpetuating interpretive fragmentation. The goal is not to diminish the humanistic richness of the discipline but to secure its scientific future by replacing symbolic mystique with cognitive clarity—restoring culture to intelligibility without sacrificing meaning.

1.1. Classical Evolutionism – The Illusion of Linear Progress

Early anthropological evolutionism emerged in the last third of the nineteenth century as the first systematic attempt to explain cultural diversity within a unified theoretical framework. Edward Burnett Tylor and Lewis Henry Morgan conceptualized culture as a single developmental sequence progressing through hierarchically ordered stages from “savagery” to “barbarism” and ultimately to “civilization” (Tylor, 1871/1958; Morgan, 1877/1964). Under this paradigm, all societies were assumed to share the same universal trajectory of development, differing only in their temporal placement along the evolutionary scale. Cultural variation was thus interpreted not as the expression of alternative adaptive equilibria or divergent institutional solutions, but as evidence of historical delay or arrested development. This framework placed technological innovation, subsistence intensification, and social complexity at the core of cultural advancement, often treating moral, cognitive, and political “progress” as derivatives of material evolution. Although this view rightly rejected polygenist accounts and emphasized species-wide human continuity, it simultaneously entrenched teleological assumptions whereby cultural change was read retrospectively as movement toward a predetermined end-state defined by Western industrial modernity (Bowler, 1989; Stocking, 1987).

The principal theoretical deficiency of classical evolutionism lies not in its comparative ambition but in its failure to articulate causal mechanisms capable of generating cultural variation. Explanations remained largely narrative: societies passed through stages because this was how “civilization” naturally unfolded. Cultural sequences were inferred from surface similarities among distant societies rather than from demonstrable causal processes linking human cognition, ecological pressures, and institutional dynamics (Stocking, 1968). The absence of explicit psychological theory proved especially damaging. Human agents appeared largely interchangeable, with

cognitive capacities treated as uniform across populations and epigenetic or learning processes effectively ignored. The mind functioned merely as a passive register of material advancement rather than as an active generator of cultural forms (Ingold, 2002).

Furthermore, classical evolutionism collapsed evolutionary reasoning into linear progress. Evolution was equated with moral improvement rather than adaptive diversification. This produced the erroneous expectation that cultures should converge toward an optimal or idealized form of social organization, implicitly modeled after European bourgeois societies. Subsequent ethnographic discoveries, however, undermined this convergence assumption. Hunter-gatherer groups, pastoralists, and horticulturalists exhibited stable adaptive systems persisting for millennia without transitioning to “higher” stages of complexity, contradicting the notion of inevitable progression (Sahlins, 1972; Winterhalder & Smith, 2000). Stability rather than linear ascent emerged as the modal pattern of cultural evolution.

Boasian historicism famously rejected the stage-theory paradigm by arguing that cultures develop through unique pathways shaped by contingent historical events rather than universal sequences (Boas, 1911). While this critique successfully dismantled teleology, it also led to an abandonment of comparative explanation altogether. Stage models were replaced by radical particularism, and biological or psychological generalizations were dismissed as speculative. In effect, classical evolutionism’s failure to offer mechanistic explanation produced a disciplinary backlash that replaced flawed generalization with descriptive relativism, rather than refining the causal ambition of comparative analysis (Berry, 1969; Sanderson, 1990).

Contemporary evolutionary anthropology revisits the foundational questions of classical evolutionism without inheriting its teleology. Instead of treating cultural change as linear ascent, modern theories conceptualize culture as a population-level evolutionary system governed by principles analogous to but distinct from genetic evolution (Boyd & Richerson, 1985; Richerson & Boyd, 2005; Henrich, 2015). Cultural traits are now modeled as informational units transmitted through cognitively biased learning processes subject to selection, variation, and drift. Evolution becomes non-directional: different populations may converge or diverge depending on ecological contexts, demographic structures, and transmission environments. No inherent endpoint exists toward which cultures must progress.

This shift fundamentally reconfigures how continuity and diversity are explained. Universal human cognitive architecture establishes shared constraints on cultural representation, including domain-specific inference mechanisms for social relations, morality, tool use, and supernatural agents (Tooby & Cosmides, 1992; Boyer, 2001; Atran, 2002). At the same time, learning biases such as prestige imitation, conformist transmission, and payoff-biased copying generate patterned cultural variation across populations (Henrich & McElreath, 2003). Ecological factors influence the relative payoff structures of competing practices, favoring different subsistence strategies, kinship systems, or political institutions in distinct environments (Winterhalder & Smith, 2000; Kaplan, Hooper, & Gurven, 2009). Cultural evolution unfolds not as a march toward modernity but as a branching process in which stable adaptive solutions persist alongside more complex institutional arrangements.

Furthermore, modern frameworks allow for group-level selection processes to generate macro-cultural patterns without invoking systemic teleology. Cultural packages that enhance cooperation, facilitate punishment of free riders, and stabilize collective identity can outcompete less cohesive cultural systems, promoting large-scale social complexity under particular demographic conditions (Richerson et al., 2016; Henrich, 2015; Whitehouse, 2021). Crucially, complexity emerges as a contingent outcome of selection pressures favoring intensified cooperation, not as a universally obligatory developmental stage. Small-scale societies may remain evolutionarily stable if their ecological conditions do not reward institutional intensification.

The classical equation of complexity with superiority is therefore replaced by a pluralistic evolutionary ontology. For example, hunter-gatherer egalitarianism often reflects sophisticated social strategies for minimizing dominance hierarchies and resolving conflicts, rather than developmental “backwardness” (Boehm, 1999). Similarly, decentralized kinship systems persist not because of stagnation but because they efficiently regulate resource distribution and social alliances under certain ecological regimes (Hill et al., 2011). These findings demonstrate that cultural variation reflects adaptive diversity rather than differential advancement along a universal ladder.

Naturalistic anthropology also corrects the methodological weaknesses of early evolutionism. Cross-cultural comparison today relies on systematic databases such as the Human Relations Area Files and the Standard Cross-Cultural Sample, enabling explicit statistical testing of hypotheses about cultural correlates and causal patterns (Murdock & White, 1969; Ember & Ember, 2001). Comparative inference has thus

moved from impressionistic analogies to model-based science. In reassessing classical evolutionism, its enduring value lies in its recognition that culture is a legitimate target for systematic comparison and explanatory theory. Its fatal flaw was the conflation of explanation with teleology and of evolution with moral progress. Naturalistic anthropology inherits the former ambition while discarding the latter illusions. Cultural evolution is now understood as a dynamic interaction among universal cognitive mechanisms, local ecological constraints, transmission biases, and institutional selection pressures that jointly generate persistent cultural diversity without implying hierarchical ranking or directional inevitability.

Thus, the illusion of linear progress dissolves once culture is treated not as a moral ladder but as an open-ended evolutionary process. What remains is a scientifically revitalized comparative anthropology capable of explaining both the remarkable unity of the human species and the stable plurality of its cultural forms.

2. Boasian Culturalism – History Replacing Explanation

Franz Boas's rejection of speculative evolutionary schemes represented a decisive turning point in the formation of modern anthropology. Reacting against the teleological progress narratives of nineteenth-century evolutionism, Boas insisted that each society must be understood on the basis of its unique historical trajectory rather than through comparison with abstract civilizational stages (Boas, 1911). In this view, cultural forms were products of historically contingent processes of diffusion, innovation, and social learning, not expressions of universal evolutionary sequences. By grounding anthropology in intensive empirical fieldwork and methodological relativism, Boas sought to replace armchair speculation with ethnographic rigor. His defense of cultural relativism simultaneously served a powerful ethical function: it dismantled scientific racism by divorcing cultural variation from biological determinism and emphasizing the psychological unity of humankind (Stocking, 1968; Baker, 1998). In this regard, Boasian anthropology established enduring methodological standards and reshaped the discipline toward its most recognizable modern form.

Yet Boas's critique of evolutionary anthropology ultimately overshot its target. By rejecting teleology, Boasian culturalism did not merely refine evolutionary theory but effectively abandoned general explanation itself. Culture came to be treated as an autonomous historical process insulated from biological causation and cognitive

regularities. Psychological universals were acknowledged only in the most abstract sense, as the generic “psychic unity” of the species, but were not operationalized as explanatory mechanisms generating patterned cultural outcomes. Cultural variability was increasingly conceptualized as irreducible contingency: cultures differed because their histories differed, and further causal inquiry was deemed either irrelevant or politically suspect (Boas, 1911; Kroeber, 1917; Stocking, 1987).

This methodological stance shaped Boas’s students and successors profoundly. Alfred Kroeber advanced the notion of culture as a “superorganic” phenomenon transcending individual psychology, arguing that cultural systems obeyed laws distinct from biological inheritance or psychological processes (Kroeber, 1917). Culture, in this framework, became a self-propagating domain whose continuity and transformation could be accounted for without reference to evolved cognitive dispositions. Ruth Benedict’s configurationalism similarly characterized cultures as holistic personality patterns shaping individual development, yet without grounding these patterns in any systematic theory of cognition (Benedict, 1934). Margaret Mead’s influential work on adolescence and gender roles further reinforced cultural determinism by presenting dramatic cross-cultural contrasts as evidence for near-total plasticity of human behavior, often minimizing evolved predispositions altogether (Mead, 1928; Freeman, 1983). Across these traditions, explanation increasingly gave way to description: ethnography produced rich portraits of cultural difference but left unanswered the fundamental causal question of why certain forms of social organization and symbolic representation recur cross-culturally while others remain rare or unstable.

