Gaston Bouthoul's polemology and the strategic void

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Introduction

Polemology, the science of war and conflict founded by Gaston Bouthoul in the 1940s, is enjoying a revival in the face of changes in contemporary conflicts. This is due to the growing complexity of modern confrontations, which fall outside the traditional categories of strategic thinking. New forms of conflict, combining conventional and asymmetrical dimensions, require new analytical tools if they are to be understood in their entirety (Huyghe, 2001; Baumard, 2012).

Bouthoul defined polemology as the objective and scientific study of war as a total social phenomenon. This approach is particularly relevant at a time when forms of conflict are diversifying and hybridizing, going beyond the traditional framework of armed confrontation between states (Molina Cano, 2023).

Today's conflicts call into question the classic distinction between states of war and states of peace. The emergence of "grey zones", where organized crime, terrorism and guerrilla warfare intermingle, bears witness to this fundamental evolution in forms of collective violence. This phenomenon can be explained by the gradual erosion of the state monopoly of legitimate violence and the emergence of non-state actors in contemporary armed conflicts (Hintermeyer, 2017, 2022).

Polemology is based on a central premise: war is a social phenomenon that must be studied scientifically in order to better understand and prevent it. Bouthoul's motto "*Si vis pacem, gnosce bellum*" (if you want peace, know war) illustrates this rational approach, which is opposed to purely moral or legal visions of the war phenomenon. This scientific approach seeks to understand the underlying mechanisms of conflict, rather than to condemn or justify it on ethical grounds (Klinger, 2006, 2007).

The Vietnam War (1955-1975) is a perfect illustration of the relevance of this scientific approach. Beyond conventional strategic analyses focused on military aspects, polemology helps us understand how demographic and sociological factors determined the outcome of the conflict. The demographic structure of North Vietnam, with its young, rural population, made it possible to sustain a prolonged war effort, whereas American society, which was older and more urbanized, proved more sensitive to human losses. This fundamental difference in social structures partly explains Vietnam's resilience in the face of American technological superiority (McNamara, 1995).

Polemogenic mechanisms in contemporary conflicts

The demographic factors identified by Bouthoul as determining the outbreak of conflict are strikingly confirmed in contemporary wars. The concept of "surjeunissement", referring to an abnormally high proportion of young men in a population, is particularly relevant to understanding the dynamics of today's conflicts. The demographic upheavals in the Middle East are a case in point. The Syrian civil war, which started in 2011, developed in a context where over 60% of the population was under the age of 25. This unbalanced demographic structure provided fertile ground for the various warring factions, fuelling the durability and intensity of the conflict (Courbage and Todd, 2007).

The case of the Arab Spring also demonstrates the relevance of a polemological analysis of demographic factors. The societies that experienced the strongest protests were characterized by a predominantly young, urban population facing endemic unemployment. This demographic configuration, combined with rigid social structures, created the conditions for a social and then military explosion, confirming Bouthoul's theories on the links between demographic pressure and conflictuality (Fargues, 2017).

The evolution of belligerent complexes

Belligerent complexes, the psycho-social mechanisms that transform social tensions into armed conflict, are undergoing significant changes in the contemporary context. The "scapegoat complex", particularly studied by Bouthoul, is taking on new forms with the emergence of social networks and the globalization of information. Ethnic conflicts in Central Africa, notably in Rwanda and Burundi, illustrate the persistence of these traditional mechanisms for designating a collective enemy, while showing how new media can accelerate and amplify these stigmatization processes (Chrétien and Kabanda, 2016).

The war in Ukraine since 2014 offers a particularly illuminating example of the evolution of belligerent complexes in the digital age. The conflict combines traditional elements of territorial rivalry with new forms of informational and psychological warfare. Social media and mass disinformation have created

an environment where collective perceptions are systematically manipulated, giving rise to what some researchers call digital belligerent complexes.

Hybrid warfare, a feature of contemporary conflicts, validates the global approach advocated by polemology. Today's conflicts are characterized by their multidimensional nature, combining traditional armed confrontations, economic warfare, cyber-attacks and information warfare, as anticipated by Huyghe (2001) in his *Enemy in the Digital Age*. This development confirms Bouthoul's intuition that war cannot be reduced to its military dimension alone, but must be understood as a total social phenomenon mobilizing all of a society's resources (Delmas-Marty, 2016).

