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Violent Radicalism and the Psychology of Prepossession

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Abstract

The phenomenon of violent radicalism/extremism is portrayed as a consequence of a mechanism that fosters extremism in general. This is the process of motivational imbalance or "prepossession", a state wherein a given need becomes dominant to the point of inhibiting other needs. In the case of violent extremism, the dominant need is the quest for significance, the desire to matter and have self and others' respect. Whereas the "hydraulic" domination-inhibition process that underlies extremism can be observed across levels of phylogeny, the motivational imbalance in those cases is typically brief in duration. In the case of humans, however, participation in violent extremism can be long lasting, due to its facilitation by a compelling narrative" that ties violence to the attainment of significance, and is embraced by a "network" of trusted others (individuals' friends and relatives) who validate the narrative and bestow significance on individuals who implement its dictates.

Keywords

radicalization, violent extremism

In the pages that follow, I consider the phenomenon of violent extremism and its underlying psychological mechanisms. But before doing so, it may be helpful to consider what one might even mean by calling something radical or extreme. Accordingly, I turn first to matters of terminology.

Meanings of 'Radicalism/Extremism'

Radicalism

The term 'radical' (when applied in the social sphere) has two meanings that at first glance appear distinct from each other. One meaning pertains to the word's usage as a noun: A radical is a *nonconformist*, a *troublemaker*, a *deviationist*. The second meaning pertains to the term's use as an adjective. Here, radical means *thorough*, *fundamental*, or *essential*. This latter usage derives from the Latin word 'radix' or 'root' in that a root underlies the plant and is essential to its existence.

But what does this have to do with deviancy and nonconformity? On the surface of it, rather little – and the term's use in this fashion may appear enigmatic. Yet, there could be more here than meets the eye. Indeed, looking deeper into the psychology of *the radical* (as a noun), we find a kind of essentialism, or purism; a single mindedness, or as Soren Kierkegaard (1886/1938) felicitously put it, "the willing of one thing," which in turn recalls the term's adjective application.

Extremism

'Radicals' are often referred to as 'extremists.' But what is extremism? Again, two senses of the term are apparent. One sense is statistical and refers to ends (i.e., extremes) of the distribution. Extremists are rare, they are unusual or infrequent within an aggregate, and their activities are not what most people do. The other sense of extremism relates to *intensity*, or *magnitude*. To refer to something as 'extreme' is to depict it as intense, powerful, or considerable (as in extreme hunger or thirst, or extreme disappointment). As can be seen then, radicalism and extremism have important parallels that explain their interchangeable use: (1) they both denote something that is rare and infrequent, and (2) they both connote something that has special poignancy by dint of its magnitude or essentiality.

But beyond hermeneutics, the question is whether 'extremism' and/or 'radicalism' have a psychological reality, versus representing mere ways of speaking devoid of a deeper psychological basis. I believe that the former is, indeed, the case and that extremism defines an authentic psychological state. A major implication of this notion is that many different 'extremisms' (e.g., violent extremism, extreme diets, extreme sports or extreme addictions) share a psychological dynamic in common, and differ in the contents or dimension, namely that which the term 'extreme' qualifies.

Extremism as a Psychological Construct: On the Psychology of Prepossession

The concept of *extremism* stands in contrast to that of *moderation*. Moderation, in turn, assumes a state of *motivational equilibrium* characterized by a balanced satisfaction of the individual's basic biological and psychogenic needs. Extremism marks a deviation from

that equilibrium, hence depicting a motivational imbalance wherein one need rises above others and prepossesses or 'crowds out' the remaining basic needs. Because by definition most persons desire to have all their basic needs fulfilled, and experience distress otherwise (that is what the term basically implies, after all), only a minority may endure a prolonged state of extremism. Thus, the intensity sense of extremism discussed above, shades into the statistical sense in that inveterate extremists typically constitute a small segment of the general population.

From the present perspective then, extremism lies on a continuum (of intensity) and is a matter of degree; it reflects the extent of deviation from the motivational balance in which people's different fundamental needs are harmoniously gratified.[1] It is also true, however, that whereas extremism typically characterizes a minority of individuals (thus, converging with statistical extremism), under special circumstances it may also apply to a *majority* of persons within a given population.