Boasian anthropology thus instituted what may be described as a substitution of historical narrative for explanatory theory. Cultural phenomena were explained by reference to prior cultural events—acculturations, borrowings, or internal developments—without probing deeper mechanisms governing why particular cultural elements were retained, transformed, or abandoned. As Marvin Harris later observed, cultural relativism’s rejection of explanatory generalization generated a form of theoretical paralysis in which “to explain was to compare, and to compare was to sin” (Harris, 1979, p. 46). The discipline retreated into particularism, treating general theory as either methodologically unjustified or ideologically dangerous.

From a naturalistic perspective, this retreat was unnecessary. Evolutionary explanations do not entail teleology or hierarchy; they simply seek to explain variation through causal mechanisms operating under selection processes. The Boasian rejec-

tion of species-wide cognitive regularities stemmed largely from a conflation between biological explanation and crude racial typologies. However, modern evolutionary psychology demonstrates that universal psychological design does not flatten cultural diversity but rather underwrites it. Shared mechanisms of social learning, kin recognition, coalition building, agency detection, and moral norm acquisition generate structured cultural variability when operating under divergent ecological and demographic conditions (Tooby & Cosmides, 1992; Atran, 2002; Boyd & Richerson, 1985).

Cultural contingency, therefore, is not synonymous with cultural randomness. While histories differ, they unfold through minds governed by a shared cognitive architecture. Learning biases such as prestige imitation, conformist preference, success-based copying, and emotional salience strongly influence which cultural variants spread, stabilize, or collapse (Henrich & McElreath, 2003; Henrich, 2015). For example, ritual systems that reliably generate emotional arousal are more memorable and more effective at coalition signaling, thereby enjoying greater transmission stability than less emotionally charged symbolic practices (Whitehouse, 2021). Moral codes exploiting intuitions about fairness and punishment can spread and institutionalize more readily than emotionally neutral legal prescriptions (Boehm, 1999). These patterns cut across historical contexts, revealing lawful regularities that Boasian particularism failed to capture.

Furthermore, empirical cross-cultural research has demonstrated predictable correlations among subsistence strategies, kinship arrangements, marriage rules, and political organization that cannot be reduced to idiosyncratic historical sequences alone (Murdock & White, 1969; Ember & Ember, 2001). Although Boas regarded cross-cultural statistical comparison with skepticism, such methods now provide robust tools for identifying causal linkages between ecological constraints and cultural institutions. For instance, polygyny correlates with high male economic variance and subsistence ecologies favoring resource monopolization, while monogamy stabilizes under conditions promoting social equality and extensive cooperative networks (Henrich, Boyd, & Richerson, 2012). These regularities undermine the Boasian claim that cultural patterns resist nomothetic explanation.

The concept of culture as superorganic also proved theoretically problematic because it displaced causal agency away from individuals. Cultures do not think, learn, or enforce norms; individuals do so, utilizing evolved cognitive capacities within so-

cially structured environments. By neglecting the psychological implementation of culture, Boasian anthropology produced an ontologically inflated abstraction incapable of binding symbolic analysis to behavioral causation. Cognitive anthropology restores the missing link by conceptualizing cultural representations as distributed mental constructs scaffolded by teaching practices, ritual repetition, and institutional reinforcement (Sperber, 1996; Atran & Medin, 2008).

Historical narrative retains undeniable importance within anthropological explanation. Cultural trajectories reflect contingent events, demographic pressures, technological innovations, and intergroup encounters. However, naturalistic anthropology insists that history is not itself an explanation but a record of causal processes whose dynamics must be specified. Why did particular innovations diffuse rather than others? Why did specific institutions stabilize rather than collapse? Why do certain belief systems recur cross-culturally? These questions demand accounts grounded in cognition, ecology, and cultural selection rather than historical description alone.

In retrospect, Boasian anthropology can be understood as a morally motivated but theoretically overreaching corrective to nineteenth-century evolutionism. It replaced one explanatory distortion—teleological progress—with another—the denial of cross-cultural causal generalization. By insulating culture from biology and psychology, it preserved anti-racist values but at the cost of scientific explanatory power. Modern naturalism demonstrates that the ethical aims of Boasian relativism are not jeopardized by biological explanation; indeed, they are strengthened by recognizing universal cognitive equality as the foundation upon which cultural diversity is constructed.

Thus, while Boasian culturalism institutionalized ethnographic rigor and relativist sensibility, it inadvertently fostered what might be described as an anti-explanatory ethos: a disciplinary bias toward description over causation, narrative over modeling, and historical uniqueness over patterned generalization. Naturalistic anthropology restores the causal ambition that Boas curtailed without reviving the teleological errors he rightly opposed. Culture emerges not as inscrutable contingency but as an evolutionary process channeling universal minds into historically contingent yet systematically patterned forms of social organization and symbolic expression.

3. British Functionalism – The Myth of Cultural Homeostasis

Bronislaw Malinowski's functionalist anthropology constituted one of the most influential attempts to provide a causal explanation of cultural institutions in the early twentieth century. Rejecting speculative reconstruction and historical abstraction, Malinowski grounded anthropological theory in intensive fieldwork and firsthand observation, most notably through his ethnography of the Trobriand Islanders (Malinowski, 1922, 1944). He conceptualized culture as an "instrumental apparatus" designed to satisfy the biological and psychological needs of individuals, including subsistence, reproduction, security, social integration, and emotional stability. Cultural institutions—kinship systems, exchange networks, rituals, and political hierarchies—were thus described as adaptive responses ensuring the survival of individuals and the continuity of the social group. Malinowski's framework replaced Boasian historical relativism with a form of practical biologism, grounding anthropology in human needs rather than historical contingency alone.

Despite this apparent rapprochement with naturalism, Malinowski's theory remained fundamentally teleological. Cultural forms were explained by their functions rather than by explicit micro-level causal mechanisms generating their persistence. Institutions were assumed to exist because they fulfilled essential needs, yet the processes through which particular practices stabilized while others failed were not modeled. The explanation remained macro-functional: custom X exists because it contributes to satisfying need Y. This circularity became one of the principal criticisms leveled against functionalism (Harris, 1979; Gellner, 1988). Customs were treated as naturally integrated instruments of social stability, masking conflict, competition, and individual strategic behavior beneath a veneer of social coherence. The individual, whose needs were theoretically foregrounded, was paradoxically analytically absent; agency dissolved into systemic necessity.

Structural-functionalism, as developed by A. R. Radcliffe-Brown, pushed functionalism even further away from psychological explanation. Radcliffe-Brown explicitly rejected individual needs as explanatory bases and reconceptualized culture as a component of social structure, defined as the network of relations binding individuals into an organized whole (Radcliffe-Brown, 1952). Institutions were said to exist insofar as they maintained systemic equilibrium by reproducing social roles and normative expectations. Here, culture was no longer instrumental to individual survival but

necessary for social cohesion. Stability itself became the explanandum and explanans: institutions persisted because they promoted system stability, and systems remained stable because institutions persisted. The organic metaphor of society became explicit: societies were likened to living organisms with interdependent organs whose functions contributed to overall homeostasis.

From a naturalistic standpoint, both variants of British functionalism suffer from a shared flaw: the reification of the social system at the expense of individual cognition and strategic interaction. Cultural institutions do not possess goals, needs, or survival imperatives apart from those of the individuals who enact them. Explanations framing institutions as if they existed to stabilize “society” lack ontological grounding, since only agents select strategies, adopt norms, punish defectors, and reproduce practices. The functionalist doctrine of social homeostasis substitutes metaphor for mechanism and obscures the dynamic processes through which institutions emerge, persist, and change.

Behavioral ecology and evolutionary game theory radically recast these issues by grounding cultural stability in micro-level decision-making dynamics. Human behavioral ecology conceptualizes individuals as strategists seeking to maximize fitness-relevant payoffs under ecological constraints, informed by evolved preferences for resource acquisition, kin investment, alliance formation, reputation management, and coalition building (Smith & Winterhalder, 1992; Winterhalder & Smith, 2000; Kaplan et al., 2009). Cultural institutions are understood not as equilibrium-maintaining structures but as emergent solutions to collective action problems produced by decentralized individual strategies. Marriage systems, property regimes, ceremonial exchanges, and political hierarchies stabilize when they align individual incentives with cooperative outcomes; they collapse when incentive alignment fails.