Rethinking cycles of violence

The accelerating cycles of violence in the contemporary world call into question the relevance of Bouthoul's traditional cyclical model. While the thirty-year generational pattern remains observable in certain contexts, modern conflicts seem to follow more complex, interwoven temporalities. The example of Afghanistan is particularly revealing: since 1979, the country has experienced an uninterrupted succession of conflicts, from Soviet invasion to civil war, then to post-2001 Western intervention, without respecting the classic periodicity identified by Bouthoul. This situation can be explained by the internationalization of conflicts and the multiplication of the actors involved, creating self-sustaining dynamics of violence, mainly based on a deterioration of global cultures, i.e. their flattening, rather than their confrontation (Roy, 2022). The case of African conflicts since independence also illustrates this evolution of cycles of violence. The Great Lakes region has seen waves of violence that overlap and feed off each other, creating what researchers call "conflict systems". This complex reality calls for the updating of polemological analysis models to integrate these new temporalities of collective violence.

The impact of new technologies

The digital revolution is profoundly transforming the nature of contemporary conflicts (Huyghe, 2001), while validating some of Bouthoul's fundamental intuitions about the total character of modern confrontations; no longer as a simple projection or continuation of means, but by creating a conflict space integrating both traditional intensive warfare and cognitive warfare (Arquilla and Ronfeldt, 1993; Baumard, 2017). The emergence of cyberwarfare calls for a fundamental rethinking of polemology - the sociology of war as theorized by Gaston Bouthoul. The development of French doctrine on cyberwarfare shows that traditional polemological frameworks focusing on demographic, economic and psychological factors (Bouthoul, 1951) need to be expanded to take account of the entirely new forms of social aggression emerging in the digital realm.

A renewed polemology must first account for the way in which cyber-capabilities have transformed what Bouthoul called the "aggressive constants" of human societies. The evolution from exploratory

hacking to state-sponsored cyber operations demonstrates that digital skills initially developed for technical curiosity can be rapidly transformed into instruments of social aggression when institutional frameworks emerge to channel them. This is a new variant of what polemology calls the "crystallization of aggressive functions", in which technical capabilities precede and shape institutional responses rather than follow them (Bouthoul, 1962).

For this renewal, it is essential to understand how cyberwarfare challenges polemology's emphasis on clear identification of belligerents. The persistent difficulties of attribution in cyber-attacks, illustrated by cases such as the 2016 DNC compromise, suggest that modern conflicts can persist in an ambiguous space between peace and war. This fundamentally challenges polemology's assumption that war requires clear social recognition of hostile parties. The evidence shows that we need new theoretical frameworks for analyzing conflicts in which attribution uncertainty is an essential strategic feature rather than an incidental factor (David-Barrett, 2015).

The rapid evolution of cyber capabilities also forces us to reconsider how polemology deals with technological change. While Bouthoul recognized the role of technology in warfare, cyber capabilities represent something qualitatively different - tools that can be rapidly modified and redeployed to circumvent traditional escalation frameworks. States' cyber doctrines show that digital weapons are evolving too rapidly for a traditional polemological analysis focused on relatively stable technological capabilities (Rid, 2013).

Perhaps most importantly, cyberwarfare introduces new dimensions to what polemology calls "structural violence". The ability to cause large-scale social disruption through cyber-attacks on critical infrastructure suggests that structural violence can now be exercised with unprecedented precision and scale. Polemological frameworks must therefore be broadened to take into account forms of social aggression that directly target societal functions rather than traditional military means (Arquilla, 2014).

The implications of developing a "cyber-polemology" are profound. Evidence shows that we need new theoretical frameworks capable of accounting for the rapid evolution of technical capabilities, the central role of uncertainty in attribution, the ability to cause precise structural damage, and the blurring of boundaries between peace and war. The traditional polemological emphasis on clear social processes of conflict initiation and resolution needs to be updated for an age when conflicts can persist in ambiguous forms below the traditional thresholds of war (Kaldor, 2012).

Artificial intelligence and autonomous weapons systems are also introducing new parameters into conflict analysis. The growing use of drones and combat robots is profoundly changing our relationship to violence and death in combat, a central theme of polemological reflection. The distancing created by these technologies calls into question the traditional psychological mechanisms of collective aggression identified by Bouthoul. Drone operators, physically removed from the battlefield,

nevertheless develop psychological disorders similar to those of traditional combatants, suggesting the persistence of certain fundamental mechanisms of war psychology (Chamayou, 2018).