To consider how this may happen, consider the analogy of the concept of *health*, which denotes the optimal physiological functioning of an organism. Normally, most people are (more or less) healthy and their bodily systems function as intended. Occasionally, however, entire populations might fall sick, owing to a plague, mass starvation, or poisoning. Similarly, whereas societies are relatively peaceful and non-violent much of the time (Pinker, 2011)—there are circumstances (at times of war) where most members are required to mobilize and fight (i.e., employ violence) for a common cause. In short, whereas generally the intensity and frequency conceptions of extremism are in sync, they may occasionally diverge.

Motivational Balance and Imbalance

Psychological theorists (e.g., Deci & Ryan, 2000; Fiske, 2010; Maslow, 1943; Higgins, 2012) agree that humans have a set of basic motives whose fulfillment is indispensible to their well-being. Some such motives pertain to fundamental biological needs, including the need for nutrition, hydration, rest, etc. It is generally agreed that satisfaction of those needs is indispensable to biological health and ultimately to survival.

Other basic needs are *psychogenic* in nature: these are the need for safety, love/belonging, esteem, and self-actualization (identified by Maslow, 1943), need for autonomy, competence and relatedness (identified by Deci & Ryan, 2000), need for value, truth and control (identified by Higgins, 2012), or need to belong, understand, control, enhance, and trust (identified by Fiske, 2010). As can be seen then, psychological theorists differ in how they parse the universe of basic needs. Nevertheless, they concur that such needs do exist and that their non-fulfillment foments suffering and distress.

[1] We assume that the imbalance is a matter of degree. In fact, in normal circumstances, arousal of a given need signifies its momentary dominance over other needs, but at its low magnitudes the dominance of one need is coexistent with the active psychological presence of other needs and their exercise of constraints upon behavior.

Humans are assumed to strive for fulfillment of their basic psychogenic needs, much as they do with respect to physiological needs. Furthermore, people's specific goals are assumed to be traceable, ultimately, to their basic needs. The goal of cooking may hark back to the need for nutrition, rebellion against oppression—to the need for autonomy, competition—to the need for competence, formation of intimate ties—to the need for relatedness, and so on (Deci & Ryan, 2000).

Balance and Constraint

I define motivational balance as a state in which all the basic needs constitute active concerns whose fulfillment drives individuals' behavior. These needs constrain one another such that behavior that gratifies only some needs while undermining others tends to be avoided. For instance, one's hunger may co-exist with concerns about health, and taste; as a consequence, foods that are unhealthy or foul-tasting would be avoided. One's need for intimacy and relatedness may temper one's need for achievement, thus promoting a work-family balance, etc.

Imbalance and Release

At times, however, a motivational imbalance may occur wherein a given need receives disproportionate emphasis, overriding the others. This state may be described as one of *prepossession*, in which one's mind is predominantly absorbed with a given motivational concern, and is oblivious to all else (Shah, Friedman, & Kruglanski, 2002). For instance, under extreme hunger one might be ready to eat anything at all, regardless of its healthfulness, and a highly ambitious person, driven by an unstoppable drive to succeed, may become a workaholic and sacrifice her or his personal relations, health, even autonomy, on the altar of work. Thus, where a given need becomes particularly intense, alternative needs recede in salience, liberating possible behavior from their constraints. In consequence, the set of behavioral options for gratifying the dominant need expands, through inclusion of formerly prohibited behaviors detrimental to the now inhibited needs. For instance, when one's (acquired) need for a given intoxicating substance (e.g., alcohol, crack, heroin) is particularly intense, it may prompt behaviors destructive to self and others (e.g., foregoing healthy nutrition, neglecting one's work obligations, engaging in criminal behavior) whose sole purpose is to obtain the object of one's desire by any means necessary. Such behaviors merit the epithet *extreme* because they denote a deviation from a motivational balance. And because people in general strive to maintain balance, extreme behavior is infrequent, as discussed earlier.

The constraints on behavior imposed in a motivationally balanced state, and their disinhibition under motivational imbalance, were investigated by Köpetz, Faber, Fishbach, and Kruglanski (2011). One of their studies (Study 3) examined the foods that students, who had equal concerns for *eating enjoyment* and *weight control*, were contemplating for lunch. In one experimental group, commitment to the goal of food enjoyment was augmented through the technique of mental contrasting (of subjective *values* of given states of

affairs, and *barriers* to attaining them; Oettingen, 2000; Oettingen, Pak, & Schnetter, 2001). It was found that as compared to a control condition where the eating enjoyment and weight control goals were in balance, participants whose commitment to food enjoyment was enhanced listed more foods (reflecting an expansion of the number of means to the dominant goal under motivational imbalance). Of interest, too, the additional foods listed were rated higher on taste but also on caloric content (at odds with the weight control objective) whereas in the control (balanced) condition, the fewer foods listed were equal on taste but lower on caloric content. A subsequent experiment (Study 4) where commitment to the food enjoyment goal was manipulated via sequential priming obtained the same result. And a final experiment additionally showed that an increase in the number of means to the dominant goal through the listing of caloric foods was mediated by *inhibition* of the dieting (weight control) goal.

Violent Extremism

As already noted, motivational imbalance may underlie all kinds of extremism regardless of their specific nature (e.g., extreme eating habits, extreme sports, addictions of various sorts, "fatal attractions", etc.). I now consider how this process plays out in the case of violent extremism. Our work on this topic (Jasko, LaFree, & Kruglanski, 2016; Kruglanski et al., 2013; Kruglanski, Chen, Dechesne, Fishman, & Orehek, 2009; Kruglanski, Gelfand, et al., 2014; Kruglanski, Jasko, Chernikova, Dugas, & Webber, 2017; Webber et al., 2017, 2018) suggests that the need that dominates this process is individuals' *quest for personal significance,* that is, the desire to matter and have respect in one's own eyes and those of revered others. When that motive is sufficiently aroused, it suppresses alternative needs; this enables the implementation of possible means of gaining significance that are incompatible with those needs. In those circumstances, individuals may consider violence and aggression as paths to significance, especially if enticed to do so through compelling *narratives* delivered by persuasive communicators endowed with charisma and revered in the individual's social *network*.

The human quest for personal significance represents a basic need whose fulfillment is essential to individuals' sense of well-being. It is implicit in such motivational notions as the need for competence (Deci & Ryan, 2000), enhancement (Fiske, 2010), or control (Higgins, 2012). All such constructs connote attainment of high standing (that is, of desirable outcomes) on dimensions valued in one's culture, e.g., athletics, art, science, politics, or warfare.

The quest for personal significance subsumes a variety of subordinate goals identified in the social science literature on terrorism and violent extremism (e.g., Gambetta, 2005; Stern, 2003), such as devotion to the leader, vengeance, the "perks" of paradise, even financial rewards (e.g., monetary payments to families of suicide bombers, salaries to the fighters of Al Qaeda or ISIS). Those subordinate goals are but means to the superordinate goal of personal significance. Take *vengeance* for example. It represents a case where one's loss of

significance through disempowerment and humiliation by another social agent is erased by violent payback to the perpetrator, that "levels the playing field" and restores one's sense of mattering.

Devotion to the leader implies carrying out activities that the leader approves of and for which she/he rewards individuals by bestowing significance upon them. Financial rewards, or the perks of paradise are awarded in recognition of one's worth; they reflect one's valuable contributions to the protection of one's faith. Even salaries dispensed to fighters of terrorist organizations or payments to families of killed 'martyrs' are significance bestowing: They enable individuals to care for their families, thus gaining their gratitude and admiration, as well as living up to their obligations as providers.

The Role of Violence in the Quest for Significance

Arousal of one's need for significance (e.g., through a significance loss, and/or the opportunity for a significance gain) does not prejudge how significance is attained and it does not necessarily imply a resort to violence. After all, personal significance defines a universal human need, which most people fulfill in peaceful ways. Where severe intergroup conflict is in place, however, unleashing violence against the adversary is often hailed as a particularly effective route to significance, meriting the group's recognition of the individual as a hero or a martyr. Typically, societies pay homage to, and glorify those who are ready to make sacrifices on their behalf. For instance, military service that reflects soldiers' readiness to risk life and limb for "king and country" has been universally regarded as a most honorable pursuit (Olsthoorn, 2005). Thus, even though violence isn't significance-bestowing *necessarily*—it often is so *actually* and in light of the ubiquity of intergroup conflict in human history. The means-ends relation between violence on behalf of one's group and the attainment of personal significance is spelled out in many ideological narratives, including those of non-state militant organizations of various sorts (Kruglanski, Gelfand, & Gunaratna, 2012).

An extensive body of recent research supports the intimate relation between the quest for significance and the support of violence on behalf of some sanctioned cause. For instance, open source materials about successful suicide bombers (i.e., individuals who volunteered to die while carrying out their mission) suggest that those animated by a loss of significance and/or evincing a particularly strong appetite for significance gain perpetrated more severe casualties (in terms of the numbers of people killed and/or wounded in the attacks) than individuals with a less intense quest for significance (Webber et al., 2017). Examination of ideologically motivated crimes carried out in the U.S. yielded that violent (vs. non-violent) crimes were more likely to be committed by individuals who suffered considerable loss of significance in one or more life domains (Jasko et al., 2016). Finally, Muslim immigrants in the U.S. who felt marginalized and discriminated against were more likely to support and identify with radical Islamist groups (Lyons-Padilla, Gelfand, Mirahmadi, Farooq, & van Egmond, 2015; for a review, see Kruglanski, Belanger, & Gunaratna, 2018).

Extremism Mediating Processes

Neuronal Circuitry

The motivational imbalance at the root of extremism is enabled by basic mechanisms describable on the biological/neuronal (molecular) as well as psychological (molar) levels of analysis. The former have been investigated with animal models at different phylogenetic levels, such as mice, flies or crayfish among others. For instance, flies will tolerate a higher concentration of bitter (and potentially toxic) contaminants in food as they get hungrier. In other words, their 'concern' for taste seems to decline the greater their concern for nutrition becomes. Research on the brain mechanisms involved in this phenomenon reveals that taste neurons become more sensitive to sweet-tasting substances and less sensitive to bitter tastants (Inagaki, Panse, & Anderson, 2014). Similarly, research carried out with mice (Lin et al., 2011) revealed that many of the ventral hypothalamic neurons activated during male-male aggressive encounters were *suppressed* in the presence of females.

Activation of neurons that typically elicit aggressive behavior in the mouse affected it to a much reduced extent when the male was engaged in copulation, and it required a considerably more intense level of stimulation under these conditions to elicit attacks. This inhibition was removed following ejaculation. As Anderson (2012, p. 1085) summarized it, "This observation is consistent with…electrophysiological data suggesting that mating causes an active inhibition of attack circuitry, so that the level of artificial stimulation required to override this inhibition is increased during the consummatory phase." These findings suggest that when mating/courtship becomes a predominant concern, other needs such as defense (e.g., against possible aggressors or invaders) are inhibited and their momentary importance to the animal diminishes.

Animals' preference for a balanced 'moderation' is illustrated by a study in which an animal who is both thirsty and hungry is afforded access to two bottles of water, one of which contains a tasteless but caloric compound, and the other containing water without the nutritious compound (Elizalde & Sclafani, 1988). It is found that after drinking from each bottle, the animal will come to prefer the water with the nutritious component because it can detect the compound with receptors in its gut. In other words, the animal prefers the state in which both hunger and thirst are satisfied to a state in which only thirst is, and it does so by employing the *multifinal* means (Kruglanski et al., 2002) of drinking from the bottle that contains not only water but the compound as well.

In summary, animal research carried out by behavioral biologists attests both to animals' preference for *balanced* states (in which their various motives, e.g., hunger and thirst, are all satisfied) and to neural mechanisms that enable the emergence of a motivational *imbalance* in which a given motive subjected to a particularly intense stimulation emerges as dominant alongside a parallel decline in the strength of other motives and the concomitant weakening of behavioral patterns that typically subserve them.

In lower species, the state of prepossession in which a given motive dominates others is typically of brief duration. The motivational "storm" subsides once the momentarily dominant need is taken care of and the animal is then free to turn its attention to its alternative concerns. In humans, however, the operation of cognitive and social mechanisms enables long haul persistence of prepossessive states, including an enduring engagement in violent extremism. These mechanisms are considered in what follows.

Cognitive Bases

Below, I briefly describe three cognitive mechanisms that play a central role in the radicalization process. These are the processes of *knowledge activation*, *knowledge inhibition*, and *construal* or *inference*.

Knowledge Activation

The phenomenon of knowledge activation is ubiquitous throughout the radicalization process. It plays a key role in evocation of one's significance motive and bringing to mind possible ways of satisfying it. The process of knowledge activation assumes that a given knowledge construct is *available* in the individual's memory from which it is triggered, and hence made *accessible* by various primes in the individual's environment. The ease with which an available construct is activated by a cue or prime defines its degree of accessibility, or activation potential (Higgins, 1996). Accessibility, in turn, is determined by the degree to which the primed construct is currently motivationally relevant to the individual (Eitam & Higgins, 2010; Higgins & Eitam, 2014).

As noted earlier, attainment of personal 'significance' is highly motivating for most people, stemming as it does from such basic needs as those of competence (Deci & Ryan, 2000) self-enhancement, or control (Fiske, 2010; Higgins, 2012). Given its high activation-potential, priming the significance motive by external stimuli is thus likely to succeed. In real world contexts, such priming may be accomplished in various ways, e.g., through sermons or exhortations delivered by charismatic communicators, through discussion in chat rooms on the internet, through Instagrams or videos depicting events related to that goal, etc.

Typically, exhortations by militant propagandists activate one's goal of collective significance related to the humiliation of a group (e.g., Muslims, Palestinians, Americans) suffered in the hands of an adversary and hence communicating a loss of significance on part of the group's members. In those instances, the significance loss is bound to the individuals' social identity (i.e., their wounded pride as Muslims, Palestinians, or Americans).

Alternatively, the quest for significance restoration may be linked to one's individual-identity and be activated by memories of one's personal failures, debacles, and humiliations essentially unrelated to collective causes. Finally, the quest for significance may be evoked by opportunities for significance gain, that is, by heightened *expectancies* of significance attainment. As we discussed in detail elsewhere (Kruglanski, Chernikova, Rosenzweig, & Kopetz, 2014), goals have a value and an expectancy component: activation of a heightened

expectancy of significance attainment through some recommended actions should thus increase the activation of that goal as well.

Activation's Consequences

Activating a cognitive construct impacts subsequent thoughts, feelings, and actions. For instance, it can affect the categorization of ambiguous stimuli that share features with that construct (Srull & Wyer, 1979; Higgins, Rholes, & Jones, 1977; for a review see Decoster & Claypool, 2004). Specifically, activation of the significance goal may increase an individual's tendency to interpret others' ambiguous remarks and behavior in significance relevant terms, that is, as significance decreasing (i.e., as slights or insults) or as significance enhancing (i.e., as compliments and recognitions).

Activation of a given construct results in the spreading of activation to other nodes in the construct's associative network, that is, to other semantically related constructs. For instance, the construct of personal significance could activate ways and means associated in the person's mind with the attainment of significance, as well as priming the emotion constructs associated with attainment or failure to attend significance (e.g., shame, dejection).

Selective Attention, and Inhibition

Cognitive scientists agree that attention is selective (e.g., see Eriksen & St. James, 1986; Jonides, 1983; Scholl, 2001; Yu, Mann, & Gosine, 2012). Attentional resources are finite, such that focusing them on a given construct withdraws them from other topics. For instance, in a dichotic listening task, the more individuals pay attention to stimuli presented in one ear, the less attention they pay to those presented in the other ear (e.g., Moray, 1959; Studdert-Kennedy, Shankweiler, & Schulman, 1970).

Typically, cognitive experiments study selective attention to externally presented stimuli, e.g., text presented in a dichotic listening task, letters presented in the flanker task (Eriksen & Eriksen, 1974), or differently colored words in the Stroop task (Stroop, 1935). But selective attention can also apply to internal constructs such as ideals or goals. *Rumination,* for instance, refers to the focusing of attention on the symptoms of one's distress, and on its possible causes and consequences (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008). And in the context of multiple goal activation, increased activation (through priming) of some goals prompted the withdrawal of attention from other goals, a phenomenon that we labeled the 'goal pull' effect (Shah & Kruglanski, 2002).

These attentional mechanisms likely play an important role in radicalization into violent extremism as well. For instance, focusing one's attention on the goal of personal significance (e.g., occasioned by instances of humiliation and significance loss) may divert it from issues of comfort and safety and enable individuals to enact risky behaviors at odds with those concerns (e.g., to volunteer for suicidal attacks). Similarly, focusing attention on issues of security and safety (as likely did much of the U.S. population in the aftermath of the 9/11 assault) may divert individuals' attention from issues of human rights, allowing torture to be practiced (e.g., in Guantanamo, Abu Ghraib, and a variety of 'black sites'

where enhanced interrogation techniques might be practiced) and disregarding concerns with humanity, compassion, or empathy.

Inhibition

As already noted, selective attention refers to focusing attention on some (internal or external) stimuli and the consequent withdrawal of attention from other stimuli. This process consists of two opponent factors pulling in divergent directions: One source of pull or attraction emanates from the focal stimulus to which attention is deliberately directed and the opposing pull comes from the stimulus from which attention is withdrawn. The stronger the pull of the latter, the greater the effort needed in order to direct one's attention at the focal target by inhibiting the distracting stimulus.

Consider the Eriksen flanker task mentioned earlier (Eriksen & Eriksen, 1974). In one of its versions, participants are instructed to make a given response to certain letters, e.g., to press a left arrow if the letters H and K appear in the middle of a seven-letter string, and to press a right arrow if the letters S and C appear in that location. Participants are then presented with a string of letters that are either consistent or inconsistent in their response implications. For instance, the sequence HHHKHHH is consistent in implying a left response, similarly the sequence CCCSCCC is consistent in implying a right response. In contrast, the sequences HHHSHHH and CCCHCCC are inconsistent in that the flanking distractors imply a different response than the central target letter. Speed of responding is significantly faster in the case of consistent versus inconsistent flanker letters (e.g., see Eriksen, 1995 for a review) because of the need in the latter case to inhibit the incongruous responses elicited by the flankers.

Similarly, in the well-known Stroop test (Stroop, 1935), participants are instructed to name the color in which a color-denoting word is printed. When the word (e.g., "red", "green", or "yellow") is presented in a color different from that denoted by the name (e.g., the word "green" is printed in blue rather than green), naming the word's color typically takes longer and is more prone to errors than when the printed color matches the name of the color as it appears in the text. On the incongruent (vs. congruent) trials where the text mismatches the color, emitting the correct response requires inhibiting the incorrect response elicited by the word.

Attentional Processes in Violent Extremism

What role do these attentional processes play in radicalization and extremism? To reiterate, when one of the individual's needs becomes dominant, it draws attention away from other concerns. However, where the latter represent basic needs whose fulfillment is essential to individuals' well-being, they may well "vie" for attention as well. Accordingly, the focusing of attention on the dominant, extremism-promoting need may require considerable effort directed at inhibiting those competing concerns. In other words, mere diversion of attention may be insufficient where the alternative concerns emanate from individuals' basic needs. Precisely because such alternative concerns are basic, they are likely to assert them-

selves sooner or later, and grab the individual's attention. Staying focused on the dominant need may then require active inhibition.

By analogy, consider a basic need for nutrition evoking the experience of hunger. Though preoccupation with other concerns, such as an engrossing intellectual activity, may take one's mind off hunger for a while, the 'oblivion' is unlikely to be long lasting. Sooner or later, hunger will let itself be known through increasingly severe pangs, and come to penetrate the individual's awareness. Thus, to maintain attentional focus on a given concern, mechanisms of selective attention may need to be augmented by those of active inhibition: an effortful process of banning unwanted thoughts from one's mind (Anderson & Huddleston, 2012; Lee & Kang, 2002; Wegner & Erskine, 2003).

Extremism (of whatever kind) is thus stressful and hard to accomplish: it requires the investment of inhibitory energy to suppress basic human needs that vie for attention. The more extreme the behavior (i.e., the greater the upset of the motivational balance), the fewer the persons (namely those with extraordinary self-regulatory capacity) who are able to keep it up, especially for a long duration. For instance, the average length of time that individuals spend as members of violent far right organizations in Europe (e.g., of the neo-Nazi variety) is about ten years (Bjørgo, 2002). Similarly, Pyrooz and Decker (2011) examined interviews with former juvenile gang members in the U.S. and found that gang desistance was strongly correlated with age, suggesting a natural aging out process from membership in gangs. Gottfredson and Hirschi's (1990) age-crime curve suggests that criminal activity prevalence peaks in the late teens and declines in the early 20s. In the same vein, Laub and Sampson (2001) suggest that the vast majority of criminal offenders stop committing criminal activities. Key elements to this desistance include aging, marriage, securing legal, stable work, and/or reassessing the costs and benefits of crime (i.e., realizing the sacrifice to other needs that engaging in crime effects). And although drug addiction, alcoholism, and eating disorders are often long lasting, individuals typically engage in protracted battles with these afflictions aimed at a recovery of a motivational balance that affords a harmonious satisfaction of their basic needs (National Center on Addiction and Substance Abuse at Columbia University, 2012; Carter et al., 2012; Keel, Dorer, Franko, Jackson, & Herzog, 2005; Vallerand et al., 2003).

In summary, processes of knowledge activation, selective attention, and inhibition play an important role in all kinds of extremism, including violent extremism. Activation of a dominant need, and the focusing of attention on it, comes at the expense of alternative concerns that also demand attention. Maintenance of extreme behavior may require continued investment of efforts and energies in inhibitory processes that deny attention to those concerns. This stresses the motivational system as a consequence of which extremism tends to be time-bound, and to be exhibited by small segments of most populations.

Sense Making and Meaning Construction

Though activation of motivational constructs (goals and means) is necessary, it is insufficient for their actual implementation in behavior. Additionally, a *construal* process must

take place in which the behavior comes to be understood as an effective means to a current goal. This function is carried out via an inferential process in which judgments are formed on the basis of relevant evidence. Recently, we (Kruglanski & Gigerenzer, 2011) characterized this process as *rule based*: The individual subscribes to the premise/rule/heuristic whereby *if* some condition is fulfilled, a given conclusion follows. In the case of violent extremism, the conclusion at issue may be that a given act of violence (e.g., kidnapping, killing, or a suicidal attack) is legitimate, and laudable. A judgment of this sort is likely to require evidence of a social kind, typically articulated in an ideological narrative that asserts the violence-significance relation. The source that delivers the narrative must be credible and venerated. In fact, its reputation (expertise, trustworthiness) serves as evidence for the veracity of its pronouncements. Often, such a source is one group's leader, a charismatic communicator, or another high-ranking member of one's group whose knowledge and intentions are trusted. In the case of violent extremism, such a communicator may assert that the aggression carried out on behalf of one's group is indeed desirable and significance affording. Simply, the listener may apply the rule "if leader X delivers a given message (e.g., whereby violence for a cause confers significance) (then) that narrative is valid." Leaders' pronouncements may thus constitute one inferential basis for concluding the laudability of violence. Other such bases may include a *perceived consensus* within one's group that the narrative is valid, as well as the observation that individuals who acted in conformance with the narrative (e.g., by carrying out acts of violence against the group's ostensible enemies) are celebrated and admired.

In summary, the activation of constructs and their consequent representation in awareness, though necessary, is insufficient for making behavioral choices and embarking on a concrete course of action. The latter presuppose the formation of a cognitive means-ends schema that tie a given (e.g., extreme) activity-construct to an individual's goal in the situation (e.g., attainment of personal significance) and its validation via the appropriate evidence.

Awareness of the 'True' Reasons

Nisbett and Wilson (1977) (see also Chun, Kruglanski, Sleeth-Keppler, & Friedman, 2011) argued that individuals are often unaware of the true causes of their behavior that are often implicit and inaccessible to consciousness; instead, people typically assign effects (e.g., behaviors) to readily accessible, plausible causes that make good explanatory sense. Such a dynamic may well apply to individuals who perpetrate violence against others. Often, those persons might be unaware that what ultimately drives their behavior is their quest for significance (e.g., aroused by a significance loss and/or opportunity for a significance gain). Ascribing one's actions to a 'quest for significance' may sound egotistic (if not downright narcissistic), boastful, and vain—not the kind of attribute one may want to claim for oneself. Instead, individuals might ascribe their behavior to more socially desirable causes such as devotion to (nationalist, ethnic, religious or social) ideals valued by their group. Such ascriptions are not wrong. As shown below, they do confuse, however, the categories of goals versus means.

The goal of any behavior ultimately derives from one of the individuals' basic needs. The means to the goal are determined by the specific context. Consider the (basic) need for nutrition experienced as hunger. The means to satisfying it would be completely determined by situational availability. In some circumstances, booking a table at a restaurant might constitute an available means, whereas in other conditions the available means might be cooking a meal in one's kitchen, plucking a coconut from a tree, etc.

Similarly, the goal of personal significance could be served by a variety of means, including such valued behaviors as fighting for a socially cherished cause. Individuals might thus ascribe their behavior to an ideological cause without explicitly realizing that serving it is but a means to their fundamental quest for significance, which is the motivation ultimately responsible for their behavior. Illustrating this point, German neo-Nazis whom we have recently interviewed (Kruglanski, Webber, & Koehler, 2018) explained their attraction to the movement by mentioning the significance theme in less than 50% of the cases, as compared to nearly 80% of cases where they explained it in terms of the movement's ideological narrative and/or the support for that narrative by their network.

Recapitulation and Conclusion

Complex behaviors exemplified by actions of violent extremists are enabled by fundamental psychological and biological mechanisms, some of which humans share with organisms at lower rungs of the phylogenetic ladder. In this paper, I propose that extremism arises in a situation in which a given basic need dominates others. This state of *prepossession* removes the constraints that the latter needs impose on behavior, and hence license activities detrimental to those concerns.

The foregoing analysis is thought to apply to all kinds of extremisms including, though not limited to, violent extremism. It also captures the twofold meaning of extremism as a term used in popular language, namely in its denotation of a (1) high *magnitude* or *intensity* ascribed to a phenomenon or a process, and (2) its infrequency of occurrence: because the imbalanced dominance of a given need inhibits other basic concerns, it should foster distress and dissatisfaction that most people would tend to avoid. Thus, states of prepossession in which extremely intense needs obviate others are ultimately unsatisfactory and hence short-lived and/or infrequent.

In our prior work (e.g., Jasko et al., 2016; Kruglanski et al., 2009, 2013, 2017; Kruglanski, Gelfand, et al., 2014; Webber et al., 2017, 2018), we identified the quest for personal significance as the dominant motivational driver of violent extremism. It is that need that impels individuals to commit to a socially valued cause and sacrifice alternative concerns related to basic human needs (i.e., security, comfort, survival). Such a state of prepossession (by the significance *need*) is mediated and preserved via (1) ideological *narratives* that stress the linkage between commitment of violent actions and the attainment of significance, and (2) embeddedness in a social *network* that embraces and validates the narrative as well as rewards individuals for acting on its exhortations.

The presently described state of prepossession is made possible by the operation of basic mechanisms observable at the neural and cognitive levels, including in particular the twin processes of activation and inhibition in which the stimulation of biological and cognitive processes serving a given organismic function coincides with the suppression of processes serving alternative functions. Whereas these basic mechanisms operate across levels of phylogeny—extensive endurance of the state of prepossession in humans may be enabled by cognitive construal of belief systems and group dynamics that turn those belief systems into a shared reality.

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