For instance, exchange systems such as the Kula ring—one of Malinowski’s most celebrated cases—are now interpreted not as merely fulfilling abstract social needs but as reputation-regulating networks that enhance individual status, alliance security, and access to cooperative partnerships (Bliege Bird & Smith, 2005; Henrich & Gil-White, 2001). Participants engage strategically, cultivating prestige and social capital that yield tangible long-term benefits. The apparent altruism and ritual symbolism of exchange can be modeled as costly signaling processes demonstrating commitment to group norms and securing coalition membership.

Similarly, kinship institutions are better understood as evolved nepotistic biases and alliance strategies than as components of social homeostasis. Rules governing descent, residence, and inheritance stabilize when they optimize conflict reduction and resource transmission under specific demographic conditions (Alexander, 1987; Hrdy, 2009; Hill et al., 2011). Cultural prescriptions mutate or dissolve when ecological incentives change. No philosophical “need for cohesion” is required to explain this pattern—only strategic agents responding to cost-benefit environments.

Ritual behavior, another cornerstone of functionalist analysis, also benefits from micro-causal modeling. Instead of merely “maintaining social solidarity,” ritual practices exploit evolved psychological mechanisms of emotional arousal, synchrony, and identity fusion that strengthen coalitional bonds and increase willingness to cooperate or sacrifice (Whitehouse, 2021). High-frequency, low-arousal rituals sustain routine norm compliance; rare, high-arousal rituals promote intense group loyalty and readiness for costly joint action. Cultural persistence results from behavioral reinforcement mediated through evolved neurocognitive responsiveness to shared emotional experience.

From this perspective, functionalism’s emphasis on stability misses the central dynamics of competition, inequality, and conflict that characterize real societies. Institutions do not merely integrate—they allocate power, resources, and reproductive opportunities unevenly. Hierarchies persist when subordinate parties acquiesce due to coercive threats, reputational sanctions, asymmetric coalitional leverage, or net benefits of alliance submission (Boehm, 1999). Functionalist accounts, by contrast, naturalized inequality as socially necessary, obscuring the strategic power struggles that sustain dominance.

Cultural evolution theory further refines this critique by showing that institutional stability can emerge without genetically encoded altruism or teleological cohesion. Cultural group selection models demonstrate that norms promoting cooperation can spread when groups possessing such norms outcompete less cooperative groups in warfare, migration, or economic rivalry (Richerson et al., 2016; Henrich, 2015). Yet even here, individual-level learning biases and enforcement incentives remain the proximate drivers, while group success merely amplifies certain normative packages historically.

This naturalistic synthesis does not deny that cultures can exhibit temporary systemic stability. Rather, it explains stability as the contingent result of aligned incentives and effective norm enforcement, not as an intrinsic property of social wholes. Functionalist descriptions captured the surface coherence of institutions but failed to specify the engine generating that coherence.

The enduring contribution of British functionalism lies chiefly in its methodological insistence on observing institutions within their operational context and its recognition that cultural phenomena are functionally interdependent. However, its explanatory error consisted in extrapolating from observed interdependence to teleological systemic causation. Naturalism preserves functional insights by re-grounding them in explicit causal chains that run from evolved motives, through strategic interaction and learning biases, to institutional stabilization or transformation.

Thus, the myth of cultural homeostasis dissolves once societies are understood not as organic systems seeking equilibrium, but as competitive arenas populated by cognitively evolved organisms pursuing individually advantageous strategies that generate emergent cultural patterns. Cultural stability becomes not a given property of social structure but an explanandum solvable through evolutionary modeling. Functionalism's broad intuition—that culture is adaptive—survives, but only insofar as adaptation is reinterpreted as the outcome of decentralized strategic selection rather than of abstract systemic necessity.

4. Culture and Personality – Psychological Speculation Without Evolution

The culture-and-personality tradition, associated primarily with Ruth Benedict and Margaret Mead, sought to integrate psychology into anthropological explanation by conceptualizing cultures as expressions of distinctive personality configurations shaped through child-rearing practices and early socialization (Benedict, 1934; Mead, 1928). In this perspective, each culture was portrayed as cultivating a characteristic emotional style or psychological type: “Apollonian” restraint among the Pueblo, “Dionysian” expressiveness among the Kwakiutl, or uniquely patterned adolescent development in Samoa. These cultural personality syndromes were often described as the products of covert psychological conditioning rather than institutional selection or evolved mental architecture. While the approach contributed valuable attention to

developmental processes, its theoretical foundations rested heavily on psychoanalytic speculation and culturally deterministic assumptions that proved both empirically untestable and conceptually flawed.

A central weakness of culture-and-personality anthropology lay in its uncritical adoption of Freudian and neo-Freudian psychology. Psychoanalysis informed interpretations of child-rearing practices, sexual repression, projection, sublimation, and Oedipal conflict as causal forces shaping collective cultural character (Benedict, 1934; Kardiner, 1939). However, psychoanalytic constructs were never subjected to robust empirical validation. Core concepts such as repression, unconscious symbolic displacement, or psychosexual stage fixation derived from clinical metaphor rather than controlled experimentation and were insulated from disconfirmation by their interpretive elasticity (Eysenck, 1985; Crews, 1996). This theoretical softness allowed anthropological psychoanalysis to function as narrative hermeneutics rather than scientific explanation.

Cross-cultural empirical scrutiny further destabilized psychoanalytic models. The universality claims of psychosexual development, Oedipal fixation, and repression mechanisms consistently failed replication when operationalized beyond Western clinical contexts (Bronfenbrenner, 1970; Shweder, 1990). Cultural variation in sexual regulation existed, but did not map onto psychoanalytic predictions regarding fixation or collective neurosis. Interpretations offered by culture-and-personality scholars relied largely on anecdotal field observations selectively filtered through psychoanalytic categories that were neither falsifiable nor behaviorally measurable (Freeman, 1983; Pinker, 2002).

Mead's celebrated ethnography of Samoan adolescence epitomized this methodological fragility. Mead proposed that Samoan socialization practices produced adolescents largely free from Western psychological conflict, thereby supporting cultural determinism and psychoanalytic flexibility (Mead, 1928). Yet subsequent reinvestigation by Freeman (1983) demonstrated selective data reporting, neglect of counterevidence, and disregard for coercive social norms surrounding sexual conduct and honor violence. Later reassessments continue to show that Mead's psychological conclusions were shaped more by ideological commitment to cultural plasticity than by systematic data collection (Shankman, 2009). This controversy underscores a broader pattern: psychoanalytic anthropology conflated interpretive narrative coherence with explanatory validity.

The culture-and-personality program also struggled with internal conceptual vagueness. “Basic personality structure,” often posited as the mediating variable between child-rearing and cultural norms, lacked consistent operational definitions. Personality traits were variously described in psychoanalytic, phenomenological, or literary terminology without standardized measurement (Kardiner & Linton, 1945; Wallace, 1961). Without quantitative tools for trait assessment or developmental longitudinal registries, claims about culture-wide personality configurations remained speculative. Cross-cultural personality psychology, emerging independently, demonstrated instead that recurrent trait dimensions such as extraversion, conscientiousness, agreeableness, and neuroticism exhibit reliable cross-cultural distributions, albeit with local modulation rather than wholesale cultural reconfiguration (McCrae & Costa, 1997).

The theoretical failure of robust causal modeling became particularly stark when contrasted with developments in behavioral genetics and evolutionary psychology. Twin and adoption studies revealed significant heritability in personality traits across cultures (~40–60%), directly contradicting strong cultural determinism (Bouchard & McGue, 2003). Culture influenced trait expression but did not construct personality *ex nihilo*. Meanwhile, evolutionary psychology replaced speculative psychodynamic theories with models grounded in selection pressures shaping domain-specific adaptations for attachment regulation, status competition, mate choice, threat detection, kin investment, and coalition formation (Tooby & Cosmides, 1992; Buss, 1995). Personality variation becomes, in this framework, a stable distribution of conditional strategies rather than products of cultural indoctrination.

Cultural variation in temperament and social behavior arises not from Freudian repression schemas but from the interaction between universal cognitive architecture and local environmental incentives. Risk tolerance varies in response to ecological unpredictability; relational trust patterns shift with market integration and kinship density; dominance assertiveness responds to sex ratios and resource control inequalities (Kaplan et al., 2009; Henrich, 2015). These relationships are predictive and testable, unlike psychoanalytic explanations, which lack direct linkage to measurable ecological variables.

Moreover, cultural transmission theory demonstrates how social learning biases, not psychosexual imprinting, drive the spread of personality-relevant norms. Prestige bias and conformity drive imitation of high-status behavioral models; emotional contagion shapes expressive repertoires; punishment systems regulate deviation

from normative emotional displays (Henrich & McElreath, 2003; Boyd & Richerson, 1985). Thus, culturally patterned personalities emerge through selective imitation and enforcement mechanisms rather than deep unconscious conflicts. Ritual participation, education, and media representations induct emotional styles without presupposing latent neuroses.

Recent work also indicates that childhood attachment styles, long interpreted through psychoanalytic lenses, are best modeled as evolved adaptive responses to caregiving reliability and environmental stability (Del Giudice, 2009). Secure, anxious, and avoidant attachment profiles function as conditional strategies optimized for different parental investment regimes, not pathologies generated by cultural repression. This removes psychodynamic mystification from development and situates variation within evolutionary life-history frameworks.

