



Apprehending the Bio-cognitive Substrates of Social-Identity Formation in Islamic-Extremist Masternarratives

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Abstract

A new generation of counter-terrorism scholars have begun to correct the theory-induced blindness of their predecessors. These scholars seek to arm CT experts with predictive social-identity models that are serviceable to enclave-level efforts to counter Islamic radicalisation in Europe. Dina Al Raffie, for example, builds upon Fathali Moghaddam's "staircase to terrorism" model to reveal the social-identity dynamics in non-violent forms of Islamic discourse that specifically foster extremist conditions within European Muslim enclaves. Raffie has demonstrated that, "it is the perceptions of individuals, and what shapes them, that provide the foundations for violent radicalisation." Raffie insists that "radicalisation can be understood as a process of first fostering an increase in religious awareness and then manipulating this awareness for political ends." Religious awareness within Muslim enclaves begins at the "ground floor" of the local Islamic community. Raffie challenges CT scholars to augment her investigations of the ground-floor cultural mechanisms that prime their Muslim populations for recruitment by the likes of Dr. Baghdad. Mindful of Raffie's focus on perceptual influencers and cognitive framers that function as extremist primers, I will lay out an analytical model for investigating how European Islamic masternarratives activate, structure, and motivate a distinctly Muslim social identity and condition communal members for extremist recruitment. Where Raffie has been examining the cultural "ground floor" in which extremist priming takes place, I will be examining its basement, the bio-cognitive substrates of identity-formation in Islamic masternarratives.

Introduction

How do Muslims, European Muslims in particular, become radicalized and motivated to commit terrorist acts? As the refugee crisis in Europe intensified, that question, posed with increasing impatience by the general public, urgently demanded honestly achieved answers that are intelligently useful to counter-terrorism practitioners and their counter-radicalisation operations.[1] However, counter-terrorism scholars who specifically investigate processes of *social-identity formation* in Islamic extremists have been generally less than illuminating in their efforts to provide answers to that question that will enable CT experts to develop strategies for apprehending and disrupting processes of radicalisation.

Lacking a standard model for social-identity formation in Islamic extremists, CT scholars who examine social-identity formation in violent extremist Islam typically revert to a general theory of social-identity formation by which to construct a coherent *extremist narrative* out of the subject's life. Working under the spell of her favorite theory, the analyst selects from the subject's psycho-biographical evidence whatever the SIF theory tells her are the key formative themes and sub-themes of an individual's career as an Islamic terrorist. Too often, the analytical product ends up proving the theory with narrative-confirming evidence



instead of using the theory to intelligibly order the full range of disparate types of psycho-biographical, including bio-cognitive and cognitive-sociological, evidence.[2] These studies assume that, by painstakingly reassembling the thousand-and-one shards of the psyche of a terrorist, *ex post* terror attack, they can reveal the invisible hand of the Dr. Baghdad who constructed the monster. This forensic style of identity reassembly has not been entirely useless to CT practitioners, but it does not show us how to keep the monster from being built in the first place. Nor does it reveal the locations of the Dr.'s infernal laboratories.

Even methodologically self-conscious SIF VIE studies that attempt to provide a holistic deconstructive analysis of the broad ideological surround in which the European Islamic terrorist was raised, educated, and radicalized are hobbled by what Daniel Kahneman defines as *theory-induced blindness*:

Once you have accepted a theory and used it as a tool in your thinking, it is extraordinarily difficult to notice its flaws. If you come upon an observation that does not seem to fit the model, you assume that there must be a perfectly good explanation that you are somehow missing. You give the theory the benefit of the doubt, trusting the community of experts who have accepted it.[3]

One of Kahneman's most disturbing insights into human cognition is that even the trained scholarly mind tends to drink its own *Kool-Aid*. Our near-complete failure to implement successful counter-radicalization operations in Islamic enclaves in Europe suggests that the CT community has been hitting the punch bowl. We need an SIF-VIE model of practicable value to enclave-level CT experts.

Fortunately, a new generation of CT scholars have begun to acknowledge and correct the theory-induced blindness of their predecessors. This new scholarship seeks to arm CT experts with *predictive* identity models that are serviceable to enclave-level efforts to counter Islamic radicalisation in Europe. A refreshingly sober scholar from whose eyes the scales of theory have fallen is Dina Al Raffie. Building upon Fathali Moghaddam's "staircase to terrorism" model to reveal social-identity dynamics in non-violent forms of Islamic discourse that specifically foster extremist conditions within European Muslim enclaves, Raffie demonstrates that, "it is the perceptions of individuals, and what shapes them, that provide the foundations for violent radicalisation." [4] Raffie insists that, "radicalisation can be understood as a process of first fostering an increase in religious awareness and then manipulating this awareness for political ends." [5] Religious awareness within Muslim enclaves begins at the "ground floor" of the local Islamic community. Raffie challenges CT scholars to augment her investigations of the *ground-floor* cultural mechanisms that prime their Muslim populations for recruitment by the likes of Dr. Baghdad. [6]

Mindful of Raffie's focus on *perceptual influencers and cognitive framers that function as extremist primers*, I will lay out an analytical model for investigating how European Islamic masternarratives activate, structure, and motivate a distinctly Muslim social identity and condition communal members for extremist recruitment. Where Raffie examines the cultural "ground floor" in which extremist priming takes place, I'll be examining its basement, the bio-cognitive substrates of identity-formation in Islamic masternarratives. [7]

Defining Masternarrative: Soothing Cognitive Torment

Working from the premise that masternarratives merely *reflect* a community's worldview, the professional analysis of Islamist masternarratives has largely failed to yield insights that are intelligently useful to enclave-level efforts in Europe at counter-narrating the recruitment strategies of Islamic extremists. For example, this is a typical operating definition of *Masternarrative*: "Master narratives are the historically grounded stories that *reflect* a community's identity and experiences, or explain its hopes, aspirations, and concerns.



These narratives help groups understand who they are and where they come from, and how to make sense of unfolding developments around them.”[8] We derive this normative definition from the literary sub-discipline of narratology, which, as M.H. Abrams explains, “deals especially with types of narrators, the identification of structural elements and their diverse modes of combination, recurrent narrative devices, and the analysis of the kinds of discourse by which a narrative gets told, as well as with the *narratee*—that is, the explicit or implied person to whom the narrator addresses the audience.”[9] Even this traditional definition of narrative analysis is too superficial to be intelligently useful to in-the-field strategic communicators.[10] It is also incomplete. It omits the bio-cognitive substrates and psychosocial functions of masternarratives.[11]

While masternarratives most certainly do *reflect* a community’s identity and experiences, they must first activate key bio-cognitive processes in the audiences they contrive to captivate. MNs are more than historical markers. They are biological manipulators. They manipulate and exploit innate bio-cognitive proclivities.[12]

As E.O. Wilson, the pre-eminent founder of socio-biology, has noted, “Permanent ambiguity in the individual human mind is an inevitable result of the mutually offsetting forces of multilevel selection.”[13] The human mind constructs narratives almost moment by moment in order to minimize the dissonance created by our cognitive inheritance of “permanent ambiguity.” We are motivationally hamstrung between two different moral systems, a selfish program that impels us to procreate at all cost. And a self-less program that impels us to identify with and protect the genetic coherence of our primary tribe, Robin Dunbar’s famous 150, at all cost. Neither “moral” system is “rational.”[14]

As Wilson notes,

Multilevel selection (group and individual selection combined) also explains the conflicted nature of motivations. Every normal human person feels the pull of conscience, of heroism against cowardice, of truth against deception, of commitment against withdrawal. It is our fate to be tormented with large and small dilemmas as we daily wind our way through the risky, fractious world that gave us birth. (290)

Our inner, compulsively story-telling homunculus helps us minimize the torments of multilevel selection. Narrative is our primary cognitive operator, a stabilizer of mental experience whose origins lie in our *social* past.

Our narrative compulsion is an evolutionary pre-adaptation that activates and guides the other primary pre-adaptations involved in human *ultra-sociality*, like disgust, cooperation, and procreation. At the individual level, the narrative operator gives coherence to mental experience of imported sensory data that would be, without narrative structure, chaotic and unusable. But the primary adaptive *social* task of our narrative operator is to make us *feel* at home in the world and *feel* bonded to tribal members who share that home. At the social level, masternarratives (known in other eras as “myths”) maintain tribal morale and morality. At the individual level, MNs eliminate the cognitive torments of multilevel selection. Thus, MNs do much more than *reflect* personal and group identity. MNs are radically *formative* of social identity. They form inter-subjective neuro-networks, effectively binding the limbic systems of narrative captives together into an MN community.[15] In their most extreme (extremist) versions, a masternarrative functions as a communal plot, assimilating into itself the total individual identities of its captives, sending them down pre-plotted behavioral vectors.

In order to be successful as MNs (socially adaptive), they must both absorb and dispel the *torments* of multilevel selection. They must be specific enough (in symbolism, themes, plots, and language) to describe *local*



sources of “torment,” but they must be general enough to explain and structure the *collective inter-subjective* experience of *non-genetically related* individuals. It is important to recall that political modernism not only encourages fierce identity competition *among* groups but also identity competition *within* individuals. Biological cognitive torment is exacerbated by the cultural competition and the fierce identity competition that are features of pluralistic democracies. Extremist Islamic masternarratives exploit the cognitive torments of modern identity competition as a psychological resource. I will examine that process in more detail below.

Bio-cognitive analysis of Islamic masternarratives seeks to reveal how IMNs form an individual’s *social identity* within the increasingly understood parameters of human cognitive programs, within the evolutionary constraints of what paleo-anthropologists and socio-biologists call the pre-adaptations of human *ultra-sociality*, in particular, disgust, altruism, and procreation.[16]

As I am re-defining it, MN analysis should seek to explain how an MN gains access to primary biological motivational systems. This process is called limbic hijacking. MN analysis should seek not only to reveal how a specific narrative construct activates a pre-learned cognitive program, such as disgust, but also to demonstrate where (in what context) the narrative links that innate motivational system to a specific set of symbols. This is called symbolic encoding.[17] From that analytical basis, MNA can then begin to reveal how the narrative kicks specific symbols into communal motion, thereby provoking a compelling, even compulsive, *feeling* of communal, group belonging. Masternarratives bring biological motivational systems into alignment with a field of resonate symbols to create a masternarrative community.[18]

Where biocognitive analysis can generate insights into the social-identity formation of Islamic extremists that are of practicable value to counter-radicalization operations is in its understanding of narrative as a neurologically compelling behavioral vector. MNs plot group-oriented behavior—behavior of, by, for the IN-group and typically aimed at or against the OUT-group.[19] European Islamic Masternarratives typically kick Islam-resonate symbols into motion (plots) that keep the European Islamic identity unburdened by the intense moral ambiguities that arise from living in or within a pluralist society. To echo Wilson, European Islamic MNs succeed where they can eliminate the cognitive torments of multilevel selection, which tend to be severely heightened among European Muslims who live *betwixt and between* self-consciously “sacred” and nonchalantly “profane” societies. European IMNs typically achieve “torment relief” among their narrative captives by eliminating competing, non-Islamic (*haram*) identity models from the symbolic enclosure of their version of Islamic mythology.

With the recent discovery that mirror neurons are globally distributed in our brains, we are beginning to understand much more precisely how MNs entice an individual’s neuro-network into synching up with a specific set of symbolic representations that are already actively circulating in other neuro-networks.[20] We already know that MNs exploit “mirror synching” to bind, at the neurological level, an individual to his identity group’s primary emotional core. The more the individual fuses with the group, the less “multilevel selection torment” he or she experiences. The more he contemplates the MN’s specific symbolizations of identity themes (i.e. disgust boundaries) and the more he employs these symbolizations to organize his own psycho-biographical data, the tighter will be his identification with the group. But he purchases group identification and self-esteem at the price of perceptual independence and accuracy.[21] Here we are dealing directly with Raffle’s *perceptual influencers and cognitive framers that function as extremist primers*.