Polemology in a strategic vacuum

The multiplication of non-state actors in contemporary conflicts represents a major challenge for polemological analysis. Transnational terrorist groups, private military companies and local militias create complex configurations that escape the traditional patterns of inter-state warfare. The Syrian conflict is a perfect illustration of this complexification: more than a thousand armed groups have been counted there, creating a tangle of alliances and rivalries that defy conventional analytical frameworks (Burgat, 2018). These entanglements have generalized a form of conflict that I have termed "somatic" (Baumard, 2012), which like the peripheral nervous system is realized in a direct form of reaction to pain, and neither entails nor requires a transformation of raison d'être or strategic projection.

The Russo-Japanese War (1904-1905) was a precursor episode in the somatization of contemporary conflicts. For the first time, a major conflict was played out primarily on the terrain of subversion and intelligence, rather than on that of conventional strategy. Japan, under the leadership of Akashi Motojiro, deploys a network of agents in the Caucasus to destabilize the Russian Empire from within, demonstrating that technological and numerical superiority are no longer enough to guarantee victory. This war heralded the emergence of a new paradigm in which traditional strategy gave way to indirect operations.

The Cold War institutionalized this shift towards a tactical approach to conflict. The development of counter-insurgency as the dominant modus operandi reflected the gradual abandonment of strategic thinking in favor of immediate tactical responses. David Galula, in his 1964 book, theorizes this approach, which favors immediate control over long-term vision. This period saw the emergence of a doctrine that made tactical reaction the substitute for strategic thinking. The attacks of September 11, 2001 revealed the extent of the contemporary strategic vacuum. Despite unprecedented technological resources, Western powers proved incapable of anticipating and responding coherently to asymmetric threats. The interventions in Afghanistan and Iraq illustrate the prevalence of somatic and immediate responses, to the detriment of genuine strategic thinking.

Gaston Bouthoul, in "Les guerres, éléments de polémologie" (1951), had already developed an innovative approach to war as a total social fact. He suggested how social structures play a decisive role in triggering conflict, and how institutions can channel or exacerbate collective aggression. In "La guerre" (1959), Bouthoul also highlights the crucial importance of demographic factors in conflict. In particular, he develops the concept of "deferred infanticide" as a demographic regulator, and analyzes generational cycles in the outbreak of war. Here we return to the idea that the "somatic" social fact,

through timely reaction, tactics or an accumulation of micro-motivations, can generate an underlying development of conflicts beyond their immediate manifestations.

The *Traité de polémologie* (1970) takes this analysis of collective psychological mechanisms in conflict further. In it, Bouthoul studies the phenomena of mental contagion, the role of collective representations and the importance of war myths in mobilizing societies. Bouthoul's analyses of the social structures underlying conflict find a striking echo in my own analysis of the strategic void (2012). The neglect of these fundamental dimensions appears to be a major cause of the contemporary inability to develop a coherent strategic vision. Current events demonstrate the relevance of these analyses, particularly in the context of asymmetrical conflicts.

In a comparison of Bouthoul's sociology of aggression with my own notion of somatic conflict, several points of analysis emerge. Bouthoul emphasized the importance of social and collective dynamics in human aggression, which is seen as a global social phenomenon that goes beyond simple individual interactions to form part of large-scale systemic conflicts. In particular, he distinguishes between individual and collective aggression, the latter being reinforced by social and cultural factors (Bouthoul, 1973, p. 289-297). In my work, on the other hand, I have developed the idea of somatic conflicts, where conflicts are not just external manifestations of aggression, but also internal processes, rooted in individual cognition and perceptions, and often experienced unconsciously. These internal conflicts, influenced by cognitive and bodily contexts, form fertile ground for deracinated strategic responses, as they generate impulsive and tactical behaviors that escape long-term thinking (Baumard, 2017, p. 31-49).

In *Le Vide* Stratégique, as in Bouthoul's polemology, war is a social phenomenon. It goes beyond the military. For Bouthoul, war is a social manifestation, shaped by social, demographic and economic structures, and not simply a consequence of isolated political or military decisions (Bouthoul, 1973, pp. 289-297). For my part, in *Le vide stratégique*, I observed a profound crisis of strategy, where strategy becomes a series of reactions to broader social mechanisms, which ties in with Bouthoul's idea that war is often the result of invisible social forces rather than clear political will (Baumard, 2012, p. 77-112).