The culture-and-personality tradition further failed to account for intragroup diversity. If cultures manufacture uniform personality structures, then substantial within-culture variance becomes anomalous. Yet empirical studies demonstrate greater trait variation within societies than between them (McCrae & Costa, 1997). This observation directly contradicts Benedict's holistic configurations and supports models treating personalities as distributed adaptive strategies shaped by individual developmental contexts rather than cultural molds.

Naturalistic anthropology thus preserves what was empirically productive in the culture-and-personality movement—the recognition of developmental plasticity and cultural modulation—while rejecting its psychoanalytic foundations. Personality variation is explained through the interplay of genetic predispositions, sensitive-period learning, reputational incentives, and evolved social motivations. Culture influences emotional expression, moral emphasis, and normative ideals, but it does not manufacture personalities wholesale via symbolic imprinting.

Ultimately, psychoanalytic anthropology collapsed under theoretical incoherence and empirical indeterminacy. Its interpretive narratives could accommodate any ethnographic observation precisely because they lacked predictive constraint. Evolutionary psychology, in contrast, transforms personality research into a cumulative scientific enterprise: hypotheses generate quantitative predictions tested across populations, anchored in selection theory rather than hermeneutic storytelling. Culture-and-personality approaches thus represent not an integration of psychology into

anthropology but a historical detour—a moment when psychological explanation was attempted without a biologically grounded psychology.

By replacing Freudian metaphors with mechanistic models of adaptation, naturalistic anthropology rescues the study of personality from speculative determinism. Cultures shape behavior not by engraving neurotic archetypes onto blank psyches but by channeling evolved minds toward locally adaptive strategies of attachment, risk management, cooperation, and competition. What psychoanalytic anthropology mystified as collective unconscious conflicts are, in reality, systematic interactions between universal cognitive design and culturally structured opportunity landscapes.

5. Structuralism – Abstract Minds Without Mechanisms

Claude Lévi-Strauss conceptualized culture as the surface manifestation of universal unconscious mental structures organizing symbolic thought (Lévi-Strauss, 1963). Drawing inspiration from Saussurean linguistics, he proposed that myths, kinship terminologies, dietary taboos, and classificatory systems could be analyzed as transformations of deep binary oppositions embedded in the human mind, such as nature/culture, raw/cooked, life/death, or male/female. Structural analysis aimed not to reconstruct historical origins or social functions but to identify invariant formal relations underlying cultural diversity. In this sense, Lévi-Strauss represented one of the earliest attempts to reincorporate cognition into anthropological theory after the anti-psychologism of Boasian culturalism.

Despite this ambition, structuralism never developed a scientifically viable cognitive theory capable of substantiating its claims. The “structures of the mind” remained purely metaphorical constructs rather than psychologically specified mechanisms. Lévi-Strauss did not propose experimentally testable models of memory, learning, inference, or attention, nor link symbolic patterning to any identifiable neural or psychological processes. Instead, he relied on algebraic transformations and structural homologies derived from comparative interpretation of myths and symbolic practices. This methodology privileged pattern recognition over causal explanation, replacing psychological analysis with a semiotic formalism divorced from experimental validation (Sperber, 1996; Bloch, 2012).

As a consequence, structuralism faced chronic problems of indeterminacy. Almost any narrative corpus could be retrofitted to appear structurally homologous once symbolic categories and binary oppositions were suitably redefined. Structures themselves were not constrained by cognitive priors or statistical expectations, producing analyses that were rhetorically persuasive but epistemically unfalsifiable (Leach, 1970; Gellner, 1998). The absence of predictive criteria meant that findings could not be systematically challenged by new evidence; structure functioned as an interpretive device rather than a scientific explanation.

The lack of mechanistic grounding became even more salient as cognitive science advanced. Experimental research demonstrated that human conceptual systems do not operate via global binary oppositions but instead rely on domain-specific inference modules adapted to particular evolutionary problems. Folk biology categorizes species according to essentialist intuitions rather than oppositional binaries (Atran, 1998; Atran & Medin, 2008). Moral reasoning emerges from multiple evolved intuitions concerning harm, fairness, authority, loyalty, and purity rather than from abstract dialectical structures (Haidt, 2012). Religious cognition is structured around hyperactive agency detection and minimally counterintuitive concepts that maximize memorability and social transmission (Boyer, 2001). These empirically supported patterns reveal that mental architecture is modular, probabilistic, and content-sensitive, rather than formally dualistic or algebraically schematic as Lévi-Strauss proposed.

Furthermore, structuralism systematically ignored learning processes and transmission dynamics. Structural patterns were treated as emergent expressions of unconscious logic rather than as cultural representations socially propagated via imitation, instruction, and prestige bias. Cultural evolution theory demonstrates that symbolic regularities arise not from preexisting mental structures imposing form on content, but from repeated selective filtering during cultural transmission (Boyd & Richerson, 1985; Henrich & McElreath, 2003). Cognitively attractive representations enjoy higher retention rates, thus shaping symbolic systems across generations. Structuralism misidentified outcomes of transmission selection as manifestations of innate symbolic grammars.

Modern cultural epidemiology further challenges structuralist assumptions. Sperber (1996) argued that cultural representations spread in populations not because they reflect stable symbolic codes but because they exploit cognitive attractors shaped by evolved inferential biases. Unlike structuralist deep structures, cognitive attractors

can be operationalized and experimentally tested. Transmission chains consistently reveal convergence toward particular representational forms irrespective of starting inputs, demonstrating how cultural stability arises through distributed cognitive filtering rather than universal symbol grammars (Scott-Phillips et al., 2018).

Kinship structures offer a revealing empirical case. Lévi-Strauss's alliance theory posited the universal symbolic logic of kinship based on exchange of women as a realization of reciprocity structures embedded in the human mind (Lévi-Strauss, 1969). Yet subsequent comparative research undermined claims of universality and symbolic determinism. Kinship systems reflect adaptive responses to demographic pressures, inheritance strategies, residence patterns, and sexual competition rather than invariant symbolic exchange rules (Alexander, 1979; Hrdy, 2009; Henrich et al., 2012). Cognitive anthropology demonstrates that kin categorization relies on evolved heuristics tracking genetic relatedness and caregiving patterns, not on symbolic transformation protocols (Lieberman et al., 2007). Structural exchange models failed to predict real kinship variation precisely because they lacked behavioral grounding.

Structuralist myth analysis has suffered similar empirical erosion. Cross-cultural corpus studies of myth narrative show statistical clustering around emotionally charged themes—danger, supernatural punishment, heroic struggle, incest avoidance—which align with cognitive salience biases rather than binary transformation systems (Boyer, 2001; Norenzayan et al., 2016). Content spreads because it triggers attention, memory, or emotional incentives, not because it fulfills formal oppositional symmetry.

Crucially, Lévi-Strauss also underestimated the role of social institutions in stabilizing symbolic structures. Structuralism conceptualized mythic variation as a self-contained play of symbolic logic, ignoring how priesthoods, schools, legal systems, and ritual hierarchies enforce semantic closure and transmission orthodoxy. Cultural information does not reproduce freely through minds alone; it is actively curated and policed by institutions that reward conformism and punish deviation (Whitehouse, 2021; Singh et al., 2017). Contemporary theories integrate cognitive biases with institutional dynamics rather than assuming subconscious symbolic algebra as the stabilizing factor.

Structuralism's final limitation was epistemological. Its analyses remained detached from cumulative scientific validation. Interpretations multiplied without resolution, since no empirical tests could favor one structural mapping over another. The research

program thus stagnated as theoretical disputes became hermeneutic rather than evidentiary. This stagnation reflected a deeper problem: unmechanized mental models cannot sustain scientific explanation.

Contemporary cognitive anthropology and evolutionary psychology rescue the central intuition of structuralism—the idea that human minds shape cultural form—while correcting its deficiencies. Rather than abstract symbolic grammars, these fields propose concrete mechanisms such as theory-of-mind inference systems, essentialist categorization modules, coalitional psychology, disgust sensitivity, and memory constraints that generate observed cultural regularities (Tooby & Cosmides, 1992; Atran & Medin, 2008; Boyer, 2001; Buss, 2019). These mechanisms are testable, falsifiable, and integrated with neuroscience and behavioral experimentation.

In this light, structuralism appears as an intermediate stage between relativist description and full naturalistic explanation: correct in locating causality partially within cognition, but incapable of specifying mechanisms. By substituting algebraic symbolism for cognitive modeling, it offered seductive narratives without explanatory power. Cultural patterns once attributed to deep unconscious structures are now understood as emergent phenomena produced by interaction among modular cognition, transmission biases, emotional salience, and institutional enforcement.

Hence, abstract minds without mechanisms could never deliver the scientific anthropology Lévi-Strauss envisioned. Only by replacing symbol algebra with experimentally grounded inference systems can anthropology achieve the explanatory depth structuralism sought but never reached.