For example, Greg Berns et al’s recent investigations of the neurology of group identification and individual perception indicate that group cohesion is purchased, both evolutionarily and neurologically speaking, at the cost of perceptual accuracy. Bern’s MRI experiments have shown that the limbic system bypasses the



neo-cortex, directly activating networks responsible for visual and auditory perception and processing (the occipital-parietal network). When group survival is threatened, loyalty to the group (altruism) is selected *before* individual perception. We have known since Solomon Ash's experiments that groupthink overrides individual volition. Berns' experiments show us how individual perception is overridden at the neurological level by group pressures to be cohesive, cooperative—altruistic. If the masternarrative community with which you identify pressures you to see 2 plus 2 as 5, you will see 2 plus 2 as 5. In fact, you may not be able to see 2 plus 2 as anything other than 5, because your neo-cortex gets overridden by your limbic system, which has been hijacked, so to speak, by your masternarrative community. Masternarrative analysis calls this process *coercive cohesion*. [22]

In this regard, Islamic MNs will only be successful if they can perform a vital *de-tormenting* psychosocial task for European Muslims whose internal, evolutionarily inherited cognitive ambiguity is intensified by an external environment of competing social identities and group loyalties. European Muslims today typically find themselves caught within a field of competing social identities and group loyalties. [23] Not surprisingly, European Islamic MNs quell identity competition (cognitive ambiguity) by eliminating non-Islamic competitors from the symbolic field. By locating and isolating the specific symbols, themes, and plots of successful masternarratives, biocognitive MN analysis seeks to reveal not only how group cohesion is coerced but also what degree of perceptual independence is lost among narrative captives.

Most masternarratives provide an individual an imagined communal space in which to escape cognitive dissonance, achieve cognitive balance, and maintain cognitive consistency. Thus, bio-cognitive analysis augments the social-psychological model of *symbolic convergence theory*, in which the primary psychosocial task that masternarratives perform for an individual is achieving and maintaining *cognitive balance*. [24]

However, before masternarratives can balance an individual's social identity within a field of competing identities, MN manipulators must *first* activate and captivate at least three universal, primary bio-cognitive programs: disgust, social altruism, procreation. [25] All three are primary motivational systems that, in a sense, contain their own biologically front-loaded plotlines. Disgust impels redemptive narratives of containment, contamination, and cleansing. Altruism impels heroic narratives of tribal defence. Procreation impels romantic narratives of tribal propagation, in the instance of IMNs both biological propagation and ideological propagation (proselytising). Most masternarratives achieve cognitive balance in narrative captives by giving these primary motivational systems mutually supporting and overlapping plotlines.

For example, Islamic "disgust" narratives eliminate internal ambiguity by telling adherents what it is "safe" to eat, to wear, to do (sumptuary laws); internal ambiguity is further diminished by telling adherents which thoughts are safe to think and which identities are safe to develop (creed policing). Once an individual aligns his personal disgust boundaries with his group's disgust symbols, his altruism/cooperation motivational system can be activated to protect the group/tribe from physical and moral contaminants. I will examine *disgust* in European Islamic MNs in more detail below.

In this regard, MNs perform "symbolic action" in the sense that the sociologist of human communication, Kenneth Burke, means, "as strategies for selecting enemies and allies, for socializing losses, for warding off the evil eye, for purification, for propitiation, and desanctification, consolation and vengeance, admonition and exhortation, implicit commands or instructions of one sort or another." [26] MNs are, "*equipment for living*, that size up situations in various ways and in keeping with correspondingly various attitudes." [27] Masternarratives provide symbolic motivations for acting in the real world.



However, biocognitive analysis extends Burke's insights, to reveal the ways in which narratives plot action in-the-real-world with symbols. Bio-cognitive analysis is highly sensitive to the active presence of identity-forming, group-generating masternarrative wherever it encounters rhetoric, narratives, storylines, images, songs (any means of *symbolic expression*, including suicide bombings and ritualized beheadings) that articulate and mobilize the primal themes of disgust, altruism, and procreation.[28] This analytical model correlates these primary narrative themes, upon Fritz Heider's "cognitive balance theory," with group attitude, group identification, and self-esteem. Analytical emphasis is placed upon isolating the specific symbolic identifications in which disgust, altruism, or procreation are linked to self-esteem, group identification, or group attitude. MNs symbolically narrate these motivational systems to create the cognitive triad of cognitive balance, self-esteem, group identification, or group attitudes.

All variants of European Islamic MNs recursively circulate themes of disgust, altruism, and, to a lesser extent, procreation. Identifying the symbolic vehicles of these themes and then correlating these themes within the points of Heider's social-identity triangle is a primary analytical task of MN analysts. When analysing Islamic MNs, therefore, it is critically important to look for correlations between the bio-cognitive triad and the social-identity triad. MNs activate the former to construct the latter. As we will see, Islamic MNs typically mobilize disgust to create self-esteem.[29]

To sum up, when analysing masternarratives at the "basement" level, we are dealing with six points of two triads, a bio-motivational triad and a cognitive-balance triad. This might be represented in a *power point* presentation with two overlapping triangles. Disgust, altruism, procreation are one triangle. Self-esteem, group attitude, group identification are the other triangle. In an active rhetorical setting, the communal "ground floor" where perceptual shaping takes place, the two triads overlap. Masternarrative field research can effectively delimit its scope by measuring for symbolic correlations among these six points.[30]

As I am defining it, bio-cognitive analysis of MNs will yield practical payoff for counter-radicalization efforts only if it can enable swifter detection of openings for analytical intervention and "narrative disruption." [31] In order to know where to aim narrative disruptors, CT experts benefit from knowing whether an Islamic MN has linked individual self-esteem primarily or secondarily to disgust detection or to altruistic protection, whether the MN has linked group identification primarily or secondarily to altruistic protection or disgust detection, whether the MN has linked group attitude primarily or secondarily to ideological procreation or to biological procreation, and so forth. By revealing how a community-forming narrative has mobilized the bio-cognitive triad of its *narratee captives*, MNA can equip CT experts with a swift grasp of precisely how self-esteem or group identification has been symbolically constructed within a specific enclave. That knowledge provides immediate apprehension of the specific type of masternarrative community with which the CT expert is dealing: fundamentalist, extremist, or terrorist. That knowledge may also provide a more accurate assessment of an individual's level of commitment to his terrorist group, a swifter and more accurate indicator of the degree of his or her narrative captivation.

To be truly useful to CR efforts, bio-cognitive MN analysis must enable precision in the apprehension of the neuro-cognitive sources, psycho-cultural resources, and thematic techniques that narrative masters of both normative and extremist Islam exploit to construct masternarrative communities. That knowledge is key to counter-narrating the extremist social identity. But it is not enough.

For example, can bio-cognitive analysis of MNs really help a strategic communicator attempting to implement a counter radicalization program in, say, Molenbeek, Brussels adjust for the fact that his target audience has been primed by their *normative* Islamic masternarrative to perceive him and his state-funded



de-radicalization program as *haram*? Does MN analysis really provide new weapons for the CT professional dealing with at-risk Muslim youths in Europe's Islamic ghettos, young Muslims who are primed to automatically perceive him as dangerously, toxically contaminant to their Islamic identities?

Symbolically Motivating Disgust: Hallal versus Haram

Enclave-level, normative Islamic MNs typically seek to eliminate the cognitive torments of multilevel selection by activating the *disgust-detection*, pre-adaptation programs of narrative captives. Global jihad's many strategic narrators, especially ISIL narrative masters, ruthlessly exploit this enclave-level masternarrative resource to ensnare local recruits.[32] The Islamic *hallal-haram* construct activates and shapes disgust as a motivational system that, in turn, structures daily behavior, and both the religious and social identity, of Muslims worldwide. This MN sub-narrative gives its narrative community extraordinary volitional control over identity maintenance, which, in turn, fosters self-esteem, especially within a broader European societal context in which Muslims generally lack control over their social-identity and, therefore, risk succumbing to low self-esteem. Although the *hallal-haram* sub-narrative possesses high "survival value" for a distinctly European Islamic identity, this symbolic construct ultimately makes adherents vulnerable to the persuasive ploys of Islamic extremist recruiters, as I will explain.

We know from Paul Rozin's extensive, groundbreaking research into the psychology of disgust that it is, "a basic biological motivational system".[33] We also know that, as Rozin explains, "Core disgust is qualitatively different, in terms of meaning, from distaste." [34] Disgust is one of our most powerful physio-emotional responses. It is involuntary and contagious. We are disgusted by what disgusts other members of our in-group. Once that pre-adaptation has been activated and then linked via symbols to a specific object, group, or idea, it is almost impossible to undo the association, no matter how arbitrary (culturally bound) that association might be.

As Rozin notes, few of us (less than one percent) can drink water from a sterile, never-used toilet bowl without feeling disgust. Even thinking about that act triggers mirror neurons that trigger disgust responses. It is even difficult for most people to drink coffee from a cup shaped like a toilet bowl. As Rozin notes, "Disgust evolves culturally and develops from a system to protect the body from harm to a system to protect the soul from harm." [35] The *hallal-haram* disjunction in all variants of Islam is a superlative example of a body-protection system being narrated into a soul-protection system. European Islamic masternarratives activate an inborn, evolutionarily inherited disgust-detection system, link that system to specific symbols of *haram*, effectively transforming biological disgust into a *hallal-haram* antagonism that serves as an Islamic identity-protection system.

What begins as a relatively simple set of dietary rules is narrated into a complex set of sumptuary laws that regulate the entire life of an individual, determining what an adherent wears, what and where and how he reads, and with whom and where and when he affiliates with other human beings. Normative Islamic teaching in Europe constructs the primal disgust of communal members within a combatively exclusive *hallal-haram* dichotomy. Even within non-violent Islamic MNs, what begins as a body-protection system becomes an identity-protection system. Any thing, group, person, sets of beliefs, or behaviors that the local IMN symbolizes as *haram* will provoke an involuntary visceral response of disgust in MN captives. That's what the psychology of disgust teaches us.

What specifically gets *perceived* as a *haram* contaminant of the identity of the believer is determined by the *disgust symbolism* of his local IMN. Whether or not a narrative captive's disgust-detection program



becomes a total and totalising motivational system to which he subjugates his entire identity and lifestyle largely depends on how the specific MN of his respective Islamic community narrates symbols of disgust/*haram*. This is precisely where MN analysis and research should be focusing its attention, in order to generate insights intelligently useful to counter-radicalization operations. Future analysis of Islamic MNs should apprehend disgust symbolism, isolating its themes, sub-themes, and the semantic clusters in which it typically emerges, thereby generating a taxonomy of disgust, altruism, and procreation subplots.

Because European Muslims are effectively surrounded by an unselfconsciously profane society that abounds in identity possibilities, European Islamic MNs keep their adherent's disgust-detection system hyper-sensitive to contaminants from *Kuffir* culture. By pushing *Kuffir* contaminants to the outer parameter of Islamic identity, the MN eliminates the cognitive torments that might arise from contact with competing sources of identity formation, *Kuffir* women, the plays of William Shakespeare, the music of Bach, the paintings of William Turner, or theo-political debates with Jews, Christians, or atheists. Raffle describes this process in slightly different terms, "Coupled with steady demonization of other social identities (for example, Britishness), Muslims are steadily radicalised as religious frameworks – perceived and real – belonging to their Islamic social identity become dominant frames of reference in their daily interactions." (90-91)."[36] Bio-cognitive analysis reveals the cultural mechanics of the "demonization" process as deriving, in part, from *disgust/haram* plots.