Gaston Bouthoul anticipated the *depersonalization* of strategy. He criticized the anthropomorphic vision of war, stressing that it was not the fruit of individual human will, but the result of social and collective forces (Bouthoul, 1976, p. 166). For my part, I have tried to show that, in the face of multiplying crises, strategy has become a series of tactical gestures devoid of any deep strategic vision, which also underlines the depersonalization of strategic actors in a world saturated with reactive mechanisms (Baumard, 2012, p. 45-65); the underlying foundation being a form of "artifactualization" of conflicts, which does not presage low intensity, but renders the expression of modern conflicts as artifacts: sums of somatic engagements that lead to high intensity, precisely because they are depersonalized.

The divergence between our approaches can be seen in our conception of war and social conflict. For Bouthoul, aggression, beyond its biological roots, becomes a social dynamic that finds expression in major collective tensions, such as wars and power struggles. In his view, these phenomena are inevitable in societies undergoing constant transformation, where conflicts are sometimes exacerbated by pacifist ideologies that fail to take into account the intrinsic conflictual nature of human societies (Bouthoul, 1970). From my perspective, however, somatic conflicts within individuals influence strategic choices in subtle and often imperceptible ways, transforming conflicts of a global nature into erroneous individual decisions, leading to the emergence of a strategic vacuum, where war is no more than a phenomenon of automatic, unreflective reactions (Baumard, 2017, p. 161-171).

Another major point of divergence lay in the rationality of war. Bouthoul saw war as an irrational phenomenon, beyond human control, an idea he developed in depth in his work on the psychology of conflict (Bouthoul, 1946, p. 199). For my part, although I have criticized the collapse of modern strategic visions, I have not posited war as an irrational phenomenon, but as a consequence of a strategic vacuum in which the absence of vision leads to a quasi-visceral management of conflict (Baumard, 2012, p. 154-173).

If we take up the criticisms evoked by Czakon, evoking a form of strategic nihilism in *Le vide stratégique* (Baumard, 2012), we could also say of Bouthoul's work that his approach to war and social conflict has significant limitations which, while not necessarily leading to direct nihilism, seem to ignore certain contemporary dynamics that shape modern conflicts. In his review, Czakon describes how contemporary conflict management, dominated by reactive logics with no long-term vision, leads to a kind of strategic vacuum where military or political actions are reduced to reflexes, immediate adaptations with no real direction. This vision of strategy as a response often disconnected from any strategic purpose can be seen as nihilism, where the absence of purpose leads to decisions that only increase confusion and instability (Czakon, 2012, p. 225-233).

As far as Bouthoul's polemology is concerned, although his analysis of the social and historical causes of war and aggression is profound and relevant, it remains insufficiently dynamic in the face of contemporary geopolitical and strategic issues. While Bouthoul insists on war as an almost inescapable phenomenon, a product of social tensions and internal contradictions in human societies, he fails to take full account of the new forms of conflict management in a globalized world, where aggression manifests itself not only through open warfare, but also through lower-intensity conflicts of an economic or ideological nature, which do not have the same visibility but generate deep-seated tensions.

In *Le vide stratégique*, I explored how, faced with a world saturated with crises and conflicts, strategy has become a series of automatic and often poorly coordinated responses, a phenomenon that Czakon interprets as a form of strategic nihilism, where political and military actors no longer manage to

formulate clear objectives (Baumard, 2012, p. 31-49). This criticism could also be applied to Bouthoul's work. Indeed, while his reflection on collective aggression and the root causes of war is essential, his tendency to conceive war as a recurring phenomenon, dictated by fixed social and demographic laws, seems to underestimate the capacity of societies to adapt to conflicts of a different and less visible nature. By failing to take sufficient account of changing forms of warfare and strategy, Bouthoul fails to grasp the strategic vacuum that characterizes many modern societies, where war actions are no longer guided by rational strategic visions, but by reflexes that lack direction and lead to a loss of meaning in the responses given to global crises.

While Bouthoul's polemology remains relevant for understanding the historical and social roots of wars, it lacks the flexibility needed to grasp the scale of strategic nihilism we are witnessing today, where the absence of a clear purpose in military and political actions leads to recurrent conflicts without lasting objectives or results. This approach, as in my work, underlines the importance of reintroducing deep, considered strategic thinking in the face of a world in crisis, where actions must not be reduced to mere knee-jerk responses to social and geopolitical phenomena.

While Bouthoul advocates a rational understanding of conflicts to avoid their destructive recurrence (Bouthoul, 1962), I argue that the absence of understanding and strategy in contemporary societies leads not to a form of nihilism, as Czakon (2012) has suggested, but rather to a situation where social and strategic actors, saturated with crisis and violence, become incapable of meaningful action. This somatic illness of strategic action, rooted in internal conflicts, amplifies the inability to formulate coherent strategies, exacerbating the spiral of global conflict (Baumard, 2017, p. 31-49). This idea of loss of direction and disconnection from goals seems to me essential to understanding how societies that were once more strategically coherent can today sink into ineffective conflicts, marked by a lack of purpose.

As for the "nihilistic" teleology that might be reproached to my work as much as to Gaston Bouthoul's, it is clear that Bouthoul offered a more optimistic perspective, insisting on the need for a "scientific sociology" of war to manage conflicts rationally and non-ideologically (Bouthoul, 1991, p. 24-25). In my work, by contrast, I have described a world where strategy has disappeared, where war and conflict become a repetition of acts without a clear objective, leading to a form of strategic nihilism, a situation where goals seem constantly to dissolve in a reality devoid of direction (Baumard, 2012, p. 183-207). Thus, modern societies, undoubtedly gripped by a lack of knowledge of warfare, lock themselves, through self-fulfilling prophecies, into an endless cycle of crises, can seem doomed to a loss of meaning. Bouthoul, however, insisted on the importance of understanding the underlying mechanisms of war, and avoiding an overly pessimistic or ideological view of conflict (Bouthoul, 1976, p. 168).

Bouthoul already deplored the reduction of strategy to its military dimension alone, whereas polemology aimed to restore its social and anthropological complexity (Molina Cano, 2023). And there

is certainly a common denominator in the denunciation of the progressive replacement of strategy by mere "operating modes", deprived of any creative vision and reduced to reproducible tactical procedures (Baumard, 2012). This convergence can also be found in the same historical diagnosis. For Bouthoul, the advent of atomic weapons marked a fundamental break in the history of strategic thinking. Bouthoul saw in it the end of Clausewitzian total war, forcing a complete rethink of the foundations of strategy (Bouthoul, 1991). I have extended this analysis by showing how nuclear deterrence has contributed to emptying strategy of its substance, by making any direct confrontation between great powers impossible (Baumard, 2012); this has progressively degraded both the learning of the operative arts, and the need to think strategically, when the effectiveness of the tactical regime made it possible to preserve strategic prerogatives without engaging in high-intensity conflict.

This evolution raises the crucial question of the very possibility of a strategic approach in a world dominated by somatic reactions. Contemporary polemology is thus faced with the challenge of rethinking its theoretical foundations in order to apprehend conflicts that increasingly elude traditional analytical frameworks.

Czakon (2012) poses a very pertinent question about the risk of strategic nihilism, opposing the idea that there is neither blindness nor a strategic vacuum, but rather the advent of an "end of strategy", where Nye's (2009) *soft power* combines with a series of somatic high-intensity conflicts. So, while Bouthoul has a resolutely positive relationship with causality, trying to establish sociological constants in the emergence of conflicts, I have most certainly proposed an oscillation between several tactical regimes, which are self-sufficient; this may underlie, as Czakon (2012) suggests, the end of strategy, which is part of a broader questioning of classical military doctrines (Poirier, 1987, p.89).

Bouthoul's polemology thus calls into question the very epistemology of war, leaving a wide field for the "soft power" described by Joe Nye (2004). It also calls into question the Clausewitzian trilogy by subtracting the state of war from its traditional explanatory variables. Peace and war are no longer a continuation of each other, but a system of stochastic coexistence. For Bouthoul, however, war remains a positive phenomenon: it is determined, it can be explained, but simply requires that demographic and sociological variables be as much a part of it as military art and strategic balance (Aron, 1962, p.235). Bouthoul's polemology, in its search for sociological invariants, can paradoxically lead to a nihilistic observation about the absence of authentic strategy today.

The proliferation of mental contagions

In his *Traité de polémologie* (1970), Bouthoul develops an innovative analysis of the mechanisms of mental contagion that lead to the outbreak of conflicts. In particular, he identifies the phenomenon of the "bellicose complex", a collective psychological state in which aggression spreads quasi-epidemically within a society. This process involves an emotional synchronization that transcends social and individual differences. Mental contagion first expresses itself through an acceleration of

communication processes and a simplification of messages. It then manifests itself through growing polarization between antagonistic groups. Finally, it leads to a temporary suspension of the usual mechanisms of social regulation.

Bouthoul places collective representations at the heart of his conflict theory. He shows how these representations structure the perception of the other and condition societal responses to crises. Collective representations act as filters, guiding the definition of what constitutes a legitimate threat. They also determine which responses are considered appropriate, and set the criteria for success or failure. This analysis of collective representations remarkably anticipates later work on collective cognitive biases in strategic decision-making.

Bouthoul's originality lies particularly in his analysis of war myths as essential components of conflict. He explores in depth the myth of the golden age and decadence, which nourishes a mobilizing nostalgia within societies. He also analyzes the myth of necessary sacrifice, which helps legitimize collective violence. His study extends to the myth of the civilizing or redemptive mission, which justifies expansion and domination. These myths are not mere cultural embellishments, but profound structures that shape the collective understanding of conflicts and their modes of resolution.

Bouthoul's analysis has particular resonance in today's "strategic vacuum" (Baumard, 2012). Bouthoul's analyses find an echo in the amplification of these phenomena of mental contagion, in which social networks and hyper-connectivity play a central role. The mechanisms he identifies help us to understand the rapid spread of contemporary conflicts. His work also sheds light on the growing difficulty of maintaining coherent strategic positions, and the ineffectiveness of purely rational approaches to crisis management.

The Arab Spring of 2011 is a perfect illustration of this evolution: starting in Tunisia, the protest movement spread to Egypt, then to the entire Arab world in a matter of weeks. Social networks considerably accelerated the mechanisms of emotional contagion described by Bouthoul, creating what I called in 2012 a "society of ebb and flow". The war in Syria also demonstrates the power of new vectors of contagion. The viral dissemination of images of repression rapidly transforms a local protest into an international conflict. Collective representations are polarized on a global scale via social media, illustrating the acceleration of classic polemological mechanisms. The attacks of September 11, 2001 marked a turning point in the evolution of these collective representations of conflict. As Bouthoul anticipated, the instantaneous media coverage of the event produced an unprecedented global emotional synchronization. The ensuing "war on terror" is a perfect illustration of how collective representations can durably structure international politics. The intervention in Afghanistan (2001-2021) is a textbook example of the impact of collective representations on strategy. The opposition between a Western vision of "nation building" and local representations of power and legitimacy led to a strategic impasse that Bouthoul would have described as a "dialogue of armed deaf".

The resurgence of war myths: the sudden death of the ultra-center

The wars in the Middle East since 2003 also illustrate the power of religious and identity myths. The emergence of Daech, with its mythology of the restored caliphate, corresponds precisely to the mechanisms of mythological mobilization described in Traité de polémologie. The war in Ukraine since 2022 demonstrates the persistence of the war myths analyzed by Bouthoul. The Russian myth of the "great fatherland" and its historical mission stands in stark contrast to the European myth of the international order founded on law. This mythological confrontation deeply structures the conflict, beyond the immediate geopolitical stakes.

Bouthoul's analysis helps us to understand why the strategic vacuum identified in 2012 is getting worse: the acceleration of mental contagion mechanisms via digital technology is making it harder than ever to develop coherent long-term strategies. The cyber-sphere amplifies the phenomena of emotional contagion, while fragmenting collective representations.

The Ukrainian crisis illustrates this dynamic: the rapid spread of emotions and contradictory narratives via social networks considerably complicates the development of coherent strategic responses. Decision-makers must simultaneously manage media urgency and geopolitical complexity, often leading to purely tactical responses. We are no longer in the "war of mentalities" so dear to Galula. It's no longer a question of shifting territorial support, or of winning the global war of "heart and mind", but of hijacking and manipulating the perception and cognition mechanisms of global opinion. While global campaigns of influence and propaganda have been used in all contemporary conflicts, the new martialities involve attacks on the "cognitive integrity" of populations, understood here as the capacity of peoples to be sovereign of their collective and individual cognition. If historical propaganda, which has not disappeared, is capable of radicalizing and dividing, it cannot globally carry out "subtraction" operations in cognitive spaces, whereas contemporary interfaces can shape perceptions by carrying out either suppressions (e.g. "shadow banning") or cognitive tunnels, i.e. pre-constructed spaces of cognitive adherence without the knowledge of the targeted populations.

Beyond cognitive control, the manifestations of contemporary violence are thus desanctified and permutable. The ubiquity and immediacy of these cognitive tunnels, whose deployment artificial intelligence can organize upstream of initial cognition, profoundly change the triggers of aggression. For Bouthoul, the sociology of aggression is part of a positivist tradition, seeking to establish measurable regularities in conflict phenomena. As he writes: "Conscious motivations, because of their contradictions and variety, appear to be only the most superficial aspect of collective aggressiveness" (Bouthoul, 1973, p.295). His approach thus rests on three fundamental pillars: the distinction between individual and collective aggression; the study of the structures underlying conflicts; and the search for statistical regularities in violent manifestations. For Bouthoul, collective aggressiveness cannot be reduced to the simple sum of individual aggressiveness. It obeys its own laws and fulfils specific sociological functions. This concept is in line with Durkheim's idea of the autonomy of the social.

For their part, somatic conflicts are characterized by several features: an immediate, non-reflexive reaction; a loss of the strategic dimension in favor of the tactical; and an autonomization of conflictual responses in relation to the initial stakes - what I've called here an "artifactualization" of warfare, in the same way as an artifactual routine whose origin or advent we no longer really know. Paradoxically, this "artifactualization" is not conducive to strategic ambiguity: if we gain by not positioning ourselves on entrenched demarcation lines, we lose by being ambiguous about somatic artifacts. What the opponent retains is that you are unable to have a clear perception of a conflict, which in itself is a tactical artifact. This obviously raises the question of recognizing the autonomy of conflict phenomena in relation to the intentions of the actors; something that Bouthoul treated as a deterministic emergence, because he defended the idea of a scientific instrumentation of war. From then on, modern conflict creates a "sudden death" of the ultra-center: it degrades the standard of the arranged position, of de-escalation, to the status of Gofmannian figuration, i.e. the denial of the somatic character of conflict, of which the belligerents are lucid.

The root cause of this discrepancy lies in Bouthoul's agenda, which gives disproportionate importance to underlying structures rather than apparent motivations. Bouthoul favors a quantitative and statistical approach, whereas contemporary conflictuality is expressed around stochastic knots, whose strange attractors are often external to any local rationality; thus requiring a more qualitative and interpretative methodological approach. Bouthoul looks for cyclical regularities, when new conflictualities are based on the immediacy of somatic reactions. Bouthoul aims for a positive science of conflict, while the new martial ecologies call for a critical theory of strategic loss. This shift from a "sociology of aggression" to a theory of somatic conflict reflects the loss of traditional strategic frameworks, the acceleration of conflictual temporalities and the increasing automation of responses to crisis situations. This corroborates Hedberg and Jönsson's (1989) suggestions of a new strategic regime in which the distance between myth and strategic action is reduced, opening the door to the emergence of somatic, profiling war myths.

Towards a new polemology?

Bouthoul's legacy thus suggests that overcoming the strategic vacuum requires a renewed understanding of the psycho-social mechanisms of conflict in the digital age. The emerging climate crisis offers a perfect example of this challenge: how can we develop a coherent strategy in the face of a threat that simultaneously mobilizes contradictory collective representations and antagonistic myths? The global response to the Covid-19 pandemic illustrates the growing difficulty of maintaining strategic coherence in a world where the mechanisms of mental contagion and polarization of representations are constantly accelerating. As Bouthoul predicted, the psycho-social dimension of crises is becoming predominant in their management, and we need to rethink the foundations of polemology to adapt it to contemporary issues.

Firstly, we need to go beyond the classic opposition between strategy and tactics, which still largely structures Bouthoul's thought, but also the doctrinaire thought space, to analyze the new forms of hybridization between these two levels. The example of contemporary "hybrid wars" clearly shows how actors can now combine tactical actions and strategic effects in a much more fluid way (Baumard, 2018).

Secondly, the notion of "belligerent complexes" could usefully be updated in the light of strategic vacuum analysis. In particular, this would involve studying how these complexes can themselves be instrumentalized and emptied of their substance in a purely operational logic, as Baumard shows in relation to contemporary military doctrines (Baumard, 2012).

Lastly, polemology needs to integrate the cognitive and informational dimensions of contemporary conflicts more systematically. While Bouthoul had already perceived the growing importance of psychological factors in modern warfare, Baumard shows how the mastery of information and representations has become a central strategic issue, beyond mere physical confrontations (Klinger, 2007). Our analysis (2012) highlights some important limitations of Bouthoul's polemology. While Bouthoul sought to establish regularities and cycles in war phenomena, I suggested that this quest for regular patterns was itself part of the strategic impoverishment he denounced. The search for the "laws" of warfare, however sophisticated, is still part of a mechanistic way of thinking that fails to grasp the complexity of contemporary confrontations (Freund, 1983).

More fundamentally, polemology failed to anticipate what I have termed the "mechanics of the vacuum", i.e. the way in which modern organizations come to replace strategic thinking with standardized procedures and reproducible "best practices". Where Bouthoul still saw in modern conflicts the expression of structural "belligerent complexes", I rather detect a progressive loss of strategic substance in favor of purely operational logic (Czakon, 2012).

Updating fundamental concepts

Contemporary polemology needs to adapt its conceptual tools, while preserving the relevance of Bouthoul's fundamental intuitions. The concept of "polemogenic structures" remains particularly fertile for analyzing new forms of conflictuality. In the case of the Israeli-Palestinian conflict, the demographic, territorial and identity structures identified by Bouthoul as factors of conflictuality continue to play a decisive role. Differentiated demographic growth between populations, tensions over territorial control and the crystallization of antagonistic collective identities are structural factors that have perpetuated conflict for over seventy years (Courbage and Todd, 2007).

The concept of "belligerent complexes" is also finding new relevance in the analysis of contemporary asymmetrical conflicts. Recent work in social psychology has confirmed the validity of this approach

to understanding the mechanisms of radicalization and collective violence. The conflict in Yemen since 2014 is a perfect illustration of how traditional belligerent complexes (tribal rivalries, religious tensions) articulate with new factors of conflictuality such as competition for scarce resources and the intervention of regional powers (Bonnefoy, 2021).

The extension of the field of conflict to cyberspace calls for an adaptation of the conceptual tools of polemology. The development of conflicts in the digital domain has profoundly altered the nature of contemporary confrontations, as demonstrated by the massive attacks against Estonia in 2007 and Iran in 2010. This development confirms Bouthoul's intuition about the total dimension of modern conflicts, which now mobilize all the technological resources of societies (Rid, 2016). The analysis of social networks and information flows now makes it possible to study the formation and propagation of "digital belligerent complexes" in real time. The case of the Syrian civil war has shown how digital platforms can accelerate social polarization and war mobilization. Researchers were able to observe the formation of antagonistic informational bubbles that prefigure and accompany the escalation of physical violence (Singer and Brooking, 2019).

New methodological challenges

The rise in Sino-American tensions since 2018 perfectly illustrates the need to integrate Bouthoul's teachings into contemporary strategic thinking. Beyond the economic and military aspects, the conflict is largely played out on the terrain of collective representations. The trade war masks a deeper struggle between two visions of the world, two mythologies of progress and international order.

The Huawei affair, which began in 2018, demonstrates how technological issues quickly turn into a confrontation of collective imaginations. Western suspicion of Chinese technologies reflects less a technical reality than a deep-seated cultural anxiety, just as Bouthoul analyzed in his work on collective fear mechanisms. The Nagorno-Karabakh conflict of 2020 offers a striking example of the persistence of the mechanisms described by Bouthoul. The speed with which this "frozen" conflict has been reactivated demonstrates the power of the underlying mythological structures. The intensive use of drones and social networks has only amplified the traditional mechanisms of identity mobilization and emotional contagion.

Similarly, the growing tensions in the South China Sea since 2015 illustrate how historical myths of sovereignty can durably structure contemporary conflicts. The "nine-dash line" claimed by China is as much a territorial myth as a maritime strategy. Contemporary hybrid wars, as seen in Ukraine since 2014, confirm Bouthoul's intuition about the growing importance of psychological factors in conflicts. Information manipulation, cognitive warfare and influence operations are becoming central, profoundly transforming the very nature of conflict.

The multiplication of cyber-attacks since 2010, such as Stuxnet and NotPetya, reveals the emergence of a new conflict dimension that Bouthoul could not have anticipated, but whose propagation mechanisms are strangely in line with his analyses of the contagion of bellicose behavior. Tensions surrounding the energy transition, for example, illustrate the emergence of new types of conflict in which environmental issues, antagonistic collective representations and myths of progress are intertwined. Pandemic management, as demonstrated by the Covid-19 crisis, is now also a form of global conflict in which the mechanisms identified by Bouthoul (mental contagion, collective representations, mobilizing myths) play a central role.

Conclusion: Overcoming the strