

Archetype Killers

Tahir Rahman¹ and J. Reid Meloy²

¹ Department of Psychiatry, School of Medicine, Washington University in St. Louis

² San Diego Psychoanalytic Center, San Diego, California, United States

Human cognition is scaffolded by ancestral archetypes—deeply imprinted, evolutionarily conserved patterns of perception, emotion, and behavior that have been established across generations. These innate structures serve as motivational templates that filter experience and shape identity long before conscious reflection begins. Targeted violence, an escalating public safety threat, is often marked by archetypal amplification, as seen in many school shootings, assassinations, and terrorist acts. This article presents the ARCH triad—a heuristic framework comprising extreme overvalued beliefs, imprinted archetypes, and thymotic drive—to explore the psychobiological roots of some acts of targeted violence. We examine how these components interact across neurodevelopmental, ethological, and cultural levels, and demonstrate their relevance through brief case analyses of several attackers. Implications for behavioral threat assessment, particularly within the Terrorist Radicalization Assessment Protocol–18 framework, are explored. We also identify potential neuroethological markers—such as symbolic releasers, fixed archetypal action patterns, and last-resort cognition—that may inform future artificial intelligence-driven tools for early intervention and forensic risk formulation. While not predictive, the ARCH model provides an additional lens for interpreting symbolic and motivational dynamics in targeted violent behavior.

Public Significance Statement

The ARCH triad—extreme overvalued beliefs, archetypes, and thymotic drive—provides a new lens to understand the symbolic and motivational dynamics behind acts of targeted violence. By exploring how identity, moral emotion, and cultural narratives converge, this framework can enhance the interpretation of complex behaviors. Case examples illustrate how ARCH can deepen the explanatory power of threat assessments without replacing existing validated tools like the Historical Clinical Risk Management–20 V3 or Terrorist Radicalization Assessment Protocol–18.

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racially motivated science during the 1940s. As others have noted (e.g., Sapolsky, 2018), Lorenz's scientific legacy must be viewed critically, with full recognition of the ethical failures associated with aspects of his work. Lorenz was also a physician, and his biography serves as a poignant reminder of the moral responsibility that comes with the profession. This history underscores the enduring obligation to uphold ethical standards in all scientific inquiry.

Correspondence concerning this article should be addressed to Tahir Rahman, Department of Psychiatry, School of Medicine, Washington University in St. Louis, 660 South Euclid Campus, Box 8134, St. Louis, MO 63110, United States. Email: trahman@wustl.edu

Humans are a species that tells stories of gods and justice, then builds weapons to fulfill them. The danger lies not only in our instincts but in the symbols we identify as our destiny.

Targeted violence poses a growing challenge to public safety, often emerging from a convergence of identity, belief, and motivation. Among the cognitive–affective drivers implicated in such attacks is the concept of extreme overvalued beliefs (EOBs)—rigid, emotionally charged convictions that are culturally or subculturally shared and become fused with an individual’s sense of self (Kristinsdottir et al., 2025; Meloy & Rahman, 2021; Rahman, 2018). These beliefs are frequently relished, amplified, and defended and are distinguished from delusions or obsessions by their cultural context, affective intensity, and resistance to challenge (McHugh, 2006).

Complementing EOBs are archetypes—innate psychological templates first conceptualized by Carl Jung as universally recurring patterns in the human psyche. While not genetically encoded in the conventional sense, archetypes are thought to arise from evolutionary pressures and are shaped by early developmental and cultural experiences (Haule, 2010; Jung, 1959; Major, 2021). Archetypes influence how individuals construct meaning, interpret symbols, and form identity narratives. Jung warned that excessive identification with a particular archetype can precipitate pathological outcomes, describing it as a psychological “torrent” that overwhelms individual agency and unleashes collective energies with destructive potential (Jung, 1959, p. 351). As a historical example, Jung argued that Adolf Hitler invoked the Hero and Savior archetypes in the German populace, contributing to the mass psychological mobilization that underpinned the rise of Nazism (Evans, 1964).

To these two domains, we add a third: thymotic drive—the evolutionarily conserved motivational force for recognition, moral significance, and status, encompassing *amour-propre* (Hirsch & Shepherd, 1974; Plato, ca. 380 BCE/1997; Succar et al., 2023). Taken together, these three factors—Archetype, Drive, and Culture—interact to shape some acts of targeted violence, particularly in cases where identity is fused with personal grievance and moral absolutism. We formalize this interaction with the following behavioral equation, called the ARCH model:

$$\text{Targeted Violence} = A \times D \times C. \quad (1)$$

In this model, *A* represents *archetypal identification* (e.g., Warrior, Martyr); *D* denotes *motivational intensity*—particularly thymotic drives such as honor, outrage, or legacy; and *C* captures the cultural narratives, symbols, or belief systems that frame meaning-making and behavior, often manifesting as EOBs. The multiplicative structure implies that if any component is absent or inactive, the behavioral expression may not occur (e.g., $1 \times 1 \times 0 = 0$). This reflects a threshold model, where the presence and interaction of factors increase the likelihood of violence, but no single element is determinative.

As Monahan and Steadman (1996) noted, targeted violence should be understood more like a weather system than an earthquake: Its emergence depends on the convergence of multiple dynamic conditions, not on a single precipitating event. Just as a dryline, frontal system, and jet stream must converge to produce violent tornadoes, the psychological and symbolic forces described in the ARCH model may align to create the conditions for ideologically motivated violence. The ARCH triad does not replace validated risk assessment tools, but rather complements structured professional judgment approaches such as the Terrorist Radicalization Assessment Protocol (TRAP-18) by offering a symbolic-cognitive and integrative lens to deepen understanding of attacker psychology and inform prevention, intervention, and forensic analysis. In the sections that follow, we elaborate on each component of the ARCH model, apply it to case studies, and examine its integration with existing threat assessment frameworks.

Primary and Secondary Archetypes

The Warrior or “pseudocommando” archetype has long been recognized in structured professional judgment tools for assessing violence risk (Dietz, 1986; Hempel et al., 1999). Building on this foundation, we propose a set of primary existential archetypes—Victim, Hero, Warrior, Avenger, Savior, Outlaw, and Martyr—which serve as deeply embedded motivational templates. These archetypes shape how individuals construct meaning, form identity, and interpret their roles within moral or ideological struggles. In cases of targeted violence, such archetypes often dominate an individual’s self-concept, filtering experience through symbolic frameworks that justify action (Meloy & Rahman, 2025).

In contrast, secondary archetypes—such as Terrorist, Assassin, Mass Shooter, Cult Leader, Lone Actor, Vigilante, and Suicide Bomber—emerge as culturally contingent expressions of the more universal primary forms. These secondary roles are often shaped by specific subcultural narratives and serve as operational identities through which individuals enact deeper archetypal scripts.

The relationship between these archetypes and EOBs is especially evident in psychiatric contexts where rigid, identity-fused beliefs dominate. For instance, individuals with anorexia nervosa may structure their self-concept around triads such as Victim–Martyr–Beauty, while those who engage in self-injury may adopt Victim–Martyr patterns. These configurations are often reinforced by internal narratives involving suffering, purification, or symbolic transformation. Such symbolic roles can scaffold maladaptive behaviors and justify self-directed or outward aggression (Hafez, 2006; Meloy & Rahman, 2025).

Emerging research into psychedelic therapies and altered states of consciousness may provide further insight into how archetypal imprints become rigidly encoded—and how they might be decoupled or restructured. States of awe, ego dissolution, or neuroplastic reorganization may offer opportunities for interrupting maladaptive symbolic identifications and replacing them with more flexible or prosocial frameworks (Siegel et al., 2024).

We propose that primary archetypes are often imprinted (Behroozi et al., 2024) during developmentally sensitive periods, forming what we term “fixed archetypal action patterns” (FAAPs)—emotionally charged, structured behavioral scripts that lie dormant until triggered by a symbolic cue. This concept extends classical ethological models of fixed action patterns (FAPs) and sign stimuli, as developed by Konrad Lorenz and Niko Tinbergen. Lorenz, a Nobel laureate and founder of modern ethology, studied instinctive behaviors and imprinting in animals. Tinbergen, also a Nobel laureate, was instrumental in identifying how specific stimuli trigger fixed behavioral responses. Their work demonstrated that seemingly complex behaviors could be activated by simple environmental cues—principles we apply here to symbolic human aggression (Hess, 1973; Lorenz, 1935, 1950, 1963; Tinbergen, 1951).

In a 1975 interview, Konrad Lorenz compared the behavior of Nazi youth—emotionally mobilized by Hitler—to instinctive animal aggression (Evans, 1975). He drew on ethological research,

such as Tinbergen’s studies of a small fish species called the stickleback. Male sticklebacks are strongly territorial and will attack any object with a red underside, which mimics the breeding coloration of rival males (Tinbergen, 1951). Remarkably, they would attack a crude red-painted model while ignoring more realistic fish-shaped models that lacked red.

This automatic response illustrates the concept of a FAP, which is defined by the following:

1. A specific trigger (e.g., red coloration) that reliably initiates the behavior.
2. A stereotyped attack sequence that unfolds in a predictable, species-typical way.
3. Independence from prior learning—the behavior is innate rather than acquired through experience.
4. Completion once initiated, such that the attack sequence proceeds to its endpoint even if the triggering stimulus is removed.

While such sequences in animals are triggered by immediate sensory input, Lorenz and modern ethologists argue that human aggression is symbolically mediated (de Waal, 2005; Haidt, 2012; Lorenz, 1963, 1978; Sapolsky, 2018). In our model, a symbolic imprinter (such as an emotionally charged ideological experience) lays down the latent archetypal script. A symbolic releaser (such as a perceived injustice or socio-political event) then activates that script, resulting in a ritualized yet flexible behavioral response. For example, whereas a primate may attack in response to a direct territorial intrusion, a human attacker might be triggered by a political cartoon, a perceived insult to a sacred text, or the symbolism of a government building—stimuli that carry no immediate threat but are laden with ideological meaning. Although rooted in conserved motivational circuitry, the expression of these behaviors is filtered through cultural, symbolic, and cognitive layers that are *symbolic imprinters* and *symbolic releasers*.

Symbolic imprinters are emotionally powerful exposures—often involving awe, injustice, or moral conviction—that become deeply embedded in a person’s psyche (Keltner & Haidt, 2003). These experiences are especially potent when they occur during developmentally sensitive periods, such as adolescence, but even later exposures can have a lasting impact when they are repeated or emotionally intense. Religious messages, political

ideologies, or stories of victimization can shape how individuals view the world and themselves. For example, Timothy McVeigh was influenced by the Waco siege and *The Turner Diaries*, Lee Harvey Oswald by Marxist propaganda, and Anders Breivik by online nationalist narratives. These exposures did not just form opinions—they embedded symbolic identities, like *Warrior*, *Martyr*, or *Avenger*, which became central to how these individuals understood grievance and purpose.

Later, symbolic releasers—such as a government building, a political event, or a perceived injustice—can reactivate these internal scripts. The response is not impulsive but often ritualized and symbolic. In humans, aggression is not merely reactive—it is shaped by representational or symbolic meaning, where places, people, or events come to stand for abstract threats to identity, morality, or justice. This symbolic encoding and release process helps explain how violence can be deeply structured, goal-directed, and ideologically framed.

Ethological and Evolutionary Basis for Symbolic Imprinting

Lorenz (1963) originally asserted that intra-species lethal aggression was uniquely human. However, later primatological research refuted this claim. Male chimpanzees (*Pan troglodytes*) have been observed engaging in coordinated, lethal coalitionary raids against members of neighboring groups—featuring stealthy approach, strategic positioning, and explosive ambush tactics (Evans, 1975; Goodall, 1986; Meloy, 2006; Morris, 2017). These behaviors strongly resemble human acts of predatory violence and suggest that the capacity for structured group aggression predates the emergence of symbolic language.

Such raids are typically triggered by the presence of an outsider and unfold in a stereotyped but flexible sequence—a blend of innate structure and contextual responsiveness. While not rigid FAPs, these sequences reflect evolved behavioral adaptations for territorial dominance, alliance reinforcement, and group survival (de Waal, 2005; Morris, 2017; Wrangham & Glowacki, 2012). This animal-to-human continuity supports the hypothesis that innate aggression mechanisms in primates have evolved in response to increasing cognitive and social complexity, culminating in symbolically mediated

forms of violence in humans (de Waal, 2005; Goodall, 1986). In this context, symbolic imprinting can be conceptualized as a higher order cognitive adaptation: Culturally encoded, emotionally salient experiences lay down neural “scripts” for aggression, which are later activated by symbolic cues or ideologically loaded events (Evans, 1964, 1975).

This framework aligns closely with Jung’s concept of archetypes as deeply rooted cognitive structures that shape behavioral predispositions, emotional reactions, and symbolic meaning-making (Jung, 1959, 1964). Whereas Lorenz and Tinbergen described the biological mechanisms of aggression (Hess, 1973; Lorenz, 1963, 1978), Jung’s model explains how such patterns are psychically encoded and reinterpreted through cultural and symbolic contexts. In this way, ancient motivational circuitry can be activated not by immediate threats, but by symbols that represent grievance, injustice, or identity. Later in this study, we elaborate on the neurobiological underpinnings that unify these perspectives, showing how conserved aggression mechanisms—rooted in evolution—can be expressed through archetypal cognition and culturally mediated behavior.

Finally, thymotic drive—the desire for recognition, justice, honor, moral absolutism, or legacy—represents a third critical component of this behavioral architecture. Though long recognized in philosophy and political theory, thymos has been largely overlooked in psychology (Perl et al., 2015). As a motivational force rooted in status-seeking, moral outrage, and self-transcendence, it plays a pivotal role in symbolic and ideologically motivated violence (Esposito & Perez, 2022; Ganesh, 2020; Rahman, 2025).

These domains—EOBs, archetypal identification, and thymotic drive—form the ARCH triad. For heuristic purposes, these components can be remembered using the acronym EARTH: E for EOBs, AR for archetypes, and TH for thymotic drive. In the following section, we explore case studies that illustrate how these components converge in prototypical acts of targeted violence.

Case Studies of Archetype Killers

The following case studies illustrate how the ARCH triad—EOBs (EOBs), archetypal identification, and thymotic drive—interact to shape targeted violence. These individuals exemplify what we term “archetype killers,” whose motivations can

be meaningfully interpreted through symbolic imprinting, identity fusion, and legacy-driven aggression.

Case 1: Timothy McVeigh (Terrorist)

McVeigh embodies the *Victim–Warrior–Avenger* archetype, shaped by a fusion of extremist ideological beliefs (EOBs) and a potent thymotic drive. His deep resentment toward the U.S. government was amplified through exposure to antigovernment narratives such as *The Turner Diaries* (Meloy & Yakeley, 2014; Toobin, 2023). The federal sieges at Ruby Ridge and Waco served as symbolic imprinters, embedding the belief that the federal government was a tyrannical oppressor responsible for killing innocent civilians (Meloy, 2004). This cognitive-emotional imprint remained dormant until a symbolic releaser activated it: the Alfred P. Murrah Federal Building, which he perceived as a physical embodiment of government power and impunity. McVeigh’s bombing of the building was not merely destructive; it was a ritualized act of vengeance, fulfilling a narrative of historical retribution and cementing his identity within a militant antigovernment subculture. His actions reflect the convergence of FAAPs, rigid ideological schemas, and a legacy-seeking thymotic drive.

Case 2: Lee Harvey Oswald (Assassin)

Oswald exemplifies the *Victim–Warrior–Hero* archetype, formed through a combination of Marxist ideological indoctrination, social alienation, and a quest for historical significance. From adolescence, exposure to leftist propaganda and Cold War rhetoric acted as symbolic imprinters, fostering a belief in capitalism as inherently oppressive and reinforcing Oswald’s self-perception as a revolutionary figure. The public announcement of President John F. Kennedy’s motorcade through Dealey Plaza in Dallas functioned as a symbolic releaser, catalyzing Oswald’s transformation from frustrated outsider to self-appointed agent of justice. This act was further propelled by personal instability, including the deterioration of his marriage, heightening his desperation for recognition. Oswald’s decision to act—meticulously timed and symbolically charged—reveals the full expression of thymotic motivation: the desire to transcend obscurity and be remembered through a morally framed act of

political violence (Bugliosi, 2007; Mailer, 2007; Posner, 1994; Rahman & Abugel, 2024).

Case 3: Adam Lanza (Mass Shooter)

Lanza fits the *Victim–Hero–Avenger* archetype, molded by misanthropy, profound social alienation, and fixation on suicidal mass violence. His extensive study of previous school shooters served as a symbolic imprinter, reinforcing the belief that violence could provide personal significance and legacy. Within deviant online subcultures that glorify mass killings, Lanza internalized narratives that positioned perpetrators as powerful and transcendent. The Sandy Hook Elementary School functioned as a symbolic releaser, offering a stage upon which to enact his deeply encoded script (Rahman & Abugel, 2024). Unlike psychosis, his motivation was shaped by symbolic cognition and archetypal identity, with the attack serving as a distorted effort at self-definition and legacy inscription within a nihilistic moral frame.

These cases demonstrate how the ARCH triad can be used to interpret the motivational architecture of targeted violence. By identifying the interplay of archetypal roles, extreme beliefs, and thymotic drives, practitioners can gain deeper insight into the pathways leading to high-profile attacks. In each case, symbolic imprinting and triggering events catalyzed a transition from grievance to action, guided by a structured archetypal script and the pursuit of recognition or legacy. Together, these cases exemplify how symbolic imprinting, archetypal self-concepts, and thymotic drive coalesce in the psychology of targeted violence. The term “archetype killers” thus designates a specific class of individuals whose actions reflect the interaction of conserved behavioral templates, emotionally charged belief systems, and legacy-seeking motivation. In subsequent sections, we examine how the ARCH triad can be integrated with existing structured professional judgment models, such as the TRAP-18, to enhance meaning and deepen behavioral threat assessment.

EOBs

EOBs offer a powerful framework for understanding the imprinting of ideologically motivated violence. Originating in the early psychiatric writings of Wernicke (1900), EOBs are characterized by rigid, emotionally charged, and culturally

reinforced beliefs that dominate a person's cognition and identity (Jaspers, 1913; Rahman et al., 2019). These beliefs are typically shared within a group, relished by the individual, and increasingly resistant to challenge over time, particularly when emotionally amplified (Mullen et al., 2009). When fused with strong affect and identity, EOBs can lead to behaviors that transgress legal or moral norms (Freudenreich, 2020; McHugh, 2006; Meloy & Hoffmann, 2021; Rahman, 2018; Rahman & Abugel, 2024; Zorumski & Rubin, 2011).

Distinguishing Delusions From EOBs

EOBs must be carefully differentiated from delusions, which are hallmark symptoms of psychotic disorders such as schizophrenia or substance-induced psychosis. Delusions are false, idiosyncratic, and not culturally shared, such as the belief that "a microchip has been implanted in my brain" or "bugs are burrowing into my skin." They often co-occur with other symptoms of psychosis, including disorganized speech, hallucinations, and behavioral disintegration.

Management of patients with delusions may include civil commitment, antipsychotic medication, and structured clinical oversight, depending on applicable legal and medical frameworks. In contrast, EOBs are not inherently pathological, are typically shared within a cultural or subcultural context, and are distinguished by their emotional salience, identity fusion, and moral framing (Freudenreich, 2020; Jaspers, 1913; Rahman & Abugel, 2024; Rahman et al., 2013, 2016, 2020).

Historical Origins and Clinical Definition

Wernicke illustrated the concept of EOB through the character of Rodion Raskolnikov in *Crime and Punishment*. Raskolnikov's belief that he was an "extraordinary man" entitled to commit murder for a higher purpose—a belief he modeled after Napoleon—serves as a classic case of a pathological overvalued idea (Rahman et al., 2019; Wernicke, 1900). Though this conviction was not delusional, it dominated his reasoning and ultimately justified violence, culminating in his psychological disintegration.

Wernicke emphasized that many socially accepted values—such as honor, justice, modesty, or cleanliness—are not pathological in themselves. However, when these values become emotionally overvalued and ideologically rigid,

they can be transformed into EOBs. This overvaluation increases the risk of disproportionate or harmful action, such as violence in defense of perceived slights, injustices, or identity threats (Rahman & Abugel, 2024; Rahman et al., 2019; Wernicke, 1900).

The formal definition of EOBs is as follows:

An extreme overvalued belief is one that is shared by others in a person's cultural, religious, or subcultural group. The belief is often relished, amplified, and defended by the possessor of the belief and should be differentiated from an obsession or a delusion. The belief grows more dominant over time, more refined and more resistant to challenge. The individual has an intense emotional commitment to the belief and may carry out violent behavior in its service. (Rahman & Abugel, 2024, p. 9)

EOBs frequently become binary, simplistic, and absolute, especially in contexts of ideological extremism or subcultural radicalization (Meloy & Rahman, 2021; Rahman et al., 2021). Their power lies in their emotional fusion with identity and group belonging and in their capacity to moralize violence as necessary, redemptive, or heroic.

Archetypal Imprinting

Carl Jung described archetypes as innate behavioral templates that guide human perception, emotion, and action—analogous to instinctual programs observed in animals. He compared these structures to inherited behavioral patterns in wasps building nests and stinging prey, birds migrating, or eels returning to the Sargasso Sea—patterns that emerge spontaneously without explicit learning (Jung, 1950, 1959; Major, 2021). In Jung's view, human beings are similarly equipped with pre-configured cognitive-affective systems—such as *Warrior*, *Mother*, or *Martyr* archetypes—that structure how individuals respond to key social and symbolic situations (Jung, 1953, 1964).

Konrad Lorenz later echoed and biologically formalized this view, asserting that such patterns are "blueprinted into the genome" (Evans, 1975, p. 58). Drawing on his foundational work in ethology, Lorenz proposed that just as FAPs in animals are triggered by innate releasing mechanisms, humans possess neurobiologically conserved archetypal systems that can be activated by symbolic, emotionally charged stimuli (Evans, 1975; Lorenz, 1963).

These innate behavioral systems, or archetypes, are typically imprinted during developmentally sensitive periods, shaped by early exposure to

emotionally significant experiences, narratives, or social roles. Once imprinted, they form FAAPs—structured behavioral scripts that remain latent until released by a relevant cue. For example, exposure to narratives of injustice or betrayal in adolescence may encode a *Victim–Avenger* archetype, which later becomes activated by a perceived societal grievance (Duncan, 1991; Rahman, 2025).

This ethologically grounded model allows archetypes to be understood as evolutionarily conserved neurocognitive circuits—not mythic abstractions, but biologically plausible motivational architectures. Their activation helps explain the patterned, symbolic nature of many acts of targeted violence, particularly when these imprinted scripts are fused with EOBs and legacy-seeking drives. In the following section, we explore how these systems manifest within neural circuitry and threat-related cognition.

The Warrior Archetype

The Warrior archetype is frequently observed in cases of targeted violence, particularly among individuals who perceive themselves as combatants in a moral or ideological conflict. Early conceptualizations in threat assessment literature described this pattern as the “pseudocommando” (Dietz, 1986) and “warrior mentality” (Hempel et al., 1999). Such individuals often adopt a hybrid identity composed of *Warrior*, *Hero*, *Avenger*, *Outlaw*, and *Martyr* roles—each archetype contributing motivational structure and symbolic justification for violence (Duncan, 1991).

A clear example is Timothy McVeigh, who aspired to become a historically significant figure through retributive action. He viewed the Oklahoma City bombing as a catalyst for revolution and framed himself as the first hero of a second American Revolution (Michel & Herbeck, 2001; Meloy files). His bumper sticker during the Waco standoff—“When guns are outlawed, I will become an outlaw”—illustrates the fusion of *Outlaw* and *Warrior* archetypes within a grievance-saturated moral narrative (Rahman, 2025; Rahman & Abugel, 2024).

Although the Warrior archetype is referenced in structured professional judgment tools such as the TRAP-18, its neurobehavioral and ethological basis has remained underexplored. The ARCH model situates this archetype within an evolutionarily conserved behavioral

system—activated by symbolic imprinting, reinforced by EOBs, and intensified by thymotic drive. In subsequent sections, we explore how related archetypes—*Victim*, *Avenger*, and *Martyr*—align with specific TRAP-18 indicators such as *Personal Grievance and Moral Outrage*, *Identification*, and *Last Resort*, offering an integrated framework for understanding the symbolic and motivational architecture of targeted violence.

Archetypes and Neuroscience

Contemporary neuroscience supports the plausibility of archetypes as neurobiologically instantiated behavioral templates. As LeDoux (2003) described in *The Synaptic Self*, identity is encoded through synaptic connectivity shaped by experience, emotion, and evolution. Archetypal roles, in this view, are not abstractions but emergent properties of neural systems—structured patterns of motivation and behavior shaped by ancestral selective pressures.

Ethological parallels can be observed in the behavior of nonhuman primates. Goodall (1986) and Frans de Waal (2005) have documented forms of aggression and social regulation in chimpanzees that closely resemble human behavioral archetypes:

- The Warrior engages in proactive, strategic violence, asserting dominance and controlling territory or resources.
- The Avenger retaliates against specific past grievances, often with targeted aggression reflecting long-term memory and grudges.
- The Martyr, though rarer, engages in self-sacrificial behavior in group defense—such as solitary fighting to protect coalition members.

These behavioral patterns are not merely metaphorical. They represent recurrent evolutionary strategies in both primate and human social conflict, reinforcing the idea that archetypes reflect conserved motivational systems. Terrorists often exhibit the same structured patterns: planned violence, grievance-based retaliation, and symbolic self-sacrifice, frequently framed within ideological or moral language (Duncan, 1991; Šolc & Didier, 2018; Sapolsky, 2018).

The documentary *Rise of the Warrior Apes* (Morris, 2017) provides visual documentation of these behavioral patterns in the Ngogo chimpanzees of Uganda—the most aggressive known

chimpanzee community. Their coalitional raids, strategic targeting, and dominance rituals mirror the structural logic seen in human predatory violence. Chimpanzees also display behaviors consistent with moral–emotional processing, such as responses to norm violations, perceived unfairness, and threats to group cohesion (Broom, 2006). While lacking human language or abstract ideology, their punitive, regulatory, and reconciliatory behaviors suggest a phylogenetic foundation for moral emotions, rooted in evolved systems for alliance maintenance and social enforcement. Although often misunderstood as metaphysical, Jung’s original writings reveal a strong ethological orientation. He described archetypes as “patterns of instinctual behavior” and noted:

There is nothing to prevent us from assuming that certain archetypes exist even in animals, that they are grounded in the peculiarities of the living organism itself and are therefore direct expressions of life whose nature cannot be further explained. (Jung, 1943/1953, p. 69)

Jung was deeply influenced by Darwin’s theory of evolution and often wrote about inherited patterns of behavior that shape how we think and feel. Phylogenetics is the study of how traits—like behavior, body structures, or even instincts—are passed down and gradually change across species over time. For example, all living things use DNA to pass on information from one generation to the next, including the basic building blocks of behavior. His early formulations align more closely with modern ethology and affective neuroscience than with mystical psychology (Haule, 2010; Major, 2021). When seen through this lens, archetypes—such as the *Warrior*, *Martyr*, or *Avenger*—should be understood as biologically grounded, or blueprinted behavioral scripts, encoded in evolutionarily conserved neural systems and expressed across species through varied but homologous social roles.

Victim to Warrior Transformation

The *Victim* archetype reflects a perception of personal injustice, humiliation, or betrayal. This cognitive–affective position often leads to grievance collecting—the internal accumulation of perceived slights—and can evolve into an *Avenger* or *Warrior* posture (Meloy & Rahman, 2025; O’Toole, 2000). Offenders such as Anders Breivik framed themselves as victims of multiculturalism, which

he claimed threatened his national identity. When perceived injustice fuses with ideological framing, this role may escalate into EOBs and ritualized violence (Meloy, 2017; Rahman & Abugel, 2024; Rahman et al., 2016).

Within radicalized groups, the *Warrior* archetype often becomes overvalued. Attackers begin to see themselves as righteous combatants in a sacred or moral war. This transformation—especially when paired with the *Hero* or *Martyr* archetypes—can crystallize into binary thinking: *us versus them*, *righteous versus corrupt*, and *good versus evil*. Jung referred to this overwhelming psychic dominance as archetypal inflation, analogous to Wernicke’s description of an overvalued idea (Hamilton, 2024; Jung, 1953; Wernicke, 1900).

The Martyr and Avenger Archetypes

The *Martyr* archetype is marked by self-sacrificial behavior in service of an ideological cause. The 9/11 hijackers, for instance, engaged in preparatory rituals—shaving body hair, cleansing themselves—that aligned with symbolic notions of moral purification (Innes & William, 2021; McKay, 2011). Similar rituals are observed in primates, such as increased grooming before confrontation, which may reduce stress and enhance bonding through oxytocin release (Crofoot et al., 2011).

The *Avenger* archetype, by contrast, is rooted in retaliatory justice. Offenders such as Timothy McVeigh blended *Victim*, *Warrior*, and *Avenger* roles, portraying federal agents as enemy soldiers whose violence (e.g., Waco, Ruby Ridge) justified his bombing of a federal building (Rahman & Abugel, 2024).

Constructive Leadership Archetypes

In contrast, leaders like Dr. Martin Luther King Jr., Cesar Chavez, and Mahatma Gandhi embody archetypes such as *Visionary*, *Healer*, and *Advocate*. They are guided by isothymia—the drive for equal recognition—rather than megalothymia, which seeks superiority through dominance or destruction (Fukuyama, 1993). Civil rights leaders build social change through collective empowerment, whereas archetype killers tend to fixate on grievance, rigidity, and violent legacy.

Recognizing this divergence is crucial for threat assessment and violence prevention. In

some cases, individuals contemplating violence can redirect their identity through adaptive archetypal activation. For example, Aaron Stark, who once planned a school shooting, later became an advocate for prevention, publishing “I was almost a school shooter” as an act of prosocial narrative redefinition (Dewan, 2022).

The Outlaw Archetype and Cultural Appeal

The *Outlaw* archetype represents defiance against conventional authority (Duncan, 1991). Historical figures like Jesse James, John Dillinger, or Bonnie and Clyde—and fictional characters such as *Robin Hood* or *Dirty Harry*—are often romanticized as rebellious moral agents (Duncan, 1991; Seal, 2011; Souter & Souter, 2014). In modern contexts, this archetype appears in espionage figures like Edward Snowden, seen by some as both *Outlaw* and *Martyr* (Applebaum, 2013), and in mass shooters who emulate stylized predecessors (e.g., the “Trench Coat Mafia” inspired by *Natural Born Killers*; Langman, 2017).

In radicalized subcultures, the *Outlaw* may fuse with the *Warrior* or *Hero* archetypes. For example, Sovereign Citizen groups valorize antigovernment identity, casting the state as a corrupt occupying force (Rahman & Abugel, 2024; Vargen & Challacombe, 2023). These narratives often co-opt legal symbols and historical motifs to frame insurrection as justice.

The *Outlaw* impulse can begin in childhood, seen in status-seeking misbehavior, deception, or attention-seeking pranks—early iterations of rebellion in service of recognition. When reinforced by group validation or ideological rigidity, this trait may scale into violent expression (Rahman, 2025).

Amplified Symbolic Releasers and Ethological Triggers

Much like Tinbergen’s stickleback fish, which attack red-colored objects instinctively, humans may react to symbolic stimuli that act as supra-normal releasers—exaggerated cues that override conscious deliberation (Lorenz, 1963; Tinbergen, 1951). In animal studies, artificially enlarged eggs or exaggerated visual cues elicit stronger behavioral responses than natural ones. In humans, media, ideology, and cultural narratives can amplify certain symbols—schools,

government buildings, political figures—into emotionally loaded targets.

Examples include the following:

- The Alfred P. Murrah Federal Building (McVeigh),
- Dealey Plaza during President Kennedy’s motorcade (Oswald), and
- Sandy Hook Elementary School (Lanza).

These symbolic sites function as releasers, activating FAAPs and driving behavior toward ideologically or emotionally scripted violence. Such acts often unfold along predictable trajectories (Meloy et al., 2021). The TRAP-18 incorporates this ethological logic. The model’s proximal warning behaviors of “energy burst” and “last resort” mirror Lorenz’s theory of aggression discharge, in which both signal an imminent risk of targeted violence (Lorenz, 1935, 1963; Meloy, 2017).

The Allure and Cost of the Outlaw

The *Outlaw* archetype may also intersect with interpersonal dynamics, especially in forensic populations. Research suggests that dominant, antisocial traits—often associated with rebellion and fearlessness—are perceived as attractive by some individuals (Duncan, 1991; Schramm & Sartorius, 2024). In extreme cases, this manifests as romantic or sexual attachment to violent offenders, including serial killers or terrorists. In one forensic sample, 39% of psychopathic male forensic inpatients reported voluntary sexual relationships with female staff, often the youngest and least experienced nursing employees (Gacono et al., 1995).

This dynamic may reinforce the social and sexual appeal of the *Outlaw* identity in adolescent or marginal males. In such cases, violence becomes not only a moral act but also a performative strategy for status enhancement, sexual access, and cultural recognition (Rahman, 2025).

Thymotic Drive

Thymotic drive—the innate human need for recognition, status, honor, and dignity—has its roots in ancient philosophy and is increasingly relevant to modern neuroscience and forensic assessment (Succar et al., 2023). First described by Plato in his tripartite model of the soul, *thymos* was seen as a

motivational force distinct from reason (*logos*) and base appetite (*epithymia*; Plato, ca. 380 BCE/1997). Though long overlooked by psychology, this drive has recently reemerged as a key explanatory mechanism in political philosophy (Fukuyama, 1993; Ganesh, 2020; Lebow, 2015) and behavioral threat models. Modern research suggests that thymotic drive is not merely philosophical—it is biologically conserved. Across species, recognition and hierarchical status strongly influence reproductive success and social cohesion. Ethologists such as Goodall (1990) and de Waal (2007) have documented complex status-seeking behaviors in chimpanzees that include coalition-building, deception, and symbolic dominance displays—behavioral strategies that parallel human social dynamics.

Neurobiologically, thymotic drive may, in part, be linked to the following:

- Dopaminergic reward pathways, which are activated by status achievements (Izuma et al., 2008);
- Testosterone, which rises in response to social challenge and fuels dominance behavior (Archer, 2006; Wingfield et al., 1990); and
- Serotonin, where low levels are associated with aggression and impulsive status-seeking (Higley & Linnoila, 1997).

Importantly, thymotic dynamics operate across genders. While males often pursue direct status displays, females may compete through indirect strategies such as social exclusion or reputation management (Vaillancourt, 2013). These patterns illustrate that recognition-seeking is species-typical, not pathological per se—until it becomes distorted. German psychiatrist Karl Bonhoeffer referred to individuals with overvalued ideas as having “a strongly exaggerated *amour propre*,” leading them to regard “unpleasant experiences as personal insults” (Hirsch & Shepherd, 1974, p. 58).

Pathological Recognition-Seeking and Violence

In many cases of targeted violence, thymotic drive becomes pathologically amplified. Offenders who feel rejected, humiliated, or invisible may channel their need for recognition into violent acts designed to command attention, reshape narratives,

and achieve symbolic immortality. These behaviors are often fused with EOBs that justify violence as righteous, necessary, or heroic (Langman, 2018; Rahman & Abugel, 2024).

A subset of violent offenders, identified by Esposito and Perez (2022), are not motivated by psychosis or material gain but by a need to assert identity, status, and legacy through destruction. These individuals often exhibit narcissistic vulnerability—experiencing routine slights as profound insults—and seek redemption or revenge through acts of symbolic violence.

Offenders such as McVeigh, Breivik, and Lanza exemplify this trajectory. Their attacks were not random but ritualized performances designed to solidify grievance, elevate self-worth, and encode themselves into ideological memory. These acts often involve aestheticized violence, manifestos, and martyrdom fantasies, reinforcing their mythologized status within deviant subcultures (Fox et al., 2023; Meloy & Kupper, 2025).

Self-Harm as Symbolic Communication

The work of Favazza (1996) expands this understanding through the concept of self-harm as social signal. Across cultures, self-injury—including warrior scarification, religious flagellation, and martyrdom—has functioned not just as pain relief but as costly signaling: a way to show commitment, gain recognition, or establish moral superiority.

This logic applies to violent offenders who ritualize their preparations, dress for battle, or record manifestos—acts designed to dramatize their transformation and signal status within a symbolic system. For example, suicide bombers construct their deaths as sacred performances, magnified by ideology and media exposure. Even mass shooters often curate their legacy, leaving behind documents or digital footprints that ensure posthumous notoriety (Kupper & Meloy, 2021; Rahman & Abugel, 2024). These behaviors align with symbolic releasers, in which ritualized violence amplifies its meaning through aesthetic or cultural framing.

Implications for Threat Assessment

Recognizing thymotic drive as a core neurotheological motivator offers practical utility in

behavioral threat assessment. Many attackers are not nihilistic, but desperate for meaning, identity, and status. Their violence is often expressive—an attempt to transform perceived insignificance into historical importance.

Early intervention models should incorporate thymotic dysregulation, especially in contexts of social exclusion, narcissistic injury, or identity crisis. Understanding how recognition-seeking interacts with archetypal roles and EOBs can help differentiate between distress and threat and identify those whose trajectory is accelerating toward ideologically framed violence.

Radicalization, Thymotic Drive, and Ideologically Motivated Violence

Thymotic drive, when amplified or pathologically channeled, can become a powerful motivator for radicalization and ideologically framed violence. Rather than being driven solely by belief systems, many individuals are drawn to extremist groups through the promise of status, belonging, and identity.

As Atran (2010) found, many foreign fighters do not join terrorist movements out of doctrinal conviction, but rather for the *structure, camaraderie*, and *symbolic recognition* they offer. This has a neurobiological basis: Status-related experiences activate dopaminergic reward circuits, and in tight-knit militant groups, oxytocin-mediated bonding reinforces in-group identity—the so-called “band of brothers” effect (Junger, 2011). Social humiliation or perceived status loss may act as symbolic releasers, triggering the need to restore dignity through radical acts.

Thymotic Case Examples: Recognition Through Violence

Several high-profile cases illustrate the pathological expression of thymotic drive—the drive not just to be heard, but to be remembered.

- Timothy McVeigh framed his bombing of the Murrah Federal Building as a historical act of vengeance and revolutionary symbolism. His writings and behavior reflect a deep fixation on honor and legacy—hallmarks of distorted thymotic motivation (Meloy & Holzer, 2023; Michel & Herbeck, 2001).

- Lee Harvey Oswald, the assassin of President John F. Kennedy, also exemplifies this drive. Despite fluctuating ideological attachments (pathoplasticity), his underlying goal—*to matter*—remained constant (pathostability). Oswald experienced chronic rejection and humiliation, and the assassination appears as an act of thymotic desperation: a means to leave a historical mark (Bugliosi, 2007; Posner, 1994; Rahman & Abugel, 2024).
- Anders Breivik, who carried out the 2011 Norway attacks, viewed himself as a *Warrior-Hero-Martyr* defending Western civilization. His manifesto, courtroom behavior, and media manipulation reflected a fixation with legacy and recognition. His violence was not random—it was a symbolic performance of grievance and glory (Rahman et al., 2016).
- Many school shooters exhibit similar dynamics. Pathological narcissism, humiliation, and a drive for posthumous recognition often supersede ideology. The Columbine attackers, for example, documented their desire to surpass prior acts of mass violence. Adam Lanza, the Sandy Hook shooter, engaged in extensive research on previous attackers, suggesting competitive status-seeking rather than political messaging (Lankford, 2016; Rahman & Abugel, 2024).

In all these cases, the need for recognition—thymos—becomes the driver, while ideology, symbolism, or grievance serves as its vehicle. These are not acts of nihilism, but of distorted legacy-seeking.

Empirical Support: A Small Case Series

To explore these dynamics systematically, we analyzed 15 cases of targeted attacks, including the following:

- Five assassins
- Five terrorists
- Five school shooters

Cases were selected based on the availability of detailed public information and the richness of symbolic and motivational data. Sources included media reports, personal writings, court transcripts, and scholarly analyses.

Inclusion criteria required sufficient documentation to assess the presence of the following:

- EOBs
- Primary archetypes (e.g., *Victim*, *Warrior*, *Hero*, *Martyr*, *Outlaw*, *Avenger*)
- Thymotic drive

A thematic analysis approach was used to identify recurring motivational patterns, symbolic triggers, and archetypal alignments. Findings are summarized in Tables 1–3.

Ethical Considerations

In accordance with the Goldwater Rule (American Psychiatric Association, 2009), no psychiatric diagnosis is offered for public figures without personal evaluation. However, where public safety and national security are at stake, it is ethically permissible to analyze publicly available data—including writings, interviews, manifestos, and forensic reports—to identify symbolic, behavioral, and motivational patterns (Kroll & Pouncey, 2016; Rahman & Abugel, 2024). These interpretations are framed as analytical inferences, not clinical assessments. They are intended to enhance our understanding of threat dynamics, recognizing that multiple perspectives and expert interpretations may diverge.

Results

Analysis of 15 targeted violence cases—including five assassins, five terrorists, and five school shooters—revealed consistent archetypal and motivational patterns across groups. EOBs were universally present, providing rigid, emotionally amplified frameworks through which attackers interpreted grievance, identity, and purpose. Likewise, thymotic drive—the need for recognition, significance, or honor—emerged as a unifying motivational force in nearly every case.

Observed Group-Level Patterns

Terrorists consistently demonstrated combinations of the *Victim*, *Warrior*, and *Hero* archetypes. Their actions were driven by ideological rigidity, symbolic grievance, and identification with a cause. Thymotic drive often expressed itself through martyrdom narratives, media statements,

or manifestos aiming to immortalize the attacker's role.

School shooters frequently embodied the *Victim*, *Hero*, and *Avenger* archetypes. All exhibited significant social isolation and externalized blame, often reinforced by deviant subcultures glorifying prior mass shooters. Recognition-seeking was common, with attackers idolizing previous perpetrators and attempting to surpass them in scale or symbolic impact.

Assassins predominantly expressed *Warrior* and *Hero* archetypes, typically motivated by personal or ideological grievances. Their violence was highly symbolic, aimed at individuals representing larger social, political, or moral constructs. Across all three groups, there was no evidence of psychotic delusions or obsessions driving the behavior. Instead, these acts reflected structured belief systems, culturally or subculturally reinforced archetypes, and emotionally intense drives toward meaning, revenge, or legacy.

Case Illustration: John Hinckley Jr.

An illustrative outlier was John Hinckley Jr., who attempted to assassinate President Ronald Reagan in 1981. Hinckley did not act on overt political ideology, but rather sought recognition from actress Jodie Foster, with whom he had developed a pathological fixation.

Hinckley's self-concept was shaped by the film *Taxi Driver*, in which the protagonist, Travis Bickle, transforms from alienated loner to violent vigilante and is paradoxically celebrated for his actions. Hinckley reportedly viewed the film 19 times, internalizing the Hero–Outlaw archetype as a model of symbolic transformation. This case illustrates the libidinal fusion of archetypal identity, overvalued beliefs, and thymotic motivation—where the act of violence becomes a rehearsed performance aimed at commanding attention, validating worth, and rewriting social invisibility into historical consequence (Meloy, 1989). Hinckley's insanity acquittal also highlights the importance of distinguishing delusions from EOBs (Rahman et al., 2020).

Discussion

This study introduces a structured model for understanding targeted violence—the ARCH equation, where:

Table 1
Profiles of Assassins: Symbolic and Motivational Constructs

Assassin	Target	EOB (extreme overvalued belief)	Archetype	Thymotic drive	Symbolic imprinter (I) and symbolic releaser (R)
John Wilkes Booth	Abraham Lincoln	Southern sympathizer; viewed Lincoln as a tyrant undermining the South	Victim, Warrior, and Hero	Saw act as preserving moral order and propelling his status	I: Confederate nationalism R: Lincoln's reelection and Southern defeat
Lee Harvey Oswald	John F. Kennedy (JFK)	Marxist Leninist ideology; saw himself as a revolutionary destined to make history	Victim, Warrior, and Hero	Felt destined for historical recognition and increasing his social status	I: Awed by Marxist–Leninist literature R: JFK motorcade announcement
James Earl Ray	Martin Luther King Jr. (MLK)	Racial hatred and opposition to Civil Rights Movement; viewed MLK as a threat to his ideals	Victim and Hero	Saw MLK's assassination as preserving moral and social order	I: White supremacist ideology R: Collecting a bounty for MLK killing
Sirhan Sirhan	Robert F. Kennedy (RFK)	Anti-Zionist beliefs; saw RFK as a symbol of pro-Israeli policies he opposed	Victim and Avenger	Preserving honor, moral, and world order	I: Awed by anti-Zionist literature R: RFK support of sale of weapons to Israel
John Hinckley Jr.	Ronald Reagan	Fixation on being an outlaw for actress; believed the act would gain her attention	Victim, Hero, and Outlaw	Propelling him to a higher social status to attain a celebrity relationship	I: Awed by <i>Taxi Driver</i> film and actress R: President Reagan's same-day announcement

Note. $n = 5$. I = symbolic imprinter; R = symbolic releaser.

Table 2
Profiles of Terrorists: Symbolic and Motivational Constructs

Terrorist	Target	EOB (extreme overvalued belief)	Archetype	Thymotic drive	Symbolic imprinter (I) and symbolic releaser (R)
Timothy McVeigh	Federal Building	Antigovernment beliefs; saw federal actions as tyrannical	Victim, Warrior, Avenger, and Hero	Legacy-seeking as the first hero of the second American revolution	I: Waco Siege and Turner Diaries; awe R: Murrah federal building
Anders Breivik	Government Building, Youth Camp	Far-right ideology; aimed to combat multiculturalism	Victim, Warrior, and Hero	Attain honor, status as a moral crusader	I: Awed by right-wing conspiracy R: Oslo government building and youth camp
Brenton Tarrant	Mosque	White supremacist views; targeted Muslims as a perceived threat	Victim, Warrior, and Hero	Attain higher social status as a nationalist, purifier, and crusader	I: Awed by White nationalist movement R: Christchurch mosques
Dylann Roof	Church	Believed in White supremacy; aimed to incite racial conflict	Victim, Warrior, and Hero	Improved moral and social status	I: Awed by neo-Nazi movements R: Charleston church
Nidal Hasan	Fort Hood	Radical Islamist ideology; viewed his act as martyrdom	Victim, Warrior, Avenger, and Martyr	Attaining a higher moral and religious status	I: Awed by radical cleric R: Fort Hood

Note. $n = 5$. I = symbolic imprinter; R = symbolic releaser.

$$\text{Behavior} = \text{Archetype} \times \text{Drive} \times \text{Culture. (2)}$$

This equation formalizes the interaction between three key behavioral pillars:

- **Archetype:** the role with which the individual identifies (e.g., *Warrior*, *Martyr*, *Avenger*);
- **Drive:** the intensity of the motivation, particularly thymotic (status, recognition, honor); and
- **Culture:** the ideological, symbolic, or subcultural narratives that give the act meaning (EOBs).

This model does not replace actuarial or structured professional judgment tools such as the Historical Clinical Risk Management–20 V3 (Douglas et al., 2013) or the TRAP-18 (Meloy, 2017). Instead, it offers an adjunctive framework to deepen insight into symbolic motivation, narrative structure, and motivational architecture—especially in nonpsychotic, ideologically motivated attackers.

Practical Utility of ARCH in Threat Assessment

Each element of the ARCH triad contributes distinct and actionable information, which can also be framed as a question alongside structured protocols:

- **Archetypal identification (A):** Archetypes such as Victim, Hero, or Outlaw shape how individuals perceive themselves in conflict. These roles are culturally legible, often traceable in speech, self-presentation, or narrative behavior. Because they are evolutionarily conserved and psychologically universal, they provide a stable structure for decoding symbolic self-concept.

Is the subject enacting a recognizable archetype? Which archetype is most salient?

- **Thymotic drive (D; motivational intensity):** Recognition-seeking behavior, especially when fused with humiliation or injustice, is a powerful driver of violence. This drive often manifests in legacy-seeking, martyrdom fantasies, or status-focused planning. It can be a critical variable in differentiating at-risk ideologues from those escalating toward violence.

Table 3
Profiles of School Shooters: Symbolic and Motivational Constructs

Shooter	Target	EOB (extreme overvalued belief)	Archetype	Thymotic drive	Symbolic imprinter (I) and symbolic releaser (R)
Adam Lanza	Sandy Hook Elementary	Misanthropic beliefs; isolated and consumed by violent ideation	Victim, Hero, and Avenger	Attain a high social status in his shooter subculture	I: Awed by prior shooters and subculture R: Sandy Hook school
Salvador Ramos	Uvalde School	Fixated on gaining notoriety; inspired by shooter subculture	Victim, Hero, and Avenger	Leave a “legacy” in death	I: Awed by online shooter subcultures R: School
Ethan Crumbley	Oxford High School	Influenced by shooter subculture; externalized grievances	Victim, Hero, and Avenger	Assert power to obtain a higher social status	I: Awed by shooter subculture R: School
Nikolas Cruz	Parkland High School	Deep sense of victimization; harbored hatred toward peers	Victim, Hero, Avenger, and Outlaw	Make himself feared by others to elevate his social status	I: Awed by Columbine and other shooters R: School
Seung-Hui Cho	Virginia Tech	Alienated and narcissistic; sought infamy as a final act	Victim, Hero, and Martyr	Legacy-seeking through glorification of killing	I: Awed by online shooter subcultures R: University

Note. I = symbolic imprinter; R = symbolic releaser.

Is the subject seeking recognition or legacy?

- EOBs (C; culture): EOBs are not delusions, but emotionally charged, culturally reinforced beliefs that dominate identity. They are often simplistic, binary, and morally absolute, making them detectable in online rhetoric, manifestos, and ideological affiliations.

What rigid beliefs dominate the person’s worldview?

By assessing alignment across these three domains, practitioners can build a more nuanced risk formulation. The ARCH model is particularly useful in ambiguous cases—where traditional tools detect no psychosis or direct threat, but symbolic behavior suggests deeper motivational momentum.

Behavioral Formulation

The ARCH equation reframes targeted violence not as an output of mental illness alone, but as the convergence of three heuristically derived dynamic systems:

- An evolutionarily conserved identity structure (*archetype*),
- A biologically intensified motivational signal (*drive*), and
- A symbolic, culturally legible ideology (*culture/EOB*).

Because the ARCH equation is multiplicative, the absence or disruption of any single component—archetypal identity, emotional drive, or cultural framing—can collapse the behavioral output. This structure offers practical value for mitigation: Targeted interventions that weaken even one domain may be sufficient to interrupt the trajectory toward violence. This makes the model not only explanatory but may be operationally relevant for early-stage prevention and individualized threat management.

By grounding this formulation in both neurobiology and ethology, ARCH provides a testable, scalable model that can be adapted for research, prevention, and forensic application. It moves beyond psychiatric labels toward structured meaning analysis, empowering assessors to detect symbolic escalation, thematic fixation,

and legacy-seeking behavior across ideologies and cultures.

Integration With Threat Assessment and Management

Identifying Archetypal Patterns

Practitioners should be attentive to the following indicators of archetypal activation in individuals of concern:

- *Language and Symbolism*: Monitor for repeated references to archetypal roles (e.g., “warrior,” “martyr,” “avenger”) in writings, speech, or online activity. The adoption of specific symbols, clothing, or imagery may also signal identification with a particular archetype.
- *Behavioral Rehearsal*: Look for evidence of role rehearsal, fantasy, or preparatory behaviors that align with archetypal scripts (e.g., tactical training, manifesto writing, symbolic date selection).
- *Narrative Framing*: Assess how grievances and planned actions are described—does the individual cast themselves as a righteous hero, a victim seeking justice, or a savior for a cause?
- *Response to Challenge*: Observe how the individual reacts when their archetypal identity is questioned or validated. Heightened defensiveness or escalation may indicate deep identity fusion.

Assessing EOBs

- *Rigidity and Intensity*: Evaluate the strength and inflexibility of the individual’s beliefs. EOBs are typically held with unwavering conviction and are resistant to contrary evidence or reasoning.
- *Cultural Context*: Determine whether the beliefs are shared by a broader group or subculture, or if they are idiosyncratic. EOBs gain power when reinforced by collective narratives.
- *Affective Charge*: Note the emotional intensity with which beliefs are expressed, especially when linked to perceived injustices or moral imperatives.

Gauging Thymotic Drive

- *Recognition-Seeking*: Assess for signs that the individual is motivated by a desire for recognition, status, or legacy—such as planning for public acts, leaving manifestos, or seeking notoriety.
- *Moral Outrage*: Identify expressions of outrage, honor, or moral absolutism that may energize action.

While developed independently, ARCH elements closely align with the TRAP-18 model (Guldimann & Meloy, 2020; Meloy, 2017), which is used in behavioral threat assessment and management. The empirical convergence between these models offers both theoretical depth and practical synergy.

Pathway and Identification: Archetypes in Action

Two of the most robust proximal warning behaviors in the TRAP-18—Pathway and Identification—map directly onto the activation of archetypal scripts.

- In TRAP-18, Pathway refers to an observable trajectory of planning and preparation.
- In the ARCH model, this often mirrors an attacker’s internal mythic (fantasized) journey, where the Warrior, Martyr, or Avenger archetype structures their forward momentum toward a perceived righteous act.

Historical and forensic examples frequently involve attackers who construct elaborate personal mythologies, positioning themselves as heroic or redemptive figures. This mirrors the mythic distortion of classical journeys (e.g., Heracles, Odysseus), but with noncombatants as targets—creating a dissonant moral narrative.

Identification involves the formation of a new violent identity or imitation of previous attackers. The ARCH model provides interpretive granularity here: Identification often represents the moment archetypal imprinting becomes consciously embraced. An individual may align themselves with a Victim–Warrior identity, reinforced through online subcultures, grievances, or ideological reinforcement. This convergence has been shown to strongly differentiate attackers from nonattackers (Böckler et al., 2020; Meloy et al., 2019).

Personal Grievance and Moral Outrage: Fuel for Archetype and Drive

The distal TRAP-18 variable of Personal Grievance and Moral Outrage often reflects the Victim archetype, fused with thymotic drive. An individual who experiences failure in work, love, or social standing may begin to identify not only with personal suffering but also with a broader group that is (real or imagined) victimized.

This vicarious identification with a symbolic group primes the attacker for binary moral reasoning: us versus them and just versus unjust. The shift from personal grievance to perceived moral mission is often where ARCH crystallizes. When paired with a strong archetypal self-concept (Avenger, Martyr, Hero) and emotionally charged belief systems (EOBs), the threat picture intensifies.

Ideological Framing: Encoding Culture Into Action

Ideological Framing, another TRAP-18 distal characteristic, refers to the adoption of belief systems that justify violence. In the ARCH framework, this reflects the “Culture” variable—typically embodied in EOBs. Fundamentalist ideologies are particularly potent when they:

- Reinforce binary thinking,
- Sanctify violence, and
- Provide moral absolutes resistant to disconfirmation.

For example, the interpretive flexibility found in more liberal religious traditions often allows for symbolic nuance, while fundamentalist belief systems collapse ambiguity, enhancing rigidity. This structure parallels the neurocognitive narrowing observed as attackers approach violence: Narratives become simplified, moralized, and emotionally amplified—fitting Lorenz’s and Meloy’s descriptions of aggression discharge and time compression.

From Territory to Ideology: Phylogenetic Continuity

From an ethological lens, the TRAP-18’s insights on moral outrage and violence escalation resemble territorial aggression in social primates. Just as chimpanzee coalitions plan and execute raids on perceived outsiders (Goodall, 1986; Morris, 2017),

radicalized individuals often fixate on symbolic threats to culture, identity, or honor (Gardell, 2021). These threats activate thymotic competition (the drive not only for protection but also for moral superiority and dominance over the outgroup).

This helps explain *why* attackers frequently adopt sacred values, frame themselves as warriors or martyrs, and exhibit ideological rigidity that resists negotiation. Thymos, when dysregulated, transforms social bonding into moral exclusion—where violence becomes not only justified but necessary and often sanctified to restore recognition (Duncan, 1991; Rahman, 2025).

ARCH as an Integrative Framework

In sum, the ARCH equation helps practitioners interpret the *why* beneath the *what* in behavioral threat assessment and management:

- Archetypes clarify role identification.
- Drive indicates motivational intensity.
- Culture/EOBs reveal belief reinforcement.

These components map onto and enrich TRAP-18 indicators such as Pathway, Identification, Personal Grievance and Moral Outrage, and Ideological Framing. By applying the ARCH lens, threat assessors can better contextualize symbolic behavior, detect archetypal escalation, and formulate more precise intervention strategies.

ARCH and the Proximal Warning Behavior of Last Resort

Among the TRAP-18’s proximal warning behaviors, Last Resort is one of the most critical for imminent risk. It is defined by an urgent, time-bound imperative to act—often accompanied by binary, emotionally charged thinking and a profound sense of moral necessity. In retrospective studies, Last Resort reliably differentiates attackers from nonattackers and frequently appears as the final behavioral marker before violence (Böckler et al., 2020; Meloy et al., 2019, 2021).

At this stage, the individual’s cognition is marked by absolutism: “I must act, and I must act now.” This rigidity reflects the cognitive signature of EOBs—simplistic, moralized convictions resistant to disconfirmation. The urgency is not impulsive but structured, shaped by an internal script of escalating grievance and symbolic purpose.

The ARCH framework maps precisely onto this final behavioral shift:

- **Archetype:** At the point of Last Resort, one of four common archetypes typically dominates:
 - *Victim*: Seeks retribution for perceived injustice or humiliation.
 - *Warrior*: Frames the act as combat in a moral or ideological war.
 - *Avenger*: Demands justice through destruction of the offending group.
 - *Martyr*: Willingly sacrifices the self for legacy, purity, or divine reward.
- **Drive:** The act is powered by thymotic urgency—the attacker’s overwhelming need to reclaim dignity, assert moral worth, or be remembered. Often, this is a legacy-seeking impulse, expressed through manifestos, live-streams, or symbolic target selection.
- **Culture/EOBs:** The attacker’s worldview is fused with EOBs that justify violence as redemptive or necessary. These beliefs provide the moral license to act and explain the attacker’s inability to consider alternatives.

In many cases, the attacker’s meticulous planning reflects not psychosis but a form of narrative finality. The act is staged for an audience—real or imagined—and embedded within a symbolic script. The attacker sees the moment not as spontaneous but as historically meaningful: a closing chapter in a long-standing grievance arc.

By applying the ARCH equation at the point of Last Resort, practitioners can decode not just the urgency of the behavior, but the motivational scaffolding that brought the individual to that moment. This interpretive tool can enhance case formulation, identify archetypal escalation, and support timely interventions that might otherwise overlook symbolic triggers or motivational intensifiers (Meloy et al., 2023).

Diagnostic Implications

Offenders conceptualized as *archetype killers* often present with features consistent with specific diagnostic categories within the *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition, text revision (Rahman et al., 2021; Roberts & Louie, 2015). These traits do not define or predict violence in isolation, but when fused with

archetypal identities, rigid belief systems, and unmet motivational needs, they may contribute to the behavioral trajectory described in the ARCH model.

Personality Disorders and Rigid Ideologies

Traits associated with narcissistic personality disorder—including grandiosity, entitlement, and lack of empathy—may predispose individuals to identify with Hero or Warrior archetypes. These roles offer symbolic elevation and a framework for grief to be converted into aggrieved entitlement and righteous action.

Antisocial personality disorder traits—such as impulsivity, aggression, and disregard for others—can further facilitate violent enactment of these archetypes. Meanwhile, paranoid personality disorder may reinforce EOBs through chronic distrust and conspiratorial ideation. These beliefs are often emotionally charged, resistant to challenge, and frame violence as morally justified or defensive.

In all cases, the ARCH triad helps explain the psychological fusion of identity, grievance, and symbolic justification. *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition, text revision categories provide a useful scaffold, but the ARCH model adds a motivational structure—clarifying *why* these traits coalesce into violence in some individuals and not others.

Trauma, Attachment, and Archetypal Compensation

Trauma-related disorders, including posttraumatic stress disorder, may also heighten susceptibility to violent archetypal identification. Emotional dysregulation, dissociation, and intrusive memory processes can be channeled into retaliatory or redemptive narratives, particularly when identity repair is sought through symbolic means.

Individuals with insecure or disorganized attachment patterns are more likely to develop “pseudoattachments”—emotional bonds to rigid ideologies or archetypal roles—in place of disrupted interpersonal connections (Meloy, 1992). Adopting identities such as *Victim*, *Warrior*, or *Avenger* can serve as compensatory structures, helping the individual create coherence amid internal fragmentation or social rejection.

In such individuals, thymotic drive—the need for dignity, justice, or significance—often becomes intensified. Violence may be experienced not as criminality, but as symbolic resolution, offering restoration of agency and moral clarity. These acts often have ritualistic elements, aligning with FAAPs rooted in early-life archetypal imprinting.

Implications for Clinical Intervention

Understanding the ARCH configuration within a clinical formulation can help guide intervention. For example:

- Schema therapy may address rigid belief systems (EOBs) by challenging cognitive distortions and reworking early maladaptive schemas.
- Attachment-based interventions can target relational voids that fuel identification with violent archetypes.
- Narrative restructuring techniques can help reframe symbolic self-concepts, deconstructing Hero or Martyr identities and promoting alternate paths to dignity and meaning.

Ultimately, the ARCH model enhances diagnostic practice by emphasizing the interaction of symbolic identity, motivational intensity, and ideological rigidity—moving beyond static diagnoses to dynamic formulations that better inform risk assessment, therapeutic engagement, and threat management.

Neurodevelopmental Factors and Diagnostic Considerations

In rare cases, neurodevelopmental conditions such as autism spectrum disorder may contribute to rigid thinking patterns, narrow interests, and difficulties with perspective-taking—traits that can, under specific social and symbolic conditions, interact with EOBs and archetypal fixation.

While the exact diagnoses of Seung-Hui Cho (Virginia Tech) and Adam Lanza (Sandy Hook) remain uncertain, both appeared to demonstrate profound social isolation, rigid ideological fascination, and intense emotional investment in symbolic violence. Each was reportedly mesmerized by the Columbine attack, suggesting a form of archetypal imprinting (e.g., *Avenger*, *Martyr*) reinforced by digital subcultures and internal identification.

The ARCH model does not pathologize neurodiversity, but offers a multilevel lens—biological, psychological, and cultural—to understand how certain vulnerabilities may prime individuals toward archetypal targeted violence. Most individuals with autism spectrum disorder or related conditions do not exhibit violence; thus, the emphasis here is on interaction effects, not categorical risk (White et al., 2017).

Future Directions

The ARCH framework opens several promising lines of inquiry across genetics, neuroscience, and clinical prevention.

Genetic Mapping of Archetypal Behavior

Research into archetype genetic sequences may help identify evolutionarily conserved gene regulatory elements linked to universal behavioral patterns such as aggression, retribution, leadership, and caregiving. Comparative genomics across primates and social mammals may uncover shared regulatory loci that shape archetypal circuits. Functional neuroimaging such as functional magnetic resonance imaging or positron emission tomography could identify brain networks consistently activated during archetypal behaviors (e.g., defense, self-sacrifice). Studies of gene expression could identify which genes are active under specific psychological or environmental conditions and help uncover how symbolic cognition and archetypal roles are biologically encoded through context-dependent activity (Kandel, 1998; Knox & Fonagy, 2003). This integrative approach may eventually help link archetypal cognition to molecular mechanisms, providing a biological foundation for early detection or intervention (Davidson et al., 2000).

Cognitive Disruption and Ideological Prevention

Interventions designed to interrupt distorted archetypal narratives and EOBs show promise. For instance:

- The Body Project, originally developed for disordered eating, induces cognitive dissonance around culturally reinforced *Beauty* archetypes (Stice et al., 2012). Similar approaches may be adapted to challenge *Warrior* or *Martyr* archetypes

that drive extremist ideologies (Gibson, 1994; Rahman & Abugel, 2024).

- Preexposure worldview inoculation—getting individuals to debate and deconstruct ideology before radical content is introduced—may protect against rigid identification with EOBs (Braddock, 2020, 2022).

Therapeutic Access to Neuroplasticity

Emerging approaches such as methylenedioxymethamphetamine assisted therapy or other psychedelic modalities may offer critical windows of neuroplasticity, during which entrenched beliefs or archetypal identities can be reframed (Lepow et al., 2021). If safely applied, such tools could help reopen developmental channels and allow for reauthoring of self-concept, potentially redirecting thymotic drives toward constructive expression.

Pathological Thymos: Early Markers and Redirection

Future research should prioritize identifying early indicators of pathological thymotic drive—such as grievance or wound collection (Navarro, 2005), status obsession, or performative self-harm. Developing early-stage interventions that rechannel thymos toward achievement, advocacy, or leadership—rather than destruction—may reduce downstream violence risk.

Conclusion

This article introduces the ARCH model—Behavior = Archetype × Drive × Culture—as a novel biologically grounded, psychologically informed, and culturally integrative framework for understanding targeted violence. Reflecting back on the Monahan and Steadman weather analogy in light of the ARCH model deepens our appreciation of how behavioral risk is conceptualized. Tornado forecasting emphasizes probabilistic, dynamic, and context-sensitive convergence rather than deterministic certainty. Severe storm forecasters do not predict with absolute certainty whether there will be a tornado tomorrow, but offer a likelihood based on convergence patterns. Threat assessments must grapple with similar behavioral complexity, fluidity, and the interplay of multiple factors. By unifying concepts from ethology, neurobiology, forensic psychiatry,

psychology, and symbolic cognition, ARCH offers a new formulation for how identity, motivation, and ideology converge to drive some acts of targeted violence.

The model identifies three interdependent domains:

- Archetype: Evolutionarily conserved identity templates that guide symbolic behavior (e.g., *Warrior, Martyr, Avenger*).
- Drive: Especially *thymotic drive*, the biologically rooted human need for recognition, justice, and legacy.
- Culture: *EOBs* that provide ideological framing and moral justification.

Rather than serving as a predictive tool, ARCH functions as an explanatory system. It deepens understanding of offender psychology, clarifies symbolic behavior, and augments structured threat assessment models such as the TRAP-18. The model is particularly useful in complex cases where attackers are not psychotic, but are symbolically motivated, cognitively rigid, and seeking meaning through violence. In this formulation, targeted violence is not random—it is scripted. The attacker enacts a deeply embedded role, charged with emotional intensity and enabled by cultural narratives. Recognizing and decoding these scripts—especially when they escalate toward a last-resort identity performance—can inform more precise risk assessments, interventions, and early prevention strategies.

Future work should refine the operationalization of ARCH variables, explore its applications in genetic and neuroimaging research, and integrate the model with digital threat monitoring systems (Acklin et al., 2025). In doing so, ARCH may help bridge the gap between clinical intuition, behavioral science, and public safety.

References

- Acklin, M. W., Topping, K., Kupper, J., & Meloy, J. R. (2025). Pioneering artificial intelligence integration into forensic risk assessment: Applying ChatGPT-4o to the Terrorist Radicalization Assessment Protocol-18 (TRAP-18). *Journal of Threat Assessment and Management*. Advance online publication. <https://doi.org/10.1037/tam0000246>
- American Psychiatric Association. (2009). *The principles of medical ethics with annotations especially applicable to psychiatry* (Rev. ed.).

- Applebaum, A. (2013, June 14). Edward Snowden, the impulsive 'martyr'. *The Washington Post* (Opinion). Retrieved March 17, 2025, from https://www.washingtonpost.com/opinions/anne-applebaum-snowden-the-impulsive-martyr/2013/06/14/5c059462-d511-11e2-a73e-826d299ff459_story.html
- Archer, J. (2006). Testosterone and human aggression: An evaluation of the challenge hypothesis. *Neuroscience and Biobehavioral Reviews*, 30(3), 319–345. <https://doi.org/10.1016/j.neubiorev.2004.12.007>
- Atran, S. (2010). *Talking to the enemy: Faith, brotherhood, and the (un)making of terrorists*. HarperCollins.
- Behroozi, M., Lorenzi, E., Tabrik, S., Tegenthoff, M., Gozzi, A., Güntürkün, O., & Vallortigara, G. (2024). Functional MRI of imprinting memory in awake newborn domestic chicks. *Communications Biology*, 7(1), Article 1326. <https://doi.org/10.1038/s42003-024-06991-z>
- Böckler, N., Allwinn, M., Metwaly, C., Wypych, B., Hoffmann, J., & Zick, A. (2020). Islamist terrorists in Germany and their warning behaviors: A comparative assessment of attackers and other convicts using the TRAP-18. *Journal of Threat Assessment and Management*, 7(3–4), 157–172. <https://doi.org/10.1037/tam0000150>
- Braddock, K. (2020). *Weaponized words: The strategic role of persuasion in violent radicalization and counter-radicalization*. Cambridge University Press. <https://doi.org/10.1017/9781108584517>
- Braddock, K. (2022). Vaccinating against hate: Using attitudinal inoculation to confer resistance to persuasion by extremist propaganda. *Terrorism and Political Violence*, 34(2), 240–262. <https://doi.org/10.1080/09546553.2019.1693370>
- Broom, D. M. (2006). The evolution of morality. *Applied Animal Behaviour Science*, 100(1–2), 20–28. <https://doi.org/10.1016/j.applanim.2006.04.008>
- Bugliosi, V. (2007). *Reclaiming history: The assassination of President John F. Kennedy*. W.W. Norton.
- Crofoot, M. C., Rubenstein, D. I., Maiya, A. S., & Berger-Wolf, T. Y. (2011). Aggression, grooming and group-level cooperation in white-faced capuchins (*Cebus capucinus*): Insights from social networks. *American Journal of Primatology*, 73(8), 821–833. <https://doi.org/10.1002/ajp.20959>
- Davidson, R. J., Putnam, K. M., & Larson, C. L. (2000). Dysfunction in the neural circuitry of emotion regulation—A possible prelude to violence. *Science*, 289(5479), 591–594. <https://doi.org/10.1126/science.289.5479.591>
- de Waal, F. (2005). *Our inner ape: A leading primatologist explains why we are who we are*. Riverhead Books.
- de Waal, F. (2007). *Chimpanzee politics: Power and sex among apes*. Johns Hopkins University Press. <https://doi.org/10.56021/9780801886560>
- Dewan, S. (2022, August 22). What are the real warning signs of a mass shooting? *The New York Times*. Retrieved March 15, 2025, from <https://www.nytimes.com/2022/08/22/us/mass-shootings-mental-illness.html>
- Dietz, P. E. (1986). Mass, serial and sensational homicides. *Bulletin of the New York Academy of Medicine*, 62(5), 477–491.
- Douglas, K. S., Hart, S. D., Webster, C. D., & Belfrage, H. (2013). *HCR-20 V3. Assessing risk for violence- user guide*. Mental Health, Law and Policy Institute, Simon Fraser University.
- Duncan, M. G. (1991). A strange liking: Our admiration for criminals. *University of Illinois Law Review*, 1. <https://scholarlycommons.law.emory.edu/faculty-articles/47/>
- Esposito, L., & Perez, F. M. (2022). Killing for recognition: Mass public shootings in the era of hyper-neoliberalism. *Theory in Action*, 15(3), 17–49. <https://doi.org/10.3798/tia.1937-0237.2216>
- Evans, R. (1964). *Conversations with Carl Jung and reactions from Ernest Jones*. The University of Akron Press.
- Evans, R. (1975). *Konrad Lorenz: The man and his ideas*. Harcourt Brace Jovanovich.
- Favazza, A. R. (1996). *Bodies under siege: Self-mutilation and body modification in culture and psychiatry*. Johns Hopkins University Press.
- Fox, J. A., Levin, J., & Fridel, E. E. (2023). *Extreme killing: Understanding serial and mass murder* (5th ed.). Sage Publications.
- Freudenreich, O. (2020). *Psychotic disorders*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-29450-2>
- Fukuyama, F. (1993). *The end of history and the last man*. Penguin.
- Gacono, C. B., Meloy, J. R., Sheppard, K., Speth, E., & Roske, A. (1995). A clinical investigation of malingering and psychopathy in hospitalized insanity acquittees. *The Bulletin of the American Academy of Psychiatry and the Law*, 23(3), 387–397.
- Ganesh, B. (2020). Weaponizing white thymos: Flows of rage in the online audiences of the alt-right. *Cultural Studies*, 34(6), 892–924. <https://doi.org/10.1080/09502386.2020.1714687>
- Gardell, M. (2021). *Lone wolf race warriors and white genocide*. Cambridge University Press. <https://doi.org/10.1017/9781108609760>
- Gibson, W. (1994). *Warrior dreams*. Farrar, Straus & Giroux.
- Goodall, J. (1986). *The chimpanzees of Gombe: Patterns of behavior*. Harvard University Press.
- Goodall, J. (1990). *Through a window: My thirty years with the chimpanzees of Gombe*. Houghton Mifflin Company.
- Guldimann, A., & Meloy, J. R. (2020). Assessing the threat of lone-actor terrorism: The reliability and

- validity of the TRAP-18. *Forensische Psychiatrie, Psychologie, Kriminologie*, 14(2), 158–166. <https://doi.org/10.1007/s11757-020-00596-y>
- Hafez, M. M. (2006). Dying to be martyrs: The symbolic dimension of suicide terrorism. In A. Pedahzur (Ed.), *Root causes of suicide terrorism* (pp. 74–100). Routledge.
- Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. Pantheon Books.
- Hamilton, D. R. (2024). Biology of heroism. In S. T. Allison, J. K. Beggan, & G. R. Goethals (Eds.), *Encyclopedia of heroism studies* (pp. 127–130). Springer. https://doi.org/10.1007/978-3-031-48129-1_173
- Haule, J. R. (2010). *Jung in the 21st century* (Vol. 1: Evolution and archetype; Vol. 2: Synchronicity and science). Routledge.
- Hempel, A. G., Meloy, J. R., & Richards, T. C. (1999). Offender and offense characteristics of a nonrandom sample of mass murderers. *Journal of the American Academy of Psychiatry and the Law*, 27(2), 213–225.
- Hess, E. (1973). *Imprinting*. Van Nostrand Reinhold.
- Higley, J. D., & Linnoila, M. (1997). Low central nervous system serotonergic activity is traitlike and correlates with impulsive behavior. A nonhuman primate model investigating genetic and environmental influences on neurotransmission. *Annals of the New York Academy of Sciences*, 836(1), 39–56. <https://doi.org/10.1111/j.1749-6632.1997.tb52354.x>
- Hirsch, S. R., & Shepherd, M. (1974). *Themes and variations in European psychiatry: An anthology*. University Press of Virginia.
- Innes, W. C., & William, C. (2021). *Religious hair display and its meanings*. Springer.
- Izuma, K., Saito, D. N., & Sadato, N. (2008). Processing of social and monetary rewards in the human striatum. *Neuron*, 58(2), 284–294. <https://doi.org/10.1016/j.neuron.2008.03.020>
- Jaspers, K. (1913). *Allgemeine Psychopathologie* [General psychopathology]. Springer.
- Jung, C. G. (1950). *The symbolic life*. Princeton University Press.
- Jung, C. G. (1953). *Two essays on analytical psychology* (R. F. C. Hull, Trans.). Princeton University Press. (Original work published 1943). (Collected Works of C.G. Jung Vol. 7).
- Jung, C. G. (1959). *The archetypes and the collective unconscious*. (Collected Works, Vol. 9, Part 1). Princeton University Press.
- Jung, C. G. (1964). *Man and his symbols*. Doubleday.
- Junger, S. (2011). *War*. Hachette Book Group.
- Kandel, E. R. (1998). A new intellectual framework for psychiatry. *The American Journal of Psychiatry*, 155(4), 457–469. <https://doi.org/10.1176/ajp.155.4.457>
- Keltner, D., & Haidt, J. (2003). Approaching awe, a moral, spiritual, and aesthetic emotion. *Cognition and Emotion*, 17(2), 297–314. <https://doi.org/10.1080/026999303002297>
- Knox, J., & Fonagy, P. (2003). *Archetype, attachment, analysis: Jungian psychology and the emergent mind*. Routledge. <https://doi.org/10.4324/9780203391525>
- Kristinsdottir, K., Ebner, J., & Whitehouse, H. (2025). Extreme overvalued beliefs and identities: Revisiting the drivers of violent extremism. *Frontiers in Psychology*, 16, Article 1556919. <https://doi.org/10.3389/fpsyg.2025.1556919>
- Kroll, J., & Pouncey, C. (2016). The ethics of APA's Goldwater rule. *The Journal of the American Academy of Psychiatry and the Law*, 44(2), 226–235. <https://jaapl.org/content/jaapl/44/2/226.full.pdf>
- Kupper, J., & Meloy, J. R. (2021). TRAP-18 indicators validated through the forensic linguistic analysis of targeted violence manifestos. *Journal of Threat Assessment and Management*, 8(4), 174–199. <https://doi.org/10.1037/tam0000165>
- Langman, P. (2017). *Role models, contagions, and copycats: An exploration of the influence of prior killers on subsequent attacks*. School Shooters Info. Retrieved March 17, 2025, from https://schoolshooters.info/sites/default/files/role_models_3.1.pdf
- Langman, P. (2018). Different types of role model influence and fame seeking among mass killers and copycat offenders. *American Behavioral Scientist*, 62(2), 210–228. <https://doi.org/10.1177/0002764217739663>
- Lankford, A. (2016). Fame-seeking rampage shooters: Initial findings and empirical predictions. *Aggression and Violent Behavior*, 27, 122–129. <https://doi.org/10.1016/j.avb.2016.02.002>
- Lebow, R. N. (2015). Thumos, war, and peace. *Common Knowledge*, 21(1), 50–82. <https://doi.org/10.1215/0961754X-2818025>
- LeDoux, J. (2003). *The synaptic self: How our brains become who we are*. Viking.
- Lepow, L., Morishita, H., & Yehuda, R. (2021). Critical period plasticity as a framework for psychedelic-assisted psychotherapy. *Frontiers in Neuroscience*, 15, Article 710004. <https://doi.org/10.3389/fnins.2021.710004>
- Lorenz, K. Z. (1935). Der Kumpan in der Umwelt des Vogels. Der Artgenosse als auslösendes Moment sozialer Verhaltensweisen [The companion in the bird's world. The fellow-member of the species as releasing factor of social behavior]. *Journal für Ornithologie*, 83(2), 137–213. <https://doi.org/10.1007/BF01905355>
- Lorenz, K. Z. (1950). The comparative method in studying innate behavior patterns. *Society for experimental biology, physiological mechanisms in animal behavior. (Society's Symposium IV.) Animal behaviour* (pp. 221–268). Academic Press.
- Lorenz, K. Z. (1963). *On aggression*. Harcourt, Brace & World.

- Lorenz, K. Z. (1978). *Behind the mirror: A search for a natural history of human knowledge*. Harper.
- Mailer, N. (2007). *Oswald's tale: An American mystery*. Random House.
- Major, J. C. (2021). Archetypes and code biology. *Bio Systems*, 208, Article 104501. <https://doi.org/10.1016/j.biosystems.2021.104501>
- McHugh, P. R. (2006). *The mind has mountains: Reflections on society and psychiatry*. Johns Hopkins University Press.
- McKay, J. (2011, September 9). Their last four nights before 9/11. *The Harvard Crimson*. Retrieved March 17, 2025, from <https://www.thecrimson.com/article/2011/9/9/brothers-alghamdi-room-maid/>
- Meloy, J. R. (1989). Unrequited love and the wish to kill. Diagnosis and treatment of borderline erotomania. *Bulletin of the Menninger Clinic*, 53(6), 477–492. <https://www.proquest.com/scholarly-journals/unrequited-love-wish-kill-diagnosis-treatment/docview/1298140465/se-2>
- Meloy, J. R. (1992). *Violent attachments*. Aronson.
- Meloy, J. R. (2004). Indirect personality assessment of the violent true believer. *Journal of Personality Assessment*, 82(2), 138–146. https://doi.org/10.1207/s15327752jpa8202_2
- Meloy, J. R. (2006). Empirical basis and forensic application of affective and predatory violence. *The Australian and New Zealand Journal of Psychiatry*, 40(6–7), 539–547. <https://doi.org/10.1080/j.1440-1614.2006.01837.x>
- Meloy, J. R. (2017). *TRAP-18 manual*. Multihealth Systems.
- Meloy, J. R., Amman, M., Guldemann, A., & Hoffmann, J. (2023). The concept of last resort in threat assessment. *Journal of Threat Assessment and Management*, 12(1), 45–63. <https://doi.org/10.1037/tam0000217>
- Meloy, J. R., Goodwill, A., Clemmow, C., & Gill, P. (2021). Time sequencing the TRAP-18 indicators. *Journal of Threat Assessment and Management*, 8(1–2), 1–19. <https://doi.org/10.1037/tam0000157>
- Meloy, J. R., Goodwill, A., Meloy, M. J., Amat, G., Martinez, M., & Morgan, M. (2019). Some TRAP-18 indicators discriminate between terrorist attackers and other subjects of national security concern. *Journal of Threat Assessment and Management*, 6(2), 93–110. <https://doi.org/10.1037/tam0000119>
- Meloy, J. R., & Hoffmann, J. (Eds.). (2021). *International handbook of threat assessment* (2nd ed.). Oxford University Press. <https://doi.org/10.1093/med-psych/9780190940164.001.0001>
- Meloy, J. R., & Holzer, J. (2023). Threat assessment: The TRAP-18 and application to a lone-actor terrorism incident. In J. Holzer, P. Gill, P. Recupero, & A. Dew (Eds.), *Lone-actor terrorism: An integrated framework* (pp. 330–342). Oxford University Press.
- Meloy, J. R., & Kupper, J. (2025). Going dark redux: The 2018 Capital Gazette mass murder. *Journal of Threat Assessment and Management*. Advance online publication. <https://doi.org/10.1037/tam0000244>
- Meloy, J. R., & Rahman, T. (2025). Rise and kill first: Extreme overvalued belief and the devolution of identity. In M. Yalch, M. Taylor, L. Brown, A. Merari, & B. Bongar (Eds.), *The Oxford handbook of the psychology of terrorism and terrorist behavior*. Oxford University Press.
- Meloy, J. R., & Rahman, T. (2021). Cognitive–affective drivers of fixation in threat assessment. *Behavioral Sciences & the Law*, 39(2), 170–189. <https://doi.org/10.1002/bsl.2486>
- Meloy, J. R., & Yakeley, J. (2014). The violent true believer as a “lone wolf”—Psychoanalytic perspectives on terrorism. *Behavioral Sciences & the Law*, 32(3), 347–365. <https://doi.org/10.1002/bsl.2109>
- Michel, L., & Herbeck, D. (2001). *American terrorist*. HarperCollins.
- Monahan, J., & Steadman, H. J. (1996). Violent storms and violent people: How meteorology can inform risk communication in mental health law. *American Psychologist*, 51(9), 931–938. <https://doi.org/10.1037/0003-066X.51.9.931>
- Morris, J. (Director). (2017). *Rise of the warrior apes* [Documentary]. Off the Fence, B.V.
- Mullen, P. E., James, D. V., Meloy, J. R., Pathé, M. T., Farnham, F. R., Preston, L., Darnley, B., & Berman, J. (2009). The fixated and the pursuit of public figures. *Journal of Forensic Psychiatry & Psychology*, 20(1), 33–47. <https://doi.org/10.1080/14789940802197074>
- Navarro, J. (2005). *Hunting terrorists*. Charles C. Thomas.
- O'Toole, M. E. (2000). *School shooters*. FBI, Department of Justice.
- Perl, J. M., Forsdyke, S., Davis, C., Lebow, R. N., & Friedman, Y. (2015). Introduction: Greco-Latin findings. *Common Knowledge*, 21(1), 10–18. <https://doi.org/10.1215/0961754X-2817989>
- Plato. (1997). *Republic* (R. Waterfield, Trans.). Oxford University Press. (Original work ca. 380 BCE)
- Posner, G. (1994). *Case closed: Lee Harvey Oswald and the assassination of JFK*. Bantam Doubleday Dell Publishing Group.
- Rahman, T. (2018). Extreme overvalued beliefs: How violent extremist beliefs become “normalized”. *Behavioral Sciences*, 8(1), Article 10. <https://doi.org/10.3390/bs8010010>
- Rahman, T. (2025, January 16). *Extreme beliefs and targeted violence: Decoding the path to danger* [Lecture]. Association of Threat Assessment Professionals.
- Rahman, T., & Abugiel, J. (2024). *Extreme overvalued beliefs*. Oxford University Press. <https://doi.org/10.1093/9780197612583.001.0001>

- Rahman, T., Grellner, K. A., Harry, B., Beck, N., & Lauriello, J. (2013). Infanticide in a case of folie à deux. *The American Journal of Psychiatry*, 170(10), 1110–1112. <https://doi.org/10.1176/appi.ajp.2013.13010027>
- Rahman, T., Hartz, S. M., Xiong, W., Meloy, J. R., Janofsky, J., Harry, B., & Resnick, P. J. (2020). Extreme overvalued beliefs. *The Journal of the American Academy of Psychiatry and the Law*, 48(3), 319–326. https://drreidmeloy.com/wp-content/uploads/2020/05/2020_ExtremeOvervalued.pdf
- Rahman, T., Meloy, J. R., & Bauer, R. (2019). Extreme overvalued belief and the legacy of Carl Wernicke. *The Journal of the American Academy of Psychiatry and the Law*, 47(2), 180–187. https://www.researchgate.net/publication/337242359_Extreme_Overvalued_Belief_and_the_Legacy_of_Carl_Wernicke
- Rahman, T., Resnick, P. J., & Harry, B. (2016). Anders Breivik: Extreme beliefs mistaken for psychosis. *The Journal of the American Academy of Psychiatry and the Law*, 44(1), 28–35. <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=add182fbc2340bd2e46c9e9507a4e14a06ed7f65>
- Rahman, T., Zheng, L., & Meloy, J. R. (2021). DSM-5 cultural and personality assessment of extreme overvalued beliefs. *Aggression and Violent Behavior*, 60, Article 101552. <https://doi.org/10.1016/j.avb.2021.101552>
- Roberts, L. W., & Louie, A. K. (Eds.) (2015). *Study guide to DSM-5-TR*. American Psychiatric Publishing.
- Sapolsky, R. M. (2018). *Behave: The biology of humans at our best and worst*. Penguin.
- Schramm, H., & Sartorius, A. (2024). The attraction of evil. An investigation of factors explaining women's romantic parasocial relationships with bad guys in movies and series. *Frontiers in Psychology*, 15, Article 1501809. <https://doi.org/10.3389/fpsyg.2024.1501809>
- Seal, G. (2011). *Outlaw heroes in myth and history*. Anthem Press. <https://doi.org/10.7135/UPO9780857284211>
- Siegel, J. S., Subramanian, S., Perry, D., Kay, B. P., Gordon, E. M., Laumann, T. O., Reneau, T. R., Metcalf, N. V., Chacko, R. V., Gratton, C., Horan, C., Krimmel, S. R., Shimony, J. S., Schweiger, J. A., Wong, D. F., Bender, D. A., Scheidter, K. M., Whiting, F. I., Padawer-Curry, J. A., ... Dosenbach, N. U. F. (2024). Psilocybin desynchronizes the human brain. *Nature*, 632(8023), 131–138. <https://doi.org/10.1038/s41586-024-07624-5>
- Šolc, V., & Didier, G. J. (2018). *Dark religion: Fundamentalism from the perspective of Jungian psychology*. Chiron Publications.
- Souter, G., & Souter, J. (2014). *Guns of outlaws: Weapons of the American bad man*. Zenith Press.
- Stice, E., Rohde, P., & Shaw, H. (2012). *The body project: A dissonance-based eating disorder prevention intervention*. Oxford University Press.
- Succar, R., Barak Ventura, R., Belykh, M., Wei, S., & Porfiri, M. (2023). Fame through surprise: How fame-seeking mass shooters diversify their attacks. *Proceedings of the National Academy of Sciences of the United States of America*, 120(20), Article e2216972120. <https://doi.org/10.1073/pnas.2216972120>
- Tinbergen, N. (1951). *The study of instinct*. Oxford University Press.
- Toobin, J. (2023). *Homegrown: Timothy McVeigh and the rise of right-wing extremism*. Simon and Schuster.
- Vaillancourt, T. (2013). Do human females use indirect aggression as an intrasexual competition strategy? *Philosophical Transactions of the Royal Society B, Biological Sciences*, 368(1631), Article 20130080. <https://doi.org/10.1098/rstb.2013.0080>
- Vargen, L., & Challacombe, D. (2023). Violence risk assessment of Sovereign Citizens: An exploratory examination of the HCR-20 Version 3 and the TRAP-18. *Behavioral Sciences & the Law*, 41(2–3), 55–77. <https://doi.org/10.1002/bsl.2607>
- Wernicke, C. (1900). *Grundriss der Psychiatrie in Klinischen Vorlesungen* [Outline of psychiatry in clinical lectures]. Fischer & Wittig.
- White, S. G., Meloy, J. R., Mohandie, K., & Kienlen, K. (2017). Autism spectrum disorder and violence: Threat assessment issues. *Journal of Threat Assessment and Management*, 4(3), 144–163. <https://doi.org/10.1037/tam0000089>
- Wingfield, J. C., Hegner, R. E., Duffy, A. M., Jr., & Ball, G. F. (1990). The “challenge hypothesis”: Theoretical implications for patterns of testosterone secretion, mating systems, and breeding strategies. *American Naturalist*, 136(6), 829–846. <https://doi.org/10.1086/285134>
- Wrangham, R. W., & Glowacki, L. (2012). Intergroup aggression in chimpanzees and war in nomadic hunter-gatherers: Evaluating the chimpanzee model. *Human Nature*, 23(1), 5–29. <https://doi.org/10.1007/s12110-012-9132-1>
- Zorumski, C., & Rubin, E. (2011). *Psychiatry and clinical neuroscience: A primer*. Oxford University Press.

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