Plotted within a *hallaal-haram* antagonism, a Muslim is made empower-ingly dependent *on his own ability* to keep his Islamic identity un-contaminated. This is the secret psychosocial strength of the *disgust/haram* MN subplot: identity control. What makes the *hallaal-haram* construct especially adaptive (and therefore "sticky") in today's European Muslim enclaves is that it gives adherents a great deal of personal control over the maintenance of their Islamic identity. That identity control, or illusion of control, creates a powerful sense of self-esteem. Crudely put, the *hallaal-haram* construct empowers a European Muslim to be his own identity cop. The power of identity self-policing equates to self-esteem in a broader European society in which avenues to consumerist-based self-esteem for many Muslims are obstructed. Exploiting the biocognitive resources of disgust, the *hallaal/haram* narrative gives the narrative captive a strong feeling of control over environmental contingency (luck) and a strong feeling of successful agency, empowering the European Muslim to stave off what Martin Seligman calls *learned helplessness*. [37]

For example, securing gainful, meaningful employment in today's Muslim enclaves is largely dependent on luck. Unemployment, a primary trigger for the loss of self-esteem in European society, largely remains outside of the volitional sphere of many European Muslims today.

Because social identity (and self esteem) in secular European society largely equates to what you consume, you effectively do not have a social identity if you do not have gainful employment. Therefore, social identity and self-esteem fall outside the volitional sphere of many European Muslims. [38]

The *hallaal-haram* antagonism performs the psychosocial task of making luck in identity formation and maintenance irrelevant, thereby granting identity control and bolstering self-esteem. Within a broader environment of under- or non-employment, the *survival value* (what makes it attractive to adherents) of the *hallaal-haram* construct increases, because it serves as an identity-preserving system for warding off low-esteem, yet another psychosocial strength of this *haram* subnarrative.

All variants of normative Islamic MNs activate the primal disgust programs of adherents by constructing the religious identity of followers within a *hallaal-haram* antagonism. However, specifically European Muslim MNs keep adherents hyper-sensitive to the threat of identity contaminants, which abound in European *Kuffir*



society and promiscuously infiltrate the Muslim enclave. Moreover, the disgust-detection program compels loyalty among narrative captives when it provides a sense of identity control and fosters self-esteem, pride in being an *uncontaminated* Muslim.

Analysing disgust and identity formation, Martha Nussbaum has noted, “And even in contemporary terms, it appears that a firm and overgeneral bounding off of the self from the disgusting serves to reassure the self about its own solidity and power.”[39] Nussbaum’s conclusion suggests that European IMN adherents will remain committed to an IMN precisely because its subplots, like the *hallal-haram*/disgust-detection construct, are cognitive balancers that make narrative captives (enclave Muslims) *feel* like they have personal control over the development and maintenance of their Islamic identity within a broader *liquid haram* society in which they have little or no control over their social identity, self-esteem, or group attitudes: “the disgusting serves to reassure the self about its own solidity and power.”

Analysing *hallal-haram* as a narrative activator of the disgust-detection motivational system enables CT experts to perceive how a distinctly European Islamic identity is formed: Along a plotline that moves from disgust activation to identity border policing (identity control) to self-esteem to group identification. As an adherent begins to externalize the *hallal-haram* distinction, after his disgust-detection system has been activated and is vigilantly on-the-lookout for *haram* toxicants, he is prepared for further identity formation, to strengthen his Islamic identity. Demonization of non-*hallal*, non-Islamic identities is nearly inevitable within the MN’s field of *haram* symbols, which represents a powerful masternarrative resource awaiting the exploitation of extremist recruiters.[40]

The formation of an MN captive’s Islamic social identity receives further plotting when the pre-adaptation of *altruism* (a *group-protection* motivational system) gets activated, usually by the articulation and contemplation of “hero plots,” such as martyr and sword narratives, that channel altruistic instincts into protecting the *hallal* community from that which is *haram*, *Kuffir* contaminants. His identity advances from disgust-detection to altruism/group protection. This is where non-violent, enclave-level Islamic MNs make adherents especially vulnerable to the recruitment ploys of extremists. “Ground floor” Islamic MNs prime adherents to extend identity maintenance from an individual level of self-policing in *Dar al-Haram* up and out to a social level of combating “*haram*” in *Dar al-Harb*.[41]

For example, ISIL masternarratives effectively exploit that vulnerability by hacking into disgust programs already activated in most European Muslims by their formative, normative Islamic community. ISIL communicators seek to activate or reactivate the same disgust-detection system in potential recruits that their primary communal MN had activated. But ISIL recruitment rhetoric gains access to primal disgust through the psychic doorway of self-esteem. They reverse the traditional, normative Islamic social-identity-formation plotline.

Most European ISIL recruits are educated by and semi-integrated into their “host” European cultures. They have had frequent contact with *haram* pollutants. Typically, recruits have arrived at or are beginning to arrive at an “identity crisis” marked by vague feelings of self-disgust, a common psychological denominator among ISIL’s European recruits. The self-esteem of, say, an under-employed, but highly literate post-university student of Muslim background living in Wuppertal, Germany is likely to be very low, especially where joblessness and cultural isolation from mainstream culture are inordinately high, and *especially if he has grown lax about keeping himself unpolluted by Kuffir toxicants*. I will discuss how ISIL exploit this MN resource in detail below.



To iterate, even normative European Islamic MNs typically seek to eliminate “ambiguity and uncertainty from individual souls in society.”[42] Normative Islamic discourse exploits the crisis in individual souls that is created by what the sociologist Zygmunt calls “liquid life.” Normative Islamic MNs offer something solid to clot up the bleeding soul of the liquid Muslim who, “flows through life like a perpetual traveler, changing locations, jobs, partners, values and even sexual and political orientation.”[43] Islamic narrative masters in Europe, extremist and otherwise, know full well that “liquid life is typified by ceaseless change, uncertainty, and lack of trust in general.”[44] And they know that Islamic identity becomes a means by which the “losers” in liquid life can build an identity. These “losers” do not have the ability to participate in Western “freedom,” the freedom to construct your identity through styles of consumption and political participation that confer dignity, a *social identity*.

Further applying Zygmunt’s terms, normative Islamic narrative masters offer a Muslim the *freedom* to construct a counter-identity. Even better, Islamic masternarratives transform the socially marginalized individual’s greatest weakness into his greatest strength. Now, instead of feeling “stripped of human dignity and feeling humiliated...and watching with a mixture of envy and resentment the consumer revelry”[45] of the winners of liquid modernity, his active rejection of modernity and other, *haram* identity possibilities is placed within the sphere of his own volition.[46] His position as an outsider living within the *haram* realm of *Kuffir* now becomes a psychic asset, a masternarrative resource highly vulnerable to exploitation by an extremist recruitment narrative.

Awash in *liquid haram* but still encumbered by impulses to keep his Islamic identity hygienic — that is, captive to his formative Islamic MN — this Muslim living in what amounts to an Islamic ghetto in the middle of Europe starts to re-experience the torments of his evolutionary cognitive inheritance.[47] This Muslim is, to swipe a pulpit phrase from another theological system, *backslidden*. To echo Fritz Heider, they are suffering from *cognitive imbalance*. To use the symbolism of their own MNs, they are contaminated with *haram* and require purification.

To sum up, both non-violent and violent Islamic discourse are responses to an identity crisis that is caused by the “filthy” facts of liquid modernity. Responding to social-identity competition (modern pluralism) as if the competition itself were a *haram* contaminant, Islamic narrative masters seek to establish the uncontaminated *halla* identity of the Mosque. When the social realm is framed by this antagonistic sub-narrative, it’s but a hop, skip, and jump over to the moral imperative to de-toxify not only oneself but also one’s entire Islamic community (altruistic protection) from *Westoxification* (Occidentosis)—by any means necessary.[48]

How Extremist MNs Exploit the Resources of Normative Islamic Masternarratives:

Let us examine in a bit more detail how ISIL extremist MNs exploit bio-cognitive resources that are initially activated and plotted by non-violent, normative Islamic MNs.

ISIL narratives offer European Muslims tormented by modern identity competition a quick boost to their Islamic self-esteem. That much is oft noted by CT analysts of ISIL propaganda. However, the means by which ISIL MNs (as revealed through analysis of their respective rhetorical influencers) RE-activate a primal disgust program in recruits, a disgust system that had already been activated and educated by non-violent European Islamic MNs, has been overlooked.[49] ISIL and other extremist MNs do not merely re-balance an unbalanced Muslim social identity. Extremist MNs do not merely repair damaged self-esteem. They do not merely offer a *haram*-contaminated Muslim a means of purification.



Seeking to shift the center of a recruit's self-esteem to their black standard, Dr. Baghdad's narrative manipulators achieve that aim by *first* getting an individual to feel viscerally disgusted by his *own* low self-esteem. ISIL communicators exploit a deviously persuasive tautology: They provoke self-disgust before they offer the recruit a means of purging himself of his own self-disgust. ISIL narratives of identity transform the *hallal-haram* disgust-detection system into a total and totalizing motivational system. ISIL MNs fiercely expand the realm of *haram* into a voraciously expanding symbolic field that makes promiscuous use of a wide array of anti-Western discourses (such as the anti-imperialist, racialist tirades of Franz Fanon), Islamic symbolism (especially images taken from the "Salaf," the first generation of Muslims), and from popular street culture (for example, the Euro-gangster rap and urban "culture" of *Deso Dog*), all of which seek to increase a Muslim's sense of drowning in *liquid haram*.

ISIL identity narratives link the generative cause of a recruit's low self-esteem to the contaminating culture of *Kuffir*. ISIL propaganda represents the recruit's low self-esteem itself as "disgusting" *because* it is caused by "Westoxification" or "Occidentosis." The "self-loathing" Muslim is a common ISIL theme. *Kuffir* pollutants abound in ISIL descriptions of the infidel cultures of Belgium, France, and Germany. Low self-esteem in European Muslims is, according to ISIL's narrative argument, the result of a faulty disgust-detection system. His *haram* infection is the result of growing up Muslim in an environment rife with *Kuffir* pollutants. We might even worry that ISIL narrative masters have self-consciously studied and applied Martha Nussbaum's insights into disgust and the construction of social identity: "A ubiquitous reaction to this sense of disgustingness is to project the disgust reaction outward, so that it is not really oneself, but some other group of people, who are seen as vile and viscous, the sources of a contamination that we might possibly keep at bay." [50]

Once the disgust-detection system has been re-triggered in a potential recruit to ISIL, and once his primal disgust has been linked both to his own low self-esteem (self-disgust/*Occidentosis*) and then linked to the purported sources and causes of his disgust — *Kuffir* toxicants — the recruit becomes bio-cognitively captive to ISIL's MN.

Given what Rozin has revealed about the psychology of disgust, we must suspect that true emotional defection from the new masternarrative becomes nearly impossible. That insight bears profound implications not only for counter-radicalization operations but also for any CT practitioner who must assess the authenticity of an extremist defector's claims to have renounced violent jihad. [51]

ISIL have even developed a *haram* de-tox regimen—ritualised beheadings. By beheading a *Kuffir*, a recruit symbolically purges himself of disgusting "Western" spiritual contaminants. He not only cleanses himself in the blood of his victim of non-*hallal* food or contact with "infectious" women but also of toxic beliefs about Islam, Islamic history, septic political ideas about liberty, fraternity, and equality. By beheading *Kuffir*, an ISIL initiate symbolically beheads himself. He decapitates his "Occidental" mentality, thereby de-toxifying his Islamic identity and rehabilitating his or her self-esteem. Upon the ISIL MN plotline, the movement from primal mental ambiguity (the innate biological need for narrative) to self-disgust to social identification to redemption (beheading an unbeliever) is figured as a natural, even inevitable plot. ISIL re-formation (or deformation) of the Islamic social identity exploits what psychology calls a reaction formation, the repressed impulse being, in backslidden potential ISIL recruits: The impulse to keep an Islamic identity clean of *haram* contaminants, the competing possible social identities that the original Islamic masternarrative excluded in order to minimize the evolutionarily inherited cognitive torments of multi-level selection. [52]



ISIL MN communicators fully grasp Rozin's insights into the psychology of disgust, intuitively and quite possibly self-consciously. They fully understand how to use masternarrative (bio-cognitive manipulation) to transform primal disgust into a totalizing identity-forming system that makes recruits feel good about killing for a black standard.

It is important for CT experts to understand that Islamist MNs activate and mobilize primal disgust as a behavioral vector during the narrative re-formation of the social identity of the jihadist.[53] Within Islamist MNs, the extremist identity plotline is deliberately conflated with action in-the-real-world. Conflating narrative constructs with fatal action-in-the-real-world is a hallmark cognitive error of extremists and death cults.[54]

By contrast to contemplated narratives (like reading a novel), extremist masternarratives do not provide psychic relief from cognitive torment *without* requiring action-in-the-real-world. Aristotelian "catharsis" (emotional purification) is not the formative social-identity work primarily performed by masternarratives. Islamist MNs do not provide catharsis through aesthetic contemplation. Symbolic relief, from cognitive torment, *without-action-in-the-real-world* is deliberately denied by ISIL's MN identity plotline. Instead, ISIL narrative masters conflate real-world action and narrative plot, which is why ISIL communication strategies lack any sense of narrative irony or narrative humour, both of which arise from the perceived discrepancy between what a story tells and how it tells it. (As I will discuss below, this is also why ISIL augment their MN with ritual.) The only type of irony ISIL employs is *sarcasm*, when referring to *liquid haram* and *Kuffir* imperialists. "Sarcasm," MH Abrams reminds us, "derives from the Greek verb *sarkazein*, to tear flesh." It is the hallmark of communicators driven by disgust and contempt.[55] Dramatic and cosmic irony allow for symbolic, psychic catharsis, without requiring action-in-the-real-world. A lack of self-irony is a hallmark psychic trait of death-cult and terrorist narrative masters.[56]

By hijacking primary biological motivational systems already activated in European Muslims, the ISIL MN locks its narrative captives into a "fated" behavioral vector, a vector that begins in the adherent's formative Muslim enclave when his or her identity was constructed within the combative narrative of *halla* versus *haram*. ISIL MNs ruthlessly exploit psychological resources, in particular disgust, that have already been activated and plotted into Muslim social identities by non-violent Islamic masternarratives. ISIL narrative masters isolate seemingly non-violent perceptual influencers, like *haram*, and exploit them to narrate extremist identities. In this regard, Raffie is correct in insisting that, "radicalisation can be understood as a process of first fostering an increase in religious awareness and then manipulating this awareness for political ends"[57] Bio-cognitive MN analysis reveals how religious awareness is increased with normative Islamic communicator use of symbols to provoke and maintain an awareness in narrative captives of an identity-defining antagonistic distinction between *halla* and *haram*. ISIL communicators appear to share Raffie's insight and ruthlessly exploit this masternarrative resource.

To sum up, ISIL narratives link core disgust (*haram* soul toxins) to low self-esteem; they also link core disgust to group identification. They offer identification with ISIL as *the only* effective means by which to purge oneself of Westoxification and *Kuffir* pollutants and rehabilitate self-esteem. Self-esteem, group identification, and disgust (group attitude) become fused. Where fusion between a bio-cognitive program (like disgust) and a point in the social-identity triad (self-esteem) is detected, we have discovered an attack point for narrative disruption; this is where MN analysis can arm counter-radicalization operations. However, while we can swiftly identify openings for intervention, we cannot so swiftly counter-narrate incipient extremist identities.



Because rejection of the *halla*-*haram* distinction would be tantamount to rejecting an Islamic identity, the likelihood that any variant of Islam in Europe will jettison the *halla*-*haram* dichotomy and find new narratives by which to structure the social-identity of Muslims is almost null. What are the implications of a “*halla* identity” for CR operations? Should CR communicators and strategists actually encourage European Islamic narrative masters to strengthen their “disgust-detection” awareness as a psycho-prophylactic against ISIL recruitment, upon this premise: The less contaminated by *haram* a Muslim feels, that is, the more securely he structures his identity upon a non-violent European Islamic masternarrative, the less likely he is to succumb to ISIL psychological trickery and the less likely he’ll feel the need to “purge” himself of *haram* pollutants by shedding *Kuffir* blood? We urgently need field-level investigations of European Islamic enclaves that gather data to support or deny that hypothesis.[58]

To further emphasize what CT experts gain by apprehending the bio-cognitive mechanisms of extremist MNs, I will briefly examine ritualistic augmenters of masternarrative, discussing, briefly, how ISIL globally *canalizes* the primal disgust initially activated by local Islamic MNs into *blood rituals* that, in turn, tighten group cohesion and inspire altruistic self-sacrifice in ISIL narrative captives. I offer the following analysis of ritual augmenters of extremist masternarratives tentatively. It will serve, I hope, as a heuristic segue into my conclusion.

Ritual Augmenters of Islamic Masternarrative Communities:

Both normative and extremist Islamic masternarrative communities augment themselves with one of human kind’s most ancient and most effective social technologies—ritual. Both normative and extremist Islamic MNs exploit the bio-cognitive and psychosocial resources of *participatory ritual*: Ritual as a symbolic act; as communication; as a rite of purity; as in-grouping tribalism; and, knowingly or not, as legitimizing cultural violence.[59] Because participatory ritual gains even deeper and firmer access than masternarrative to the evolutionary pre-adaptations of ritual participants, Islamic narrative masters, especially terrorists, often make innovative use of this remarkably flexible social tool to bind their narrative captives even tighter to each other as a group and to bind the group as an MN community to their MN’s key themes, symbols, and plots. Thus, the bio-cognitive analysis of ritual may reveal otherwise overlooked openings for strategic intervention by counter-radicalization experts.[60]

Bio-cognitively considered, all forms of participatory ritual exploit the neuro-social resource of synchronous movement.[61] Because of the way our limbic system has evolved, when human beings make music, dance, drill, and otherwise keep time together in groups, participants automatically experience a feeling of group unity. We now understand the neurological reasons why we feel bonded as a group when we synchronize our movements. Because mirror neurons are globally distributed in our brains, synchronicity of movement leads to synchronicity of feeling, perception, and thought. Robin Dunbar has recently suggested that communal ritual (synchronous movement) precipitates endorphin bursts in ritual participants. Paul Zak’s research, among others, has confirmed his suggestion.[62]

The neuro-biologist Walter Freeman further explains why ritual is our most powerful tool for creating social-bonding. Our forebrain never fully closes. Thus, our neurological capacity for forming a “We” neuro-network remains perpetually open. Participatory rituals trigger the release of massive doses of oxytocin into the never-fully-closed basal forebrain. When oxytocin floods the basal forebrain, “it loosens the synaptic connections in which prior knowledge is held, this clears the path for the acquisition of new understanding through behavioural actions that are shared with others.” Freeman calls music making, drilling, dancing, and myth



making/story telling the “bio-technology of group formation.”[63] A surfeit of oxytocin, induced in the brain by communal participatory ritual, fuses members into a single neuro-network. An “I” network is dissolved into a “We” network.

The primary socio-psychological state induced by ritual is known as “ego boundary loss.” Ego boundary loss is described, in the terms of evolutionary psychology, by Steven Mithen like this:

All group activities start in a similar way. When five or six hominids or Early Humans set out together to hunt or to look for carcasses, one of them might have been feeling hungry, another fearful; some of them may have wanted to go one way, while others believed the opposite direction was best. When each individual begins a group activity in a different emotional state, the situation is ripe for conflict. Those individuals who practised the hunt and enhanced their levels of coordination would have been reproductively more successful.[64]

As exploited by normative Islamic narrative masters, participatory ritual diminishes the strong sense of distinct selfhood in individuals who live in democratic pluralities that abound in social-identity possibilities.

Ritual, “moulds the minds and bodies of the group into a shared emotional state, and with that will come a loss of identity and a concomitant increase in the ability to cooperate with others.”[65] A key insight into the process of ritually-formed social identity that CT experts should commit to memory is this: “As identities are merged, there is no ‘other’ with whom to cooperate, just one group making decisions about how to behave.”

Ritual participants, “see themselves as a collective or joint unit, feel a sense of *WE-NESS*, of being together in the same situation facing the same problems.”[66] Islamic MNs exploit these ritual resources to renew their members’ sense of *WE-NESS* amidst the challenge of pluralistic identity competition. As a leading expert on the neuro-mechanics of ritual notes, “Ritual...is usually practiced within a group, and, to that end, helps to bring the members of that group into corporate unity.”[67]

Moreover, CT experts need to consider why our limbic system is designed to respond so automatically to participatory ritual.[68] John Blacking’s studies of the Venda people of South Africa suggests why. He discovered that this tribe intensify ritualised synchronized movement *not* when they face times of stress, hunger, or crises. Rather, they perform rituals when food and resources are plentiful. Blacking discovered that the Venda use ritual to drive selfishness out of the group/tribe. Thus, ritual soothes the primal cognitive torments of multilevel selection (procreation versus group altruism), a fact bearing strong implications for the use of ritual by Islamic masternarrators to shape the social identity of Muslims living in a profane European society that is marked by both resource and social-identity plenitude.

Communal ritual lures individuals away from pursuing their own self-interest precisely when they least need the group for survival. In this regard, ritual, like MNs, soothes the primal cognitive torments of multilevel selection pressure. As Zak and other have noted, the reward to ritual participants of synchronized movement is a strong hit of feel-good oxytocin. By performing rituals during times of plenty, the Venda maintain the level of communal cooperation necessary to survive during times of scarcity and crisis. Ritual maintains social trust, reinforces horizontal cohesion, and shores up vertical obedience to the tribe’s MN. What are the social implications of the fact that the only oxytocin-rich environments, social realms marked by generosity and goodwill, that many European Muslims ever experience are strictly within Islamic enclaves?

(If Blacking’s Venda studies be indicative, then CT experts should detect an increase in the use of ritual augmenters by Islamic extremists precisely when their MN community is experiencing a collective sense of



success, is waxing in membership, is feeling unchallenged and unthreatened—not when it's facing leadership losses from drone strikes or when group membership is waning. Terrorist attacks are rituals acts of violence.) Current analyses of the human terrain of ISIL seed beds in Europe need to take seriously the social-bonding function of ritual. By studying ritual in the context of MN, we can gain a more accurate understanding of how non-violent, normative Islamic masternarratives prime adherents to respond enthusiastically to oxytocin-soaked rituals that celebrate violence (like ISIL beheadings). In particular, we need studies that show how (whether?) normative Islamic rituals prime Muslim youth for extremist recruitment. As Scott Atran discovered in his interviews of various Europe-based Islamic terrorist cells, these young men first met in “non-Muslim” settings, like sports clubs, that promote group bonding. These settings, according to Atran, activated their altruism bio-programming, which was later twisted by extremist Islamic MNs into terrorist killing, “for the good” of the Islamic community.[69] We need extensive studies of the kinds of participatory ritual being practiced in Europe's masternarrative communities, a taxonomy of ritual. We need corresponding studies of “ritual competition” within Islamic enclaves; for example, what other types of participatory ritual compete with normative Islamic rituals in and around the enclave? Such studies would be highly useful to counter radicalisation efforts.

Describing correlations between aggression and ritual, d'Aquili and Newberg note:

Human ceremonial ritual is best understood as a morally neutral technology that, depending on the myth [masternarrative] in which it is embedded, can either promote or minimize particular aspects of a society and promote or minimize overall aggressive behavior. Thus, if a myth that achieves its incarnation in a ritual defines the unitary experience that the myth generates as applying only to the tribe, then the result is only the unification of the tribe. It is true that aggression within the tribe has been minimized or eliminated by the unifying experience generated by the particular ritual. However, this fact may only serve to emphasize the special cohesiveness of the tribe vis-à-vis other tribes. The result may be an increase in overall aggression when considered on a more global scale (specifically, intertribal rather than intratribal). The myth and its embodying ritual may, of course, apply to all members of a religion, a nation-state, an ideology, all of humanity, or all of reality. As one increases the overall scope of what is included in the myth within which the unitary experience is generated, the amount of overall aggressive behavior decreases.[70]

CT experts will note that masternarrative (“myth”) plays *the decisive role* in determining the moral, social, political vectors of the collective ritual experience of unity, “WE-ness.” Masternarratives either promote or discourage aggression and use ritual to augment their primary thematic content, for example, policing for *haram* contagion.

All extremist Islamic MNs today, especially ISIL, employ ritual augmenters. They self-consciously practice blood ritual as purification rite to fuse group members together into a single neurological unit. The power of this bond is remarkable. Once coherence is achieved at the neurological level of members, it is nearly impossible to “undo” it. It's as if the ritual and the myth/narrative to which it belongs (along with its symbolism of *haram*) are tattooed into the brains of adherents. (Body tattooing before and after blood rituals further increases ritually-triggered neuro-hormones, and, despite orthodox Salafist prohibitions on tattooing, has become a ritual-within-a-ritual among ISIL members.)[71]

More disturbingly, ISIS leadership have been extraordinarily successful at exploiting ritual techniques remotely, to create out of non-genetically-related strangers a tightly bonded brother and sisterhood of terrorists who are geographically distant from their “home” territory. This practice is known as E-jihad,



Cyberjihad, and Neojihadism.[72] Much of ISIL's recruitment success derives from its ability to gain remote access, in recruits and sympathizers, to bio-cognitive pre-programming already activated by normative Islamic MN's.

For an illustrative comparative example, consider these field observations of current Mexican drug cartel use of ritual beheading:

...some observers speculate that modern Mexican sicarios who make a public display of their worship for Santa Muerte are also influenced by the internet and the videos posted by Muslim radicals beheading their enemies. It may be that the current criminal craze for beheading victims in Mexico was spawned in part by new age terrorists from the Middle East. In this scenario, Mexican sicarios saw beheading videos on the internet and thought it was a marvelous idea, especially in light of increasingly deadly competition and rivalries among themselves. The same anxieties that fostered the contemporary rise of Santa Muerte, likely also fostered public displays of ferocity as a means of survival.[73]

The field observer helpfully draws our attention to the phenomenon of violence contagion, which is contagious even in mediation, which is *why* jihadist "beheadings" belonging to masternarrative totally alien from Santa Muerte MNs seemed like a "marvellous idea" to Mexican sicarios. As bio-cognitive MN analysis explains: ritualized violence is highly contagious.

Ritualized violence hijacks the limbic systems of those within the symbolic setting, both proximally and distally. Ritual projections of violence can effectively get local populations and audiences (potential narrative captives) hooked on the psychotropic chemicals associated with extreme violent acts, symbols, and their proximal or distal contemplation. Getting a local-indigenous population psycho-tropically addicted to neuro-hormones associated with violence is an ancient strategy of subjugation and political dominance, as Daniel Smail reminds us in his discussion of how feudal lords employed "teletropic mechanisms" for influencing the bio-cognitive chemistry of their serfs.

For example, European feudal lords randomly punished villages, even highly productive villages, keeping them constantly afraid of murder and torture. These lords intuitively understood how to keep their serfs in a condition of constant cortisol toxicity, as a result of stress caused by the fear of *unpredictable* violence, which condition made it nearly impossible for the serfs to produce social-bonding hormones, like oxytocin, and, therefore, difficult to form the cooperative groups required for rebellion. Instead, serfs typically became psycho-tropically dependent on "soothing" social mechanisms like church rituals and religious festivals, further entrapping them in the neuro-power dynamics of feudal hierarchy.[74]

ISIL narrative masters have been extraordinarily innovative in techniques of "teletropic manipulation." Schooled by their Al Qaeda IO mentors, ISIL have used the *jihadisphere* not so much to, "instruct jihadist recruits and current fighters on how to wage jihad" as to create the virtual reality for remote recruits and sympathizers of *directly participating in Islamic blood rituals*.[75] One of the most disturbing aspects of ISIL has been its ability to transform media images of terrorist attacks, especially in Europe, into *visual rituals* that make remote viewers *feel* as if they were one of the terrorist attackers.[76] ISIL image collages exploit the full resources of *ritual* teletropics to reinforce its extremist masternarrative.

Although we are only beginning to understand how ritualised violence activates bio-cognitive programs like disgust or altruism in remote viewers of terrorist violence, we do know that, because terrorism is a symbolic act, it effectively makes narrative captives (at least momentarily) of viewers, both directly and in mediation.



Identifying themes of jihad/altruism and correlating them to disgust within the social-identity triad can help us better understand how mediated experiences of terrorist violence in the jihadisphere hijack disgust programming or altruism programming among Islamic viewers and prime them for a violent remaking of their social-identity—through remote activation.[77] Thus, we need studies that reveal how ISIL use remote ritual (teletropic manipulation) to make their terrorist violence contagious.

Biocognitive analysis of ritual allows us to perceive how, within extremist Islam, specifically ISIL, masternarrative and ritual mutually support a jihad motivational system. (Jihad is symbol-activated, MN motivated, ritualised violence.[78]) Ritual violence will have a contagious effect among any population for whom the ritual's masternarrative resonates with previous mythic forms and practices and masternarratives. Acts of ritual violence, like ISIL beheadings, are “symbolic vehicles” that can be projected into any Islamic enclave. ISIL use these *teletropic rituals* to project their MNs remotely, normalizing violence in distal Islamic MN communities.

As we have seen in the example of disgust-detection systems that are captivated and plotted by *halla/haram* social-identity narratives, MNs can prime captives for acts of violence because they kick symbols of disgust, altruism, and procreation into motion and then link those themes to specific plots of social identity, self-esteem, and group attitude. *Halla-haram* symbolism, for example, primes adherents for specific behaviours, like redemptive identity cleansing (beheading/suicide attacks) or altruistic tribal defence, i.e. cleansing the Islamic “tribe” of *haram* toxicants. Rituals not only release the “magical” bonding energies (unity experience) in acolytes. Teletropic rituals also possess the potential to propel a normative MN community from being a passive moral tribe into being an actively cohesive, actively combative, global movement. We need studies that reveal the mechanics by which teletropic ritual translates contemplators of symbols into commissioners of symbolic behavior—terrorism.

For example, we need analysis that reveals how ISIL has concocted a new Islamic myth/ritual system out of material that is immediately recognizable to its target population. How does ISIL piggyback off of older Islamic “myths” that have been partially discarded or are currently breaking apart?[79] We need detailed analysis of the stories of violent acts, initially circulated by an IMN, that ISIL have formed into a new Islamic mythology. How have they morphed normative Islamic MNs into new kinds of ritual celebrations of violence?

Most insurgents, terrorists, and gangsters typically employ ritual of some sort as a basis for creating group coherence and loyalty. But ISIL go one step further, by using ritual as a vehicle to normalize violence among their target population. We need comparative analysis of extremist ritual exploitation of bio-cognitive resources.

For a comparative example, we might return, briefly, to Santa Muerta gangsters, who have concocted their own extremist masternarrative and reinforced it with ritualised violence. Mexican gang members not only incorporate Santa Muerta symbols onto their bodies as tattoos, they also build shrines and perform blood rituals to invoke and propitiate Saint Death. As studious as Dr. Baghdad, these gangster-cultists performed their own anthropological and historical research, locating past manifestations of this cult, both in texts and in “sacred” geographical locations. They very deliberately and self-consciously used their autodidactic scholarship to resurrect a blood cult. Mexican Drug Lords build Santa Muerta shrines and churches in their own narco-palaces, where they stage blood rituals, like torture and mass murder.

Today, the rituals of Santa Muerta have spilled out of the gangster's incarnadine ritual circle and now infect the locals who inhabit the trafficking territory of the drug lords, commonly known as cartel-land. Mexican



SM gangs have been quick to exploit that contagion, encouraging the locals to build their own shrines to Santa Muerta.

As noted above, ISIL beheading ritual infected the SM gangsters. While beheadings serve a distinctly purification role for ISIL, I suspect they serve a more complicated function for the bosses of the Mexican sicarios. The field observer adds:

Whatever their inspiration may be for the unprecedented barbarity with which Mexican criminals today torture, murder and mutilate their victims, including flaying their faces, it is evident that many of them turn to Santa Muerte for a sense of supernatural protection. She does not call for barbaric behavior, but she does not condemn it or discourage it either. She is amoral as were most of the Aztec gods. For example, the rain god Tlaloc did not consider whether or not his worshippers adhered to good moral standards. He rewarded those who pleased him by making proper sacrifices, irrespective of their behavior on earth. Incidentally, he liked to have children burned alive in large braziers before his idol because their tears were like rain drops. This is the product of a pre-modern mind, to which Santa Muerte beckons a return.

The sicarios needed a culturally recognizable means by which to transmit and project their violence, and the “myth” of Santa Muerta was, in a sense, waiting to be revived by these Mexican Drug Lords. Using ritual as a vehicle to project violence, they transmogrified the once-dead Santa Muerta myth into living masternarrative. That narrative, made widely available through the media, has become virulently contagious, even to remote viewers.

Constantly fearing capricious violence, local populations — be they in northern Mexico or northern Iraq — are flooded with stress and fear hormones. They turn to the Santa Muerta cult itself as a symbolic means by which to gain psychic relief from fear. They seek relief from cognitive torment in the masternarrative of the very gangsters who perpetrate the violence, because they are perceived to be the high priests of the rituals of violence.

Along drug trafficking routes in Central America, the Santa Muerta cult has largely displaced traditional Catholicism, much as ISIL is attempting to displace traditional forms of Islam in Europe, North Africa, and the Sunni Triangle. Where the Catholic Church and Catholic symbols fail to protect the local Mexican population from the capricious violence of drug cartels, locals defect to Santa Muerta, who, they believe, can provide psychic relief from fear of the cartels themselves. Ritual veneration of death and the purveyors of death is an act that still belongs within a population’s sphere of volition, and, therefore, soothes cognitive torment and counteracts cortisol toxicity. Ritual veneration of the very source of your terror also helps to stave off what Seligman calls, “learned helplessness.” We may suspect that ISIL blood rituals, especially ritualised terrorist attacks in Europe, perform a similar psychosocial task for Muslim diasporas in Europe. But we need studies to investigate that question.

For example, in the aftermath of the Paris attacks, a spectacular teletropic ritual that hijacked the limbic system of an entire continent of Muslim onlookers, we should have been tracking ritual vectors of violence contagion. Analysis of social-media responses to the attacks might have found useful techniques in bio-cognitive MN analysis, which understands the bio-cultural mechanics of ritual, violence contagion, and teletropic manipulation. Such analysis would position CT experts to consider the recent attacks in Brussels not as retaliation for taking a Paris attacker into custody but rather as a *ritualised blood tax* exacted upon Kuffir for laying hands on one of ISIL’s “holies.”



How does ritual logic determine a masternarrative community's perception of a justice system? Bio-cognitively analysed, the on-going narrative of the Brussels attacks is revealed as a deep-brain lesson aimed primarily at a Muslim audience in Europe. That lesson is about jurisprudence. The Brussels attacks were intended to make the European system of justice look ineffectual and weak and to make ISIL "shariah" justice feel omni-present. ISIL's blood logic is quantitative: How much more *Kuffir* blood has been spilled than ISIS assets taken into custody? The logic of ritual violence asks the Muslim Diaspora to choose between two mutually exclusive justice systems. By ritualizing the Brussels attacks, ISIL seek to make the murder of innocent men, women, and children feel like a victory for Islamic justice.

We need investigation of this question: How does ritualized violence in the name of Islam affect an Islamic Diaspora's perception of European justice and jurisprudence?

Analysed comparatively, both ISIL and the Santa Muerta cult employ tele-tropic exploitation of the biochemistry of local populations. They both normalize violence at the neurological level by getting a target population hooked on images and narratives of violence. Both SM and ISIL exploit masternarrative rituals augmenters to make criminal acts of violence "magically" alive, realer than life itself, for narrative captives. Both ISIL and SM rituals of violence should warn us that extremists narrative masters are already very savvy in teletropic techniques of manipulation. In sum, the more ISIL use ritual augmenters, the more successful they'll be at making their violence globally contagious. Ritual augmenters will also make them more successful at

recruiting and maintaining membership., remotely. I also suspect that it's their ability to augment their MNs with ritual that will continue to make ISIL resilient, global, and increasingly immune to loss of territory in the battlespace of the Sunni triangle.

Conclusion

I've been arguing that social-identity formation is the result how bio-cognitive substrates get activated and symbolically constructed by social masternarratives. It should amply clear by now that, when analysing MNs for their role in forming social identity, we are NOT performing a deconstructive "literary" un-reading of social "stories." As E.O. Wilson rightly notes of traditional "humanities" approaches to investigations of human cultural constructions, humanities scholars, from literary theorists to political scientists to historians and anthropologists, have typically made, "no allusion to the understanding of the cognitive processes that bind them together, nor their relation to hereditary human nature, nor their origin in prehistory." (277) The failure to account for the dynamics of universal hereditary bio-cognitive processes is one major reason that traditional masternarrative analysis of discourses of political Islam has failed to equip CT practitioners with critical tools for counter-radicalization operations. As I've been arguing, to correct that failure, we must seek to understand how masternarrative and its ritual augmenters activate universal bio-cognitive pre-adaptations and structure these programs to promote self-esteem, group-identification, and group attitudes that compel neurological obedience from adherents, shape social perceptions, and promote (or hinder) specific behavioral vectors.

I've also been assuming that an unavoidable psychological reality of modern political pluralism is identity competition, which exacerbates universally inherited, biological cognitive torment. This is why we need, psycho-politically considered, masternarratives: To alleviate the cognitive dissonance inherent to our experience of our own bio-cognitive processes as they occur within a pluralistic society.[80] Pluralist democracies require cognitively balanced citizens (*masternarratees*) whose identity remains, nevertheless,



ethically responsive to a diversity of *other* identity possibilities, citizens who know that identity paths not taken are as valuable as those that are taken.[81] That's a difficult psychological balancing act, demanding a great deal of deliberative effort, even from un-encumbered democratic citizens, those who have not been primed in childhood and adolescence, in the basement of their beings, by a masternarrative that exploits a bio-cognitive motivational system like disgust to preclude both identity and political competition.

Masternarrative analysis should become a go-to tool for social scientists who want to predict where, when, and under what psycho-political conditions MNs foster social identities amicable or inimical to pluralistic communities. To facilitate masternarrative analysis at the "basement" level, we need to develop metrics for measuring correlations between the bio-motivational triad and the cognitive-balance triad. We need metric tools for correlating the triangle of disgust, altruism, procreation to the triangle of self-esteem, group attitude, group identification. As noted above, in an active rhetorical setting, the communal "ground floor" where perceptual shaping takes place, the two triads overlap. Masternarrative field research can begin immediately by measuring for correlations among these six points.

Counterterrorist experts will note that extremist masternarratives exploit the psychological resources of biological torment in order to eliminate identity and political competition. As discussed above, Islamic extremist narrative masters exploit a pre-existing identity-narrative resource, an already widely disseminated, social-identity-forming *hallal/haram* construct that is reinforced and enacted by both narrative and ritual. While the potential political violence of that disgust construct largely remains dormant among most European Muslim MNs, extremist narrative masters have been exploiting it as a resource for recruitment and for constructing disgust/*hallal* obsessed identities that altruistically seek to de-contaminate themselves and their community of *Kuffir* pollutants.[82] We need to become better narrative masters than today's extremist communicators.

As we formulate counter-radicalization strategies, we will want to pay especially close attention to how social-identity-forming masternarratives exploit the resources of bio-cognition. We will want to sensitize ourselves to the symbolic and thematic patterns of disgust, altruism, and procreation. For example, where we find masternarratives that exploit disgust motivational programs and then build identities upon a primary, mutually antagonistic distinction between the uncontaminated and the contaminating, we should isolate that masternarrative (along with its disgust-triggering symbols) and set about dismantling it in the style that Raffie and Moghaddam have already modelled for us.

When communicating with purportedly non-violent, normative Islamic narrative masters (representative strategic communicators), counter-radicalization experts will want to monitor them for self-conscious awareness of the political implications of the masternarrative they are promulgating. We may ask, for example, if Islamic narrative masters in Europe understand the broader political implications of the *hallal-haram* construct? Genuinely sincere Islamic masternarrative communicators may be not be aware that they're in bad faith with pluralistic democracy when they claim that their Islamic teachings in no way promote political violence. The psychology of disgust teaches otherwise.[83] Counter-radicalization communicators need to make Islamic narrative masters and other key influencers of normative Islam smarter about the political implications of their own masternarratives and how they exploit biological motivational systems, like disgust and altruism, to construct social-identities that may be inimical to pluralistic democracies. Extremist Islamic narrative masters have long been exploiting disgust-based, non-violent Islamic masternarratives as a template upon which to reform (really, deform) the social identity of narrative captives. CT experts must find



ways to educate sincerely non-violent Islamic strategic communicators about the bio-cognitive dynamics of the masternarratives they promulgate.

We need to find effective means to teach Islamic narrative masters why it is not psychologically viable to respect other religious viewpoints if you've been conditioned to view all other religious and political identities as *haram*, and you, therefore, *experience* them as disgusting. Although disgust and toleration may not be mutually exclusive, disgust and respect are truculently exclusive. Pluralistic democracies require more than mere tolerance of alternative identities. They require mutual respect as the bare-minimum basis for ethical responsiveness to other social identities.

Unfortunately, we should expect Islamic extremist strategic communicators to find increasingly innovative narrative and ritual means by which to gain access to and exploit the biological motivational systems of disgust, altruism, and procreation, thereby increasing their stock of narrative captives. Therefore, strategic analysis of Islamic masternarratives should do much more than provide in-the-field communicators with laminated ciphers by which to decode the symbolism of jihadist terrorism.[84] MN analysis should do more than draw maps by which to navigate normative, fundamentalist, extremist, and terrorist Islamic cultural terrain. The analysis of Islamic masternarratives should do more, even, than illuminate the terminological screens and behavioral models of terrorists. It should provide useable insights into the fundamental processes of *social-identity formation* among the Muslims that currently “sticky” Islamic masternarratives symbolically radicalise and physically mobilize. Analyzed from within a bio-cognitive framework, masternarratives are revealed as the keys to the formation of the social-identity of Islam extremists and, therefore, they are the keys to the un-formation of that same identity—*counter-radicalizing* through *counter-narration*.

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I'm especially grateful to Dina Al Raffie, Mark Weiner, Dave Phillips, and Jonathan Shay for critical inspiration and analytical guidance. For their courage, commitment, and cunning, I'm grateful to numerous CT professionals from whose work I've had the privilege of learning downrange, firsthand, the labyrinthine warrens and treacherous alleyways of combating terrorism.

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Notes

[1] If European natives were confident that counter-radicalization operations have been and will be effective, they'd be much less apprehensive about incoming refugees. Policymakers who can point to their involvement in forming and implementing successful CR ops will gain, in Europe's increasingly refugee-leery environment, hefty political capital.



[2] For the epistemological dangers that the narrative fallacy poses to the work of social scientists, see Nassim Taleb's *The Black Swawn* (New York: Random House, 2010).

[3] Daniel Kahneman's *Thinking Fast and Slow* (New York: Penguin, 2011).

[4] See Raffie's "Social Identity Theory For Investigating Islamic Extremism in the Diaspora" in *Journal of Strategic Security* (Winter, 2013, Vol 6, n. 4).

[5] Ibid.

[6] See Andrew Silke's "Holy Warriors: Exploring the Psychological Processes Of Jihadi Radicalization" in *European Journal of Criminology* (5 (1), pp. 99-123, 207).

[7] For groundbreaking science in this field, see Edward O. Wilson, "Resuming the Enlightenment Quest," *The Wilson Quarterly* (Winter 1998); Simon Green, *Principles of Biopsychology* (Hove, UK: Lawrence Erlbaum Associates, 1994); Eugene G. d'Aquili's *The Biopsychological Determinants of Culture* (Reading, Pa.: Addison-Wesley Modular Publications, 1972); Charles D. Laughlin, Jr. and Eugene d'Aquili's *Biogenetic Structuralism* (New York: Columbia University Press, 1974), 15. Laughlin and d'Aquili argue that, "The strength of biogenetic structuralist theory...lies in its capacity to explain much of the cognitive and structural aspects of classical structuralism by lodging structures squarely in specific cerebral structures and functions." (14-15) Examining and explaining how culture exploits (constructs itself out of) *cerebral structures and functions* is the goal of bio-cognitive analysis. All human cultures are structured atop universal bio-cognitive substrates.

[8] For the standard introduction to anthropological analysis of social-identity narratives, see H. Russell Bernard's *Research Methods in Anthropology: Qualitative and Quantitative Approaches* 5th ed. (Plymouth: AltaMira Press, 2011). Unfortunately, Russell does not include a chapter on the bio-cognitive analysis of masternarratives.

[9] For studies of narrative as our primary cognitive operator, see Mark Turner's *The Literary Mind* (Oxford: Oxford University Press, 1996); Jeremy Hsu's "The Secrets of Storytelling" in *Scientific American Mind* (September 18, 2008), and especially, Brain Boyd's *On the Origin of Stories: Evolution, Cognition, and Fiction* (Cambridge: Harvard University Press, 2009).

[10] For classical studies of narrative from the field of *narratology* that are relevant to and inform CT masternarrative analysis, see Gérard Genette's *Narrative Discourse Revisited* (Cornell: Cornell University Press, 1990); James Phalen's *Reading People, Reading Plots: Character, Progression, and the Interpretation of Narrative* (Chicago: University of Chicago Press, 1989) and Phelan's *Narrative as Rhetoric: Techniques, Audiences, Ethics, Ideology* (Dayton: Ohio State University Press, 1996). For a practical guide to narrative therapy that has implications for CT masternarrative disruption, see Michael White's *Maps of Narrative Practice* (New York: WW Norton, 2007).

For a computational approach to narrative analysis that is potentially instructive to CT cyber-analysis of MNs in social networks, see Inderjeet Mani's *The Imagined Moment: Time, Narrative, and Computation* (Lincoln: University of Nebraska Press, 2010).

[11] See M.H. Abrams's *A Glossary of Literary Terms* 7th ed. (London: Harcourt Brace, 1999).



[12] In this argument, I'll examine in detail only one of these pre-adaptations, the biological motivational system of disgust. Although I mention only three primary motivational systems — disgust, altruism, procreation— there are certainly more than these three, such as fear. If my argument achieve nothing else, I hope it will, at very least, encourage CT scholars to locate, isolate, and analyze all of the bio-cognitive resources that Islamic MNs exploit to construct Islamic social identities.

[13] For a powerfully synthetic biography of the field of socio-biology by its foremost scientist, see Edward O. Wilson's *The Social Conquest of Earth* (New York: WW Norton, 2012).

[14] For a broad-stroke, very readable historical overview of our *tribalistic* cognitive inheritances, see Robin Dunbar's *The Human Story: A New History of Mankind's Evolution* (New York: Faber and Faber, 2005); see also,

Joshua Greene's *Moral Tribes: Emotion, Reason, and the Gap Between Us and Them* (London: Atlantic Books, 2013). For a stark warning about the cultural, political, and legal challenges that resurgent "tribalism" poses to pluralistic democracies, see Mark Weiner's *The Rule of the Clan: What an Ancient form of Social Organization Reveals About the Future of Individual Freedom* (New York: Picador, 2014). Islamic extremist terrorist organizations are a species of resurgent "clannism."

[15] Narrative vehicles can be almost any media, from sacred texts to *Youtube* image collages to ISIL beheading rituals. Whatever medium they exploit for transmission, a masternarrative hijacks and structures *primary biological motivational systems* of disgust, altruism, and procreation. MNs contain many sub-narratives that recursively circulate and elaborate upon the primary disgust, altruism, or procreation "plotlines." MNs ultimately strive to pull biological motivational systems away from other masternarrative "competitors" and submerge them into their own self-contained, autonomous world, a world in which the torments of multi-level selection (ambiguity) are contained and soothed. See Kenneth Burke's *Language as Symbolic Action*, below, for an examination of how symbolic systems compulsively seek to perfect themselves by the internal logic of their own terminology.

[16] Biocognitive analysis, as I am defining it, takes analytical, theoretical, and methodological inspiration and guidance from these groundbreaking studies:

For a classic introduction to the methods and aims of cognitive sociology, see Eviatar Zerubavel's *Social Mindscapes: An Invitation to Cognitive Sociology* (Harvard: Harvard University Press, 1999). For the leading textbook in the field, see Susan Fiske and Shelley Taylor's *Social Cognition: From Brains to Culture* (New York: Sage, 2013). To observe the field's methodology at work as cultural analysis with implications for social-identity analysis, see Wayne Brekhus's *Culture and Cognition: Patterns in the Social Construction of Reality* (New York: Polity, 2015). For an introduction to how and why the field of cognitive sociology has taken a turn into neurological descriptions of social phenomenon, see David Frank's *Neurosociology: The Nexus Between Neuroscience and Social Psychology* (New York: Springer, 2010). See also the especially astute overview of methodology provided by Todorov, Fiske, and Prentice in *Social Neuroscience: Toward Understandings of the Social Mind* (Oxford: Oxford University Press, 2014). For an apposite viewpoint, see Schutt, Seidman, and Keshavan's *Social Neuroscience: Brain, Mind, and Society* (Harvard: Harvard University Press, 2015). For a reliable handbook to this emerging field, see Jean Decety and John Cacioppo's *The Oxford Handbook of Social Neuroscience* (Oxford: Oxford Press, 2015). For a neuro-social description of social-identity formation, see Liou Cosolino's *The Neuroscience of Human Relationships: Attachment and the Developing Social Brain* (New York: WW Norton, 2014).



For withering criticism and wholesale dismissal of the entire field of neuro-socialscience, see Carlo Umiltà's *Cognitive Neuroscience Is Still Too Young to Marry To Social Science* (Springer, 2016). I strongly encourage any CT analyst who might consider practicing biocognitive analysis of social-identity formation and masternarratives to heed Carlo Umiltà's many legitimate warnings, in particular his concerns about reductionistic explanations of complex social phenomenon and his especially worrying concerns about overdetermining incomplete and poorly understood "neuro" evidence. Although I share Umiltà's epistemological trepidation, I still feel compelled to apprehend the biocognitive mechanisms of the terrorist social-identity with the best analytical tools we currently have available.

[17] Masternarrative symbols break into two parts like a Greek symbolon, which was a coin (or potsherd) broken in half and given to two parties for identification in a legal agreement. One side of a masternarrative symbolon is biological; the other side cultural. Masternarratives form social identity by successfully fitting these two halves together.

[18] For an analytical model, see Meir Sternberg's "Universals of Narrative and Their Cognitive Fortunes (II)" in *Poetics Today* 24 (3: 297-395).

[19] For an analytical model, see Michelle Sugiyama Scalise's "Predation, Narration, and Adaptation: Little Red Riding Hood Revisited" in *Interdisciplinary Literary Studies* (5: 108-127).

[20] For groundbreaking works in this field, see Daniel Goleman, *Social Intelligence: The New Science of Human Relationships* (New York: Bantam, 2006), pp. 29-30. See also, V.S. Raamachandran's "Mirror Neurons and Imitation Learning as the Driving Force Behind the Great Leap Forward in Human Evolution" at www.edge.org/documents/archive/edge69.html. See especially, David Franks and Jeff Davis's confirmation of Raamachandran's research "Critique and Refinement of Neurosociology of Mirror Neurons" in *Biosociology and Neurosociology, Advances in Group Processes* (Vol. 29, 77, 2012).

[21] An introduction to narrative and social identity intelligently useful to the CT expert is Michael Bamberg, Anna de Fina, and Deborah Schiffrin's *Selves and Identities in Narrative and Discourse 9th edition* (John Benjamin's Publishing House, 2007). See also, Benedict Anderson's *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (New York: Verso, 2006).

[22] See Berns, Chappelow, Zink, Pagnoni, Martin-Skurski, and Richard's "Neurobiological Correlates of Social Conformity and Independence During Mental Rotation" in *Biological Psychiatry* (vol 1, 58, 3, August, 2005).

[23] For a description of the neuro-cognitive sources of social-identity competition, see Rebecca Saxe's "Reading Your Mind: How Our Brains Help Us Understand Other People" in *Boston Review* (February, 2004).

[24] For a review of cognitive balance theory, see Ernest Bormann, "Fantasy and Rhetorical Vision: Ten Years Later" in *Quarterly Journal of Speech*, 68, 1982.

[25] Evolutionary scientists call those programs "preadaptations": a structure or function evolved in one setting that is accessed and exploited in another setting. See Wilson, above, for a detailed explanation.



[26] For a classic analysis of how *symbolic communities* get formed, see Kenneth Burke's *Language as Symbolic Action: Essays on Life, Literature, and Method* (Berkeley: University of California Press, 1968). His theory of anthroposemiosis assumed that rhetoric, language, narrative, symbols exploit universal bio-cognitive substrates long before the brain-science watershed of the past decade confirmed his methodology's enabling premises. For a related approach to human communication systems as creating symbolic communities, see Clifford Geertz, *The Interpretation of Cultures: Selected Essays* (New York: Basic Books, 1973). See also, Benedict Anderson's *Imagined Communities*.

[27] Ibid.

[28] I will discuss the required cognitive equipment of the MN analyst in detail below; however, it should be obvious that the MN analyst must be fluent in current anthropological, cognitive, and psychological insights about our primary pre-adaptations and their relation to social-identity formation. In other words, fluent in symbolic convergence theory.

[29] Although there are more than three primary motivational systems, I isolate disgust, altruism, and procreation because they are central to the formation of the social-identity of Islamic extremists. Fear is certainly another biological motivational system exploited by Islamic masternarratives; in most instances, fear of losing a distinctly Islamic social identity—not fear of *Kuffir*, per se. *Kuffir* (non-Muslim identities) are far more typically thematically associated with disgust/*haram*.

[30] Scott Atran has performed extensive field research on Islamic extremist MNs, but he does not articulate any theory or methodology, as such. Atran is an extraordinarily erudite anthropologist who possesses a powerful combinatorial analytical mind. When discussing the bare-minimum cognitive equipment of the MN analyst, I'll return to his *Talking to the Enemy* (London: Allen Lane, 2010) to discuss its heuristic value to MN research.

[31] For a basic introduction to counternarrative, see Michael Bamberg and Molly Andrews's *Considering Counter-Narratives: Narrating, Resisting, Making Sense* (Jonh Benjamin's Publishing Company, 2004). For competent reviews of standard methods of narrative disruption (counter-narrating), see H.L. Goodall's *Counter-narrative* (New York: Routledge, 2010) and Timothy Khun, Mariann Wolf Lundhol, and Sanne Franson's forthcoming *Counternarratives and Organization* (New York: Routledge, 2016). For a useful model of applied MN analysis that observes techniques that were employed for *narrative disruption* in a specific political context, see M. Al-Rasheed and R. Vitalis's *Counter-narratives: History, Contemporary Society, and Politics in Saudi Arabia and Yemen* (New York: Palgrave Macmillan, 2004). For a discussion of narrative and counter narrative in the context of CT research, see Dina Al Raffie's "Whose Hearts and Minds: Narratives and Counternarratives of Salafi Jihadism" in *Journal of Terrorism Research* (vol 3, issue 2, 2012).

[32] I'll analyse this "piggybacking" process, how ISIL exploits a normative *haram narrative* already circulating in Islamic enclaves, in detail below.

[33] See Paul Rozin and Edward Royzman's "Negativity Bias, Negativity Dominance, and Contagion" in *Personality and Social Psychology Review* 5, 2001; also, Rozin and P. Fallon's "A Perspective on Disgust" in *Psychological Review* (94, 1987) as well as Rozin and R. Mandell's "Family Resemblance in Attitudes to Foods" in *Developmental Psychology* (20, 1984).

[34] Ibid.

[35] Ibid.



[36] See Raffie's "Social Identity Theory For Investigating Islamic Extremism in the Diaspora" in *Journal of Strategic Security* (Winter, 2013, Vol 6, n. 4).

[37] I owe these psychological insights to many long conversations with Dr. Jonathan Shay, who helped me understand the full implications of "learned helplessness" to social-identity *de-formation*. See Abramson, Garber, and Seligman's classic study, "Learned Helplessness in Humans: An Attributional Analysis" in *Human Helplessness: Theory and Applications* (New York: Academic Press, 1980). For an introductory overview of Seligman's cognitive theory of human helplessness as it relates to social-identity formation, see Martha Nussbaum's extensive discussion in the chapter, "The Resurgence of Intentionality: Seligman, Lazarus, Ortony, Oatley" in *Upheavals of Thought*, see below.

[38] For a sociological examination of how luck/chance (environmental contingency) determines social-identity formation in modern society, see Zygmunt, *Liquid Modernity* (Cambridge: Polity Press, 2000).

[39] For an exhaustive analysis of how both individual and social identities get constructed out of the bio-cognitive resources of disgust, see Martha Nussbaum's *Upheaval's of Thought: The Intelligence of Emotions* (New York: Cambridge University Press, 2001).

[40] Islamic cyberactivists have already developed internet search engines whose algorithms distinguish between *hallal* and *haram*. These engines are programmed to exclude *haram* from search results. They are collectively known as *Hallal Verified Engines* (HVE), such as *Hallalgoogling* and *I'm Hallal*. We need field studies of who hallalgoogles and how HVE's globalize Islamic social identity, especially among European Muslim demographics. How are HVE's influencing normative Islam, globally?

[41] For an anthropological examination of *hallal* in a global context, see J Fisher's *The Halal Frontier: Muslim Consumers in Global Market* (New York: Palgrave, 2011). For an updated examination of the economic implications of *hallal* identity to global markets, see *Halal Matters: Islam, Politics, and Markets in Global Perspective* (New York: Routledge, 2015). Neither work investigates the centrality of *hallal* to Muslim social identity; they merely assume it as the enabling premise of their arguments.

[42] See Zygmunt, *Liquid Modernity* (Cambridge: Polity Press, 2000).

[43] Ibid.

[44] Ibid.

[45] Ibid.

[46] Ibid.

[47] Jonathan Matusitz, *Symbolism in Terrorism: Motivation, Communication, and Behavior* (London: Rowman and Littlefield, 2015).

[48] For detailed examinations of the violence potential of our disgust motivational system, see W.I. Miller's *The Anatomy of Disgust* (Cambridge: Harvard University Press, 1997); Paul Rozin, "Disgust: The Body and Soul of Emotion" in Power's (ed) *Handbook of Cognition and Emotion* (Chichester: John Wiley & Sons, 1999); A.S. David et al, "Disgust—the Forgotten Emotion of Psychiatry" in *British Journal of Psychology*, 1998. I owe all of these titles to Paul Ekman, see *Emotions Revealed* (New York: St. Martin's Griffin, 2003).

[49] Dina Al Raffie corrects this oversight. See, "Investigating Social Identity Theory in Islamic Extremism" in *Journal of Strategic Security* (vol 6 no 4, Winter, 2013).



[50] See Martha Nussbaum's *Upheaval's of Thought: The Intelligence of Emotions* (New York: Cambridge University Press, 2001) pp. 200 – 206.

[51] For a reliable analytical tool with which to evaluate a defector's claims, see Dina Al Raffie's "Straight From the Horse's Mouth: Exploring Deradicalization Claims of Former Egyptian Militant Leaders" in *Perspectives on Terrorism* (Vol, 9. issue, 1 2015).

[52] For an analysis of the ISIL beheading narrative, see Doyle Quiggle's "The ISIS Beheading Narrative" in *Small Wars Journal* (February, 2015).

[53] See Matusitz, *Symbolism in Terrorism*, chapter five.

[54] See Adam Lankford's *The Myth of Martyrdom: What Really Drives Suicide Bombers, Rampage, Shooters, and Other Self-Destructive Killers* (New York: Palgrave, 2013).

[55] Defining irony, M.H. Abrams recalls the origins of irony in Greek comedy, "the character called the *ieron* was a dissembler, who characteristically spoke in understatement and deliberately pretended to be less intelligent than he was, yet triumphed over the *alazon*, the self-deceiving and stupid braggart." *A Glossary of Literary Terms* 7th ed (New York: Harcourt Brace, 1999).

[56] For psycho-symbolic analysis of the most infamous political death cult, see Klaus Vondung's "National Socialism as a Political Religion: Potentials and Limits of an Analytical Concept," *Totalitarian Movements and Political Religions* (6 (1), 2005, pp 87-95).

[57] See Raffie, above.

[58] Influenced — unduly, perhaps — by Nussbaum and Seligman, my suspicion is that any MN plotting *other*, competing identity possibilities as disgusting or contaminating will construct social identities radically inimical to pluralistic democracy, but we need data culled from European Islamic masternarrative communities with which to investigate that question. For an extended analysis of the consequences to pluralistic democracies of social identities constructed out of disgust, see Martha Nussbaum's *Upheaval's of Thought: The Intelligence of Emotions* (New York: Cambridge University Press, 2001). Nussbaum notes: "A ubiquitous reaction to this sense of disgustingness is to project the disgust reaction outward, so that it is not really oneself, but some other group of people, how are seen as vile and viscous, the sources of a contamination that we might possibly keep at bay."

[59] For in-depth, sequential analysis of each ritual mode, see Matusitz's *Symbolism in Terrorism*, p. 80 –86.



[60] For accounts of the evolutionary psychology of ritual, see Roy A. Rappaport's *Ritual and Religion in the Making of Humanity*, *Cambridge Studies in Social and Cultural Anthropology* (Cambridge: Cambridge University Press, 1999): 226-30; Victor Turner's "Body, Brain, and Culture," in *The Anthropology of Performance* (New York: PAJ Publications, 1987): 156-78; Ronald Grimes's *Beginnings in Ritual Studies*, Revised Edition (University of South Carolina Press, 1995); James B. Ashbrook and Carol Rausch Albright's *The Humanizing Brain: Where Religion and Neuroscience Meet* (Cleveland: Pilgrim Press, 1997); Scott Atran's *In Gods We Trust The Evolutionary Landscape of Religion* (Oxford: Oxford University Press, 2002); Nathan Mitchell's "What Biogeneticists Are Saying About Ritual: A Report," *Liturgy Digest*, 1:1 (Spring 1993: 75-76); Tom F. Driver's *Liberating Rites: Understanding the Transformative Power of Ritual* (Boulder, Co.: Westview Press, 1998, 13, 23); V. S. Ramachandran and Sandra Blakeslee's *Phantoms in the Brain: Probing the Mysteries of the Human Mind* (New York: Quill, 1998); Pascal Boyer's *Religion Explained: The Human Instincts that Fashion Gods, Spirits, and Ancestors* (New York: Basic Books, 2001) and Robin Dunbar's *The Human Story* (London: Faber & Faber, 2004). For an early but still-useful look at the neurological basis of ritual, see Eugene D'Aquili's *The Spectrum of Ritual: A Biogenetic Analysis*, (Columbia: Columbia University Press, 1979) and *The Mystical Mind: Probing the Biology of Religious Experience* (New York: Fortress Press, 1999). For a historical analysis of the use of ritual in human society, see William McNeill, *Keeping Together in Time: Dance and Drill in Human History* (Cambridge: Harvard University Press, 1995).

[61] Collective prayer and collective ablution are ritualised forms of synchronized movement, like dancing and music making, which is why many Islamic extremists ban dancing and music making—they represent oxytocin competition.

[62] See, *The Moral Molecule: The New Science of What Makes Us Good and Evil* (London: Bantam, 2013) and Joshua Greene's *Moral Tribes: Emotion, Reason, and the Gap Between Us and Them* (London: Atlantic Books, 2013).

[63] See Mithen and Zak.

[64] See Mithen.

[65] For the groundbreaking study in this field, see Robert Axelrod's *The Evolution of Cooperation* (London: Penguin, 1984).

[66] Quotations in this paragraph are from Mithen.

[67] See, d'Aquili and Newberg, *The Mystical Mind*.

[68] The cognitive archaeologist (brain evolution) Steven Mithen notes, "Music aids the performance of collective tasks by rhythmically facilitating physical coordination. But in the majority of cases it appears to be cognitive coordination that is induced by the music, the arousal of a shared emotional state and *trust* in one's fellow music-makers." See, *The Singing Neanderthals: The Origins of Music, Language, Mind, and Body* (London: Phoenix, 2005).

[69] See Atran's *Talking to the Enemy*.

[70] See D'Aquili and Newberg, *The Mystical Mind*, pp. 95-96.

[71] For a collection of instructive models of *ritual analysis* conducted within the parameters of *symbolic convergence theory*, see Jeffery Alexander, Bernhard Giesen, and Jason Mast's *Social Performance: Symbolic Action, Cultural Pragmatics, and Ritual* (New York: Cambridge University Press, 2006).

[72] See Matusitz, pp. 296-7.



[73] Source asked to remain anonymous. I am fully aware of and take responsibility for the ethical implications of citing an unnamed source.

[74] Daniel Smail's *On Deep History and the Brain* (Los Angeles: University of California Press, 2008).

[75] See Matusitz, chapter 16.

[76] What we now know about the global distribution of mirror neurons explains why viewing violent images is almost the same, cognitively considered, as committing violent acts. What we actually go out and do with our experience of viewing terrorist violence is largely determined by our own governing MN. Teletropic manipulation is both possible and effective because of the *global distribution* (pun intended) of mirror neurons. ISIL narrative manipulators are exploiting the *global* nature of mirror neurons.

[77] For a field-level discussion of how jihad symbolism hijacked the primal altruism of specific groups of young men and transformed their altruism motivational system into a specifically extremist social-identity and then vectored them along terrorist plots, see Scott Atran's *Talking to the Enemy: Violent Extremism, Sacred Values, and What It Means to Be Human* (London: Allen Lane, 2010).

[78] For historical analysis of jihad, see Andrew G. Bostom's *The Legacy of Jihad: Islamic Holy War and The Fate of Non-Muslims* (New York: Prometheus, 2005); Majid Khadduri's *War and Peace in the Law of Islam* (Baltimore: Johns Hopkins, 1955); Rudolf Peters's *Jihad in Classical and Modern Islam* (Princeton: Marcus Weiner, 1996).

[79] Claude Levi Strauss's ground-breaking work *The Savage Mind* (1962) is an enduringly informative description of the process of mythic disintegration and reintegration, which he calls "bricolage." I prefer the more homespun metaphor, "piggybacking."

[80] Recall, Fritz Heider's *imbalance-balance theory* and Martin Seligman's *learned helplessness*.

[81] For a now-classic delineation of the predicament of modern political "pluralism," see Hannah Arendt's essay "Understanding and Politics (The Difficulties of Understanding)" in *Essays in Understanding: Uncollected and Unpublished Work by Hannah Arendt, 1930-1954* ed. Jerome Kohn (New York: Harcourt Brace, 1994). For a discussion that makes the political aspects of a pluralistic identity explicit, see Martha Nussbaum's "Secret Sewers of Vice: Disgust, Bodies, and the Law" in S. Bandes's (ed) *The Passions of Law* (New York: New York University Press, 2000) and her *Upheavals of Thought: The Intelligence of Emotions* (Cambridge: Cambridge University Press, 2001). Nussbaum seamlessly discusses the legal and political implications of disgust-based social identities in trenchant detail. Her characterization of Paul Ekman's science of emotion-recognition is, unfortunately, inaccurate.

[82] Scott Atran has discovered how Islamic MNs activate altruistic bio-motivational programs in Muslim youths to form them into terrorists who kill themselves and others for the "greater good" of their Islamic community; see, *Talking to the Enemy*.

[83] A psychic litmus test for evaluating masternarrative communicators is whether they be capable of manifesting a self-consciously ironic attitude toward their own masternarrative. Do they reserve irony only for other identity narratives? Tone determines meaning. And style is psychological attitude. ISIL typically lack any sense of irony, because ISIL MNs conflate a narrative construct with the real world. Irony is the mark of the mature user of language. Irony usually emerges from our perception of a discrepancy between our working narrative about reality and how reality actually works.



[84] I do not mean to knock the painstaking work performed by criminologists who carefully index the symbolism of gangs and terrorist groups. My own thoughts on this subject began when I started recording tattoos, symbolic markings, magical talismans, and identity narratives of the Afghans with whom I tented at FOB Fenty, Jalalabad.