6. Marxist Anthropology – Material Reduction Without Minds

Marxist anthropology, in its various classical, neo-Marxist, and materialist formulations, reconceptualized culture as either an ideological reflection of economic relations or an adaptive response to material and ecological constraints. Drawing upon Marx's materialist conception of history and Engels's analysis of kinship and property systems, culture was framed largely as a superstructural consequence of infrastructural forces rooted in modes of production and class struggle (Engels, 1884/1972). Social institutions, belief systems, and symbolic representations were interpreted as mechanisms for reproducing relations of exploitation, masking material inequalities, or stabilizing productive arrangements. This orientation provided a powerful corrective

to idealist conceptions of culture by foregrounding the structural significance of labor organization, property relations, and resource distribution in shaping social life.

Later anthropological adaptations of Marxism extended this materialist realism. Eric Wolf's historical anthropology modeled cultures as embedded within expanding capitalist world systems shaped by colonial extraction, trade monopolies, and imperial power (Wolf, 1982). Marvin Harris's cultural materialism argued that infrastructural constraints—including population density, energy extraction efficiency, and subsistence ecology—ultimately determined social structures and symbolic systems (Harris, 1979). Although differing in emphasis, both approaches treated culture as functionally subordinate to material-economic causation. Cultural ideologies were not autonomous symbolic processes but expressions of deeper economic logics operating beyond individual perception.

Despite their strengths, Marxist and neo-Marxist frameworks consistently suffered from a fundamental explanatory deficit: the systematic absence of psychological mechanisms. Culture was reduced to ideological reflection or infrastructural adaptation without specifying how economic conditions translate into beliefs, norms, emotional commitments, and patterns of collective coordination within individual minds. Ideology was invoked as causal force but remained theoretically opaque—a rhetorical placeholder rather than a mechanistic explanation. Cultural beliefs were assumed to arise “because” economic relations demanded their presence, without addressing why certain beliefs effectively motivate cooperation or compliance while others fail to stabilize.

This omission produced a classic case of macro-reductionism. Structural arrangements were posited to determine culture directly, bypassing the cognitive mediation through which human agents interpret incentives, enforce social norms, organize coalitions, and internalize moral commitments. Marxist models described outcome correlations between economic organization and cultural practice but did not explain how these correlations were enacted psychologically. Without a theory of mind, material causation became magical causation. Economic base structures seemed to imprint cultural superstructures automatically, as if beliefs and values followed infrastructural changes by mechanical necessity.

Empirical research increasingly undermined this deterministic assumption. Cultural persistence often resists changes in economic productivity or class organization, contradicting predictions of direct base-superstructure alignment. Religious traditions persist within industrial economies; caste systems survive capitalist integration; kinship solidarities flourish under wage labor conditions incompatible with collectivist subsistence models (Bloch, 1986; Norenzayan, 2013). Such cases reveal that belief systems maintain inertia even when materially maladaptive, suggesting that ideological persistence depends not merely on economic payoff but on deep-rooted cognitive salience, moralization processes, and institutional enforcement mechanisms.

Naturalistic anthropology supplies the missing analytic layer by situating culture within evolved coalition psychology. Human minds evolved not as neutral processors of economic signals but as coalitional strategists motivated by group loyalty, reputation maintenance, moral judgment, and reciprocal obligation (Tooby & Cosmides, 1992; Boehm, 1999). These motivational systems mediate how material inequalities are perceived and translated into political alignments, ideological identification, and moral legitimation. Individuals do not support or resist class structures simply because economic relations exist; they do so through identity mechanisms involving prestige hierarchies, threat perceptions, and moral intuitions.

Experimental research in moral psychology demonstrates the primacy of fairness heuristics and in-group favoritism in shaping political attitudes (Haidt, 2012). Ideological frameworks stabilize when they resonate with evolved intuitions regarding procedural justice, proportional reward, and norm enforcement. This explains why class mobilization movements rarely emerge spontaneously despite objective inequality: coalitional formation requires strong emotional bonding and clear moral narratives capable of overcoming free-rider problems and risk aversion. Marxist predictions of inevitable proletarian revolution failed empirically precisely because they underestimated the psychological costs of collective action and the strength of reputational enforcement mechanisms maintaining individual compliance with existing institutions (Olson, 1965; Henrich, 2015).

Evolutionary models of cooperation further clarify this dynamic. Norm enforcement systems reliant on punishment, ostracism, and reputation regulation are necessary to stabilize collective action (Boyd et al., 2003; Fehr & Gächter, 2002). Ideological commitment alone cannot generate coordination without enforcement scaffolds. Marxist anthropology documented exploitation but did not specify the psychological infras-

structure sustaining either compliance or rebellion. Economic incentives alone cannot generate large-scale cooperation or ideological solidarity; these arise through cultural mechanisms exploiting evolved social emotions and learning biases.

Cultural materialism's ecological determinism suffered additional problems. Harris's theory treated ritual practices and symbolic taboos as energetically efficient adaptations to environmental constraints, such as cow sacralization in India being explained as livestock preservation strategy (Harris, 1974). Yet such interpretations often ignored the central role of belief in motivating behavior. Cognitive religious studies show that ritual prohibitions persist precisely because they invoke supernatural monitoring, purity emotions, and intuitive deontic reasoning, not mere cost optimization (Boyer, 2001; Norenzayan et al., 2016). Cultural practices that impose immediate costs to individuals remain stable only when morally sacralized via religious or normative framing.

Wolf's global political economy analysis offered a richer perspective by embedding cultural variations within imperial domination networks. Yet even this approach failed to specify how colonial violence translated into enduring identity narratives and ideological resistance movements. Ethno-national identities erupt when symbolic boundaries resonate with kinship heuristics, shared trauma memories, and ritualized signaling practices reinforcing group cohesion (Whitehouse, 2021). Again, psychological mediation explains where economic determinism alone cannot.

Naturalistic anthropology thus bridges material analysis with cognitive explanation. Resource inequalities influence coalition competition by modulating mating access, survival opportunities, and prestige hierarchies—factors directly processed by evolved motivational systems (Hill et al., 2011; Kaplan et al., 2009). Ideological systems stabilize not because they mirror class relations automatically but because they succeed in mobilizing fairness intuitions, identity sentiments, supernatural monitoring fears, or reputational incentives. Cultural evolution models explain ideological spread as outcomes of biased transmission and institutional reinforcement rather than deterministic reflection of production modes (Richerson & Boyd, 2005; Henrich, 2015).

Naturalism preserves Marxist insights while dismantling its reductionism. Political economy matters because it changes incentive structures processed cognitively, not because it mechanically determines beliefs. Class relations shape living conditions but

do not compose ideology. Ideology arises when narratives harness evolved emotional systems to channel group loyalty and moral enforcement. Thus, material conditions become distal causes whose effects depend on proximal psychological mediation.

By eliminating the false dichotomy between materialism and cognitive causation, naturalistic anthropology offers a superior explanatory synthesis. Where Marxist anthropology described patterns of domination, it failed to explain why certain cultural forms legitimate inequality or generate resistance. Evolutionary psychology and cultural selection theories now fill this theoretical void. Culture emerges as a co-evolving system where economic relations constrain opportunities but cognitive mechanisms translate constraints into moralized ideologies or strategic coalitions whose dynamics ultimately shape institutions.

The reduction of culture to economics without minds thus represents Marxist anthropology's deepest theoretical failure. Material reality matters only insofar as it is perceived, interpreted, and moralized by evolved minds. Anthropology's future lies not in choosing between Marx or Darwin but in integrating both within a genuinely causal framework where economic incentives, coalitional psychology, cultural transmission dynamics, and institutional enforcement jointly generate the patterned complexity of human cultural life.

7. Cultural Ecology – Environmental Reductionism

Cultural ecology emerged as an effort to reconnect anthropology with evolutionary explanation after the collapse of nineteenth-century progressivism and the fragmentation produced by Boasian historicism. Figures such as Julian Steward and Leslie White sought to restore causal coherence to cultural analysis by situating cultural forms within adaptive relationships to environmental constraints (Steward, 1955; White, 1959). Steward proposed the method of multilineal evolution, according to which cultural institutions evolved along different pathways shaped by distinct ecological contexts. White, more unabashedly evolutionary, conceptualized cultural development as increasing efficiency in energy capture and technological complexity, proposing quantitative indices of “cultural evolution” based on energy utilization per capita. Under this paradigm, kinship systems, subsistence economies, settlement patterns, ritual cycles, and social stratification were interpreted as functionally calibrated responses to demographic pressures, resource availability, and climatic variables.

Cultural ecology thus represented a partial revival of materialist reasoning within anthropology, offering explanations that bypassed symbolic idealism and purely historical narrative. Cultural diversity was no longer understood as accidental or purely historical but as patterned variability shaped by ecological gradients. Agricultural intensification was linked to sedentism and property regimes; pastoral mobility was correlated with clan-based political organization; hunting-gathering economies were associated with low institutional hierarchy (Steward, 1955; White, 1959). These macro correlations appeared to provide a law-like structure for explaining cultural patterns at regional and cross-cultural scales.

However, despite its legitimate explanatory aspirations, cultural ecology ultimately suffered from a central flaw: environmental reductionism devoid of cognitive mediation. Cultural adaptations were treated as system-level responses to environmental pressures rather than as outcomes of individual strategic behavior filtered through evolved psychological mechanisms. The “culture” that adapted was not made of minds and decisions but functioned like a collective organism recalibrating automatically to ecological constraints. Environmental input was assumed to directly mold institutional forms without passing through agents engaged in cost–benefit reasoning, social learning, coalition dynamics, or reputation management.

This omission produced explanations suspiciously similar to functionalism in their macro-level teleology. Cultural practices survived not because individuals found them advantageous relative to alternatives, but because they somehow enhanced group survival or environmental efficiency. Adaptive explanations remained finalistic rather than mechanistic. Why irrigation systems developed or kinship consolidation intensified was attributed to ecological necessity rather than to explicit decision procedures operating in minds under selection pressure. Cultural ecology thus replaced the symbolic mysticism of interpretivism with a form of ecological mysticism wherein “the environment” functioned as a causal deity shaping social forms without psychological intermediaries.

Behavioral ecology corrected this flaw by re-grounding cultural adaptation within micro-level strategic models. Drawing from evolutionary biology and optimal foraging theory, human behavioral ecology analyzes how individual actors make decisions that maximize fitness-related payoffs under specific ecological constraints (Smith & Winterhalder, 1992; Winterhalder & Smith, 2000). Individuals do not adapt “as cultures”; they pursue strategies shaped by evolved motives for survival, mating,

alliance formation, status acquisition, and costly signaling. Cultural institutions stabilize when they coordinate these strategic choices into mutually reinforcing equilibria.

For example, subsistence strategies formerly explained as communal environmental adaptations are now modeled as individual resource management decisions responding to energetic return rates, caloric variance, time investment trade-offs, and market integration (Kaplan et al., 2009; Hill et al., 2011). The persistence of hunting specialization among certain groups, even under agricultural encroachment, reflects not collective traditionalism but individualized cost-benefit calculations shaped by skill variance and prestige returns. Hunter status serves simultaneously as subsistence provisioning, mating display, and coalition recruitment signal (Bliege Bird & Smith, 2005; Henrich & Gil-White, 2001). Cultural stability thus arises from individually adaptive strategies rather than environmental determinism imposed at the system level.

Cultural ecology also failed to explain cultural inertia. If institutions were finely tuned to ecological pressures, rapid shifts in subsistence ecology should produce commensurate changes in kinship rules, political hierarchies, or ritual calendars. Empirically, this does not occur. Cultural lag persists long after ecological change (Boyer, 2001; Henrich, 2015). Beliefs and institutions exhibit path dependence driven by social learning biases, emotional commitments, and moralized values that resist immediate economic recalibration. Environmental reductionism cannot account for the durability of maladaptive norms, whereas cognitive transmission models predict precisely such inertia through prestige imitation, conformity bias, and institutional enforcement (Henrich & McElreath, 2003; Richerson & Boyd, 2005).

Moreover, cultural ecology underestimated the symbolic reinforcement component of adaptive institutions. Groups do not simply coordinate behavior around resource management; they sacralize these behaviors to ensure compliance. Food taboos, ritual calendars, purity codes, and supernatural sanctions transform mundane subsistence rules into moral imperatives (Boyer, 2001; Norenzayan, 2013). Cultural ecology correctly identified functional correlations but neglected the role of religious cognition and emotional enforcement in stabilizing those correlations. Institutions persist not merely because they are ecologically efficient but because they become morally inviolable.

Environmental explanations further collapse under cross-cultural anomalies. Societies occupying similar ecological niches often display divergent social organizations, while starkly different ecologies sometimes sustain convergent institutional forms. Pastoral nomadism spans both centralized military hierarchies and highly egalitarian clan federations depending on historical warfare pressures and trade integration rather than ecology alone (Barfield, 1989). Likewise, tropical horticulturalists exhibit wide variation in political stratification inconsistent with pure ecological determinism. These divergences require explanation through differential coalition dynamics, leadership competition strategies, and norm enforcement systems rather than environment per se (Boehm, 1999; Whitehouse, 2021).

Cultural ecology also struggled epistemologically. Its principal methodology relied on post hoc functional correlations rather than controlled modeling or prediction. Cultural traits were retroactively interpreted as environmentally adaptive regardless of empirical cost or inefficiency, creating unfalsifiable explanations similar to those criticized in functionalist anthropology (Harris, 1979). Where evidence of maladaptation existed, cultural inertia or historic accident were invoked without theoretical elaboration.

Cultural evolution theory integrates environmental explanation with cognitive mechanisms. Environmental variables influence payoff matrices shaping strategy adoption, but cognitive learning biases determine which strategies propagate (Boyd & Richerson, 1985). Group competition amplifies institutions that coordinate cooperation under specific ecological stressors (Richerson et al., 2016). Culture thus emerges not as a passive reflection of environment but as a multi-level process wherein strategic agents operating in ecological contexts generate stable yet historically contingent social forms.

Naturalistic anthropology therefore retains the crucial insight of cultural ecology—that ecological pressures constrain possible cultural solutions—while discarding its ecological determinism. Cultural forms arise through decision-making agents guided by evolved motivational systems and filtered by social learning dynamics. Environmental gradients modulate cultural selection, but do not determine culture directly.

Environmental reductionism ultimately collapses because adaptations do not belong to environments or to societies but to agents embedded within environments. Culture evolves when minds, not ecosystems, select strategies. Only by grounding ecological analysis in cognitive behavioral modeling can anthropology escape the twin traps of interpretive idealism and material determinism and develop genuinely causal explanations of human cultural diversity.

8. The Interpretive Counterevolution – The Over-Symbolization of Human Life, Power Without Psychology, and Critique Without Causal Foundations

The interpretive turn in late twentieth-century anthropology represented a decisive retreat away from causal explanation toward literary description, symbolic hermeneutics, and epistemological skepticism. Clifford Geertz's influential formulation of culture as "webs of significance" spun by human beings converted anthropology into an interpretive discipline oriented primarily toward decoding meanings rather than identifying causal mechanisms (Geertz, 1973). Cultural analysis became explicitly anti-naturalistic: explanation was rejected as reductionist, while interpretation was elevated as the appropriate methodological posture for an allegedly text-like human world. Although this shift produced evocative ethnographic prose and sharpened sensitivity to emic perspectives, it simultaneously abandoned anthropology's scientific aspirations. Culture was rendered opaque to causal explanation and immune to comparative inference, transforming ethnography into narrative reconstruction rather than theoretical investigation.

The interpretive program rested on a fundamental mischaracterization of explanation. By portraying naturalistic approaches as incompatible with meaning, interpretivism conflated causal analysis with symbolic elimination. Yet meaning itself is generated and processed by evolved cognitive systems whose operations are amenable to scientific modeling. Cognitive anthropology demonstrates that symbolic salience emerges from systematic attentional biases shaped by adaptive pressures; concepts more easily memorized or transmitted achieve cultural prominence not because they possess inherent semiotic depth, but because they exploit universal neurocognitive proclivities (Boyer, 2001; Sperber, 1996). Religious icons typically emerge from minimally counterintuitive representations that violate intuitive ontological expectations

while remaining cognitively tractable (Boyer, 2001; Norenzayan, 2013). Moral symbols achieve resonance by activating deontic intuitions governing harm avoidance, fairness assessment, or coalition signaling (Haidt, 2012). Interpretive anthropology described symbolic richness without explaining why particular meanings rather than others propagate cross-culturally. Naturalistic explanation exposes the causal architecture underlying symbolic selection processes that interpretivists bracketed as ineffable.

Furthermore, the interpretive approach mistakenly treated culture as a discursive surface rather than as a transmission system. Cultural stability results from repeated copying and learning filtered through prestige bias, emotional reinforcement, and institutional enforcement, not from hermeneutic consensus alone (Boyd & Richerson, 1985; Henrich & McElreath, 2003; Henrich, 2015). Interpretivists recognized ritual authority and tradition but lacked explanatory models specifying how symbolic dominance emerges. Cultural epidemiology reconstructs these processes empirically, replacing metaphorical “webs of meaning” with measurable attractor dynamics.

Poststructural and practice theory frameworks extended the interpretive turn by relocating cultural causality into discourse and power structures. Bourdieu’s concept of habitus framed culture as a system of embodied dispositions acquired through social conditioning that reproduce domination unconsciously (Bourdieu, 1977). Giddens’s structuration theory echoed this emphasis on reciprocal constitution between agency and structure (Giddens, 1984). These approaches yielded sophisticated accounts of social reproduction yet preserved a striking lacuna: the absence of any evolutionary psychological model capable of explaining why certain dispositions or power relations persist. Power remained theorized as a sociological abstraction rather than as a motivational problem mediated through evolved cognition.

Naturalistic anthropology fills this gap by grounding domination and hierarchy in adaptive social dynamics. Dominance-based hierarchies reflect evolved competition over mating access and resource control, while prestige-based hierarchies originate through skill-biased cultural transmission favoring high-status role models (Henrich & Gil-White, 2001; Boehm, 1999). Coalition psychology explains how group identities crystalize around leaders who monopolize symbolic capital, mythic legitimacy, or ritual authority (Tooby & Cosmides, 2010). Cultural reproduction occurs not through abstract “habitus” alone but through reputational incentives embedded within learning networks. Compliance to authority depends on threat management

circuits and norm internalization mechanisms rather than discursive mystification (Fehr & Gächter, 2002; Boyd et al., 2003).

Bourdieu's habitus remains descriptively fertile but explanatorily incomplete. It maps phenomenological experience without providing causal leverage: how dispositions originate, stabilize, or mutate is left unspecified. Evolutionary psychology specifies these processes by modeling habitus as conditioned activation of evolved strategies under recurring environmental and social constraints, including status competition, kin loyalty, sexual selection pressures, and reciprocity tracking (Buss, 1995; Del Giudice, 2009). Habitus thus transforms from metaphor into outcome: a repertoire of context-sensitive behavioral heuristics sculpted by both biological inheritance and cultural selection.

Feminist and postcolonial anthropology further radicalized interpretivism by foregrounding asymmetries of gender and colonial violence while maintaining explicit hostility toward biological explanation. Cultural constructions of gender became interpreted solely as symbolic power structures imposed upon malleable bodies (Ortner, 1974; Moore, 1988). Colonial subjugation was framed as discursive domination shaping identities without integrating mechanisms of coalition expansion, competitive group strategies, or violence regulation (Wolf, 1982; Said, 1978). Anti-biologism became axiomatic: evolutionary explanations were dismissed as inherently essentialist or politically regressive.

Empirical findings sharply contradict this stance. Sex-differentiated reproductive investments impose systematic differences in mate competition strategies, parental energetics, and social bargaining positions that inevitably interact with cultural norms (Trivers, 1972; Buss, 1995; Hrdy, 2009). Variation in patriarchy correlates with subsistence strategies, warfare frequency, and inheritance regimes rather than discourse alone (Boehm, 1999; Hill et al., 2011). Cultural norms channel these predispositions but cannot invent them *ex vacuo*. Gender roles reflect evolved strategy distributions modulated by ecological pressures and social institutions. Feminist concerns regarding gender inequality are not undermined but strengthened by evolutionary explanation, which exposes the root motivational conflicts sustaining domination while identifying leverage points for institutional reform based on incentive restructuring rather than discursive activism alone.

Postcolonial anthropology similarly suffers from the absence of cognitive mechanism. Colonial expansion involved not merely symbolic imposition but coordinated conquest fueled by tribal coalition psychology, prestige-seeking hierarchies, and superordinate identity formation mechanisms (Turchin, 2015; Whitehouse, 2021). Cultural integration under imperial regimes occurred through prestige imitation, religious transmission biases, and punishment stabilization rather than solely linguistic domination. Narratives of colonial discourse identify surface representations but fail to explain successful assimilation dynamics or persistence of identity resistance. Cultural evolution models clarify why some colonial ideologies collapse while others entrench over centuries: stability depends on integration with moral enforcement regimes and reputational networks, not textual legitimacy alone.

The common denominator across interpretive, poststructuralist, feminist, and postcolonial traditions is their persistent rejection of causal cognition. Cultural phenomena are theorized at the level of discourse, power semantics, or symbolic contestation while treating minds as black boxes. Naturalistic anthropology restores minds to the center of explanation. Meaning exists because brains generate it; power persists because evolved coalitional systems reward it; inequality stabilizes because mating strategies and reputation economies reinforce it.

The interpretive counterrevolution thus replaced explanatory anthropology with a hermeneutic discipline incapable of cumulative theory-building. Narrative thick description substituted for modeling; political critique displaced causal investigation. Culture became public theater rather than evolutionary system. This does not render interpretive insights invalid — symbols matter, discourse matters, power matters — but it situates them within deeper causal chains mediated by cognitive mechanisms and social transmission processes.

The naturalistic synthesis dissolves the false opposition between meaning and explanation. Symbolic richness is produced by attentional biases, emotional resonance systems, and ritual reinforcement loops. Power hierarchies are sustained through evolved dominance and prestige strategies encoded within institutional norms. Gender and colonial domination persist through coalitional psychology and sexual selection asymmetries constrained by cultural transmission. Once minds are reinserted into the model, interpretive interpretations become surface descriptions rather than ultimate explanations.

The interpretive counterrevolution thus marks anthropology's abandonment of causation in favor of critique without mechanisms. The restoration of scientific anthropology requires reintegrating cognitive causality, evolutionary dynamics, and transmission modeling into the study of culture, returning explanation to a discipline long captivated by storytelling.

9. Evolutionary and Cognitive Anthropology – Culture as Natural Process

Evolutionary and cognitive anthropology reconceptualize culture not as an autonomous symbolic realm, an ideological reflex of economic structures, or a diffuse discursive field, but as a natural evolutionary system composed of socially transmitted information instantiated within evolved cognitive architectures and shaped by selection dynamics operating across individuals, groups, and institutions. Culture evolves through processes formally analogous to genetic evolution: variation in representations, biased transmission, differential retention, and population-level stabilization operate together to generate cumulative cultural complexity (Boyd & Richerson, 1985; Richerson & Boyd, 2005; Henrich, 2015). This framework abandons teleology while preserving explanatory ambition, situating anthropology squarely within the natural sciences without erasing the symbolic richness or historical contingency of human societies.

At the core of this reconceptualization lies the recognition that human learning is systematically biased by evolved cognitive heuristics rather than random imitation. Conformity bias leads individuals to disproportionately adopt behaviors that appear common within their social reference groups; prestige bias favors copying high-status or successful models; payoff-biased learning promotes replication of strategies that yield observable rewards; emotional salience enhances memory retention for fear-inducing, morally charged, or socially relevant information (Henrich & McElreath, 2003; Boyd & Richerson, 1985). These biases function as cognitive filters determining which cultural variants proliferate and which are abandoned. Cultural stability thus does not result from moral consensus or interpretive coherence but from selective transmission guided by universal features of human psychology.

Religious belief systems provide a paradigmatic example. Gods that monitor human behavior and punish moral transgressions proliferate across societies because they exploit agency detection systems and moral emotions that enhance cooperation by deterrence (Boyer, 2001; Norenzayan, 2013; Norenzayan et al., 2016). Ritual practices persist not because they encode deep symbolic oppositions but because they induce emotional synchrony, identity fusion, and reputational commitment that reinforce coalitional loyalty and norm compliance (Whitehouse, 2021). Myths survive when they engage narrative intuitions structured around hazard avoidance, kin protection, heroic status competition, and fairness regulation. Cultural epidemiology demonstrates that such symbolic regularities emerge from cognitive attractors, not from interpretive semiotic grammars (Sperber, 1996; Scott-Phillips et al., 2018).

Norm creation and enforcement likewise depend on evolved motivational systems. Moral intuitions regarding harm prevention, fairness reciprocity, loyalty, authority respect, and purity violations constitute domain-specific evaluative modules shaping collective rules (Haidt, 2012). Cooperation stabilizes through sanction systems relying on third-party punishment, reputation tracking, and ostracism, transforming altruism from moral abstraction into an enforceable social strategy (Fehr & Gächter, 2002; Boyd et al., 2003). Cultural evolution models reveal that societies with more effective punishment institutions achieve higher levels of public goods provisioning, expanding group size and complexity without requiring selection for innate altruism.

Institutional design further amplifies cultural selection. Schools, religious organizations, bureaucracies, and legal systems regulate learning channels, formalize prestige hierarchies, and enforce ritual repetition, generating high-fidelity transmission environments that accelerate cultural accumulation (Henrich, 2015). Written language, standardized education, and professional bureaucracy decouple knowledge retention from individual memory limits, producing what Henrich characterizes as a ratchet effect whereby innovations accumulate rather than dissipate. Cultural complexity thus emerges not from increasing intelligence per se but from increasingly efficient transmission scaffolding embedded within social institutions.

This dual-process model decisively refutes blank-slate assumptions central to interpretivism and cultural determinism. Culture does not overwrite universal human nature; it exploits it. Biological evolution provided the learning mechanisms, emotional predispositions, and social motivations that culture subsequently activates and canalizes. Genetic predispositions constrain cultural possibility spaces; cultural environments,

in turn, modify selective pressures acting upon genetic variation. This reciprocal dynamic constitutes gene–culture coevolution (Lumsden & Wilson, 1981; Richerson & Boyd, 2005). Lactase persistence linked to dairying cultures exemplifies this process at the metabolic level, while disease resistance variants associated with settlement density and agriculture represent further illustration of biologically mediated cultural feedback loops.

At the psychological level, the WEIRD phenomenon (Western, Educated, Industrialized, Rich, Democratic) provides the most extensively documented gene–culture coevolutionary model (Henrich, Heine, & Norenzayan, 2010; Henrich, 2015). Kinship restrictions imposed by medieval Western Christianity dismantled clan structures, weakened extended family ties, and promoted monogamous nuclear households. Over centuries, these institutions shaped selection pressures favoring trust toward strangers, rule-based moral reasoning, analytic cognition, and reduced conformity to kin coalitions. Experimental psychology confirms that WEIRD populations demonstrate atypical cognitive profiles: heightened individualism, abstraction, norm universalism, and impersonal prosociality relative to global human baselines. These are not culturally “constructed” values floating freely but phenotypes stabilized via coevolutionary processes linking institutions and cognitive selection.

Evolutionary anthropology also clarifies political organization and inequality. Dominance hierarchies arise from mating competition and coercive control strategies; prestige hierarchies emerge from skill transmission systems oriented toward valued expertise (Henrich & Gil-White, 2001; Boehm, 1999). Cultural leadership forms thus reflect alternative evolved pathways to influence. Coalitions assemble around leaders who align moral narratives with group survival signals, explaining both nationalist mobilization and sectarian movements (Whitehouse, 2021; Turchin, 2015). Power persists not through abstract discourse but via convergent cognitive incentives: fear conditioning, loyalty signaling, and coalition enforcement.

Gender systems are likewise reframed within naturalistic models. Differential parental investment predicts sex-differentiated mating strategies and resource negotiation patterns across societies (Trivers, 1972; Buss, 1995). Patriarchal regimes intensify where warfare, inheritance structures, and property accumulation amplify male coalition advantages (Boehm, 1999; Hill et al., 2011). Feminist critiques rightly identify inequality but err in rejecting evolutionary foundations that clarify why domination persists and what institutional levers effectively mitigate it.

Crucially, evolutionary anthropology transcends reductionist mischaracterizations. Culture is neither genetic determinism nor ideological epiphenomenon nor symbolic self-enclosure. It is an evolutionarily structured population process with emergent properties irreducible to biology alone yet fully continuous with it. Meaning matters because minds process meaning; power matters because coalitions reward power; history matters because selection pathways are contingent upon demographic trajectories and institutional innovation sequences.

Naturalistic anthropology therefore restores anthropology's explanatory vocation. Cultural patterns once rendered mysterious by interpretivism, overdetermined by Marxist materialism, or flattened by ecological determinism emerge as lawful outcomes of interacting cognitive and evolutionary dynamics. The causal chain is continuous: evolved psychological architecture generates learning biases; biases shape cultural transmission; institutions scaffold transmission fidelity; demographic competition filters cultural packages; selective success feeds back into genetic and psychological distributions. Culture is not opposed to nature. Culture is nature operating at a different evolutionary scale. Only when anthropology embraces this framework can it transcend hermeneutic storytelling and become once again a genuinely scientific discipline capable of explaining—not merely describing—the patterned diversity of human societies.

10. Conclusion – Culture Without Fetishism

Culture is neither a mystical superorganic force hovering above individual minds nor a mechanical ideological reflex of economic production. It is a natural evolutionary system generated by cognitively guided social interaction unfolding within ecological and institutional landscapes. Across the history of anthropological theory, successive schools have oscillated between two symmetric errors: idealism, which detaches culture from biological causation and reduces explanation to symbolism and meaning, and material determinism, which collapses culture into infrastructural constraints without specifying psychological mediation. Both traditions have produced descriptively rich accounts yet failed to converge on a coherent explanatory framework capable of integrating symbolic meaning, political power, and historical contingency within law-governed causal models.

Classical evolutionism offered comparative ambition but fell prey to teleological linearity, mistaking cultural diversity for developmental lag rather than stable adaptive pluralism. Boasian historicism rejected teleology but abandoned cross-cultural explanation altogether, substituting narrative particularism for causal inquiry and transforming “culture” into a superorganic explanatory black box. Functionalism recognized adaptation but attributed agency to social systems rather than individuals, invoking equilibrium metaphors that masked underlying strategic interactions. Cultural ecology revived environmental realism yet succumbed to ecological determinism, treating culture as a direct ecosystem output rather than as the consequence of cognitive decision processes operating under constraint.

Psychological anthropology attempted reintegration through psychodynamic speculation, deriving collective character from psychoanalytic fictions unsupported by experimental psychology. Structuralism moved toward cognition but replaced mechanisms with algebraic semiotics, envisioning deep symbolic grammars without experimental substrates. Marxist anthropology illuminated political economy but bypassed mental processes, treating ideology as an automatic projection of material relations rather than an outcome of motivational selection systems governing coalition formation and norm enforcement. The interpretive turn completed anthropology’s withdrawal from explanation altogether, collapsing culture into discourse and meaning webs immune to causal modeling. Feminist and postcolonial approaches powerfully documented injustice and domination yet largely rejected biological explanation as intrinsically suspect, thereby sacrificing causal depth for ideological critique.

Each of these traditions identified genuine aspects of cultural complexity yet isolated them within partial frameworks. Symbolism mattered, but without psychological mechanisms it became descriptive excess. Power dynamics mattered, but without coalitional psychology they remained sociological abstractions. Material constraints mattered, but without behavioral ecology they became deterministic simplifications. History mattered, but without learning models it lacked generative logic. Anthropology accumulated insight without integration, producing theoretical fragmentation rather than cumulative knowledge.

Evolutionary and cognitive anthropology absorb these fragmented insights into a unifying causal synthesis. Culture is defined as socially transmitted information implemented by evolved learning architecture and shaped by selection dynamics acting across individual, group, and institutional levels (Boyd & Richerson, 1985; Rich-

erson & Boyd, 2005; Henrich, 2015). Cultural traits proliferate or decline according to systematic transmission biases—prestige imitation, conformity preference, success-biased learning, and emotional salience—not according to semiotic self-organization or ideological fiat. Symbolic meaning emerges because human cognition is tuned toward narrative agents, moral norm violation, kin protection, and coalition threat detection (Boyer, 2001; Haidt, 2012; Norenzayan, 2013). Ritual significance persists because emotional synchrony, identity fusion, and reputational signaling stabilize cooperation (Whitehouse, 2021). Institutions matter because they engineer learning environments that standardize transmission, enforce sanctions, and maintain normative fidelity over generations.

Power produces cultural effects not through discursive mystification but through evolved dominance systems, prestige hierarchies, mating competition, and ethnicity-based coalition psychology (Henrich & Gil-White, 2001; Boehm, 1999; Tooby & Cosmides, 2010). Gender asymmetries persist because differential parental investment alters competitive strategies in ways moderated—but never erased—by local cultural regulation (Trivers, 1972; Buss, 1995; Hrdy, 2009). Religious and moral ideologies stabilize social coordination by capitalizing on supernatural monitoring intuitions and fairness enforcement heuristics essential for large-scale cooperation (Norenzayan et al., 2016).

Historical contingency remains central yet becomes intelligible rather than inscrutable. Cultural lineages reflect path-dependent sequences shaped by demographic scale, warfare intensity, technological scaffolding, and kinship restructuring. Nowhere is this clearer than in the gene–culture coevolutionary model of WEIRD psychology. Medieval European family reforms dismantled clan systems and transformed mating strategies, inheritance structures, and social trust patterns over centuries, thereby generating selective pressures that reshaped cognitive styles toward analytic reasoning, norm universalism, and stranger cooperation (Henrich, Heine, & Norenzayan, 2010; Henrich, 2015). This is not cultural “construction” untethered to biology, but coevolutionary transformation driven by institutional selection affecting both cultural traits and psychological dispositions.

Naturalistic anthropology thus rescues the legitimacy of comparative and nomothetic explanation without resurrecting evolutionary teleology or racial typologies. Human psychological architecture is universal while cultural expression is plural because shared learning mechanisms interact with divergent socioecological constraints to

generate stable adaptive diversity. Societies differ not along a single ladder of progress but across multidimensional landscapes of cooperative organization, subsistence strategies, political integration, and symbolic regulation. No moral hierarchy follows from these differences. What emerges instead is an evolutionary geography of social forms.

Importantly, abandoning cultural fetishism does not diminish the value of anthropology's ethical commitments. Recognizing biological foundations does not naturalize domination or justify inequality. On the contrary, it clarifies why oppression persists and how institutional reforms may counteract evolved power asymmetries. Policies that disregard psychological incentives routinely fail because they confront coalitional instincts and reputational calculus rather than harness them. Evolutionary insight enables normative critique to become operational rather than rhetorical.

Anthropology's future lies in this explanatory reintegration. The discipline must reject both interpretive insulation and infrastructural determinism to reestablish itself as a mature science of humanity bridging cognition, biology, and history. Culture becomes not a hermeneutic mystery nor an ideological residue but an analyzable evolutionary system capable of generating meaning, power, morality, and diversity through natural processes.

Culture without fetishism is culture restored to intelligibility. Anthropology without causal explanation is anthropology without theoretical purpose. Only by embracing cognitive naturalism can the field fulfill its scientific vocation: explaining how minds, institutions, and histories interact to generate the immense plurality—and fragile unity—of human cultural life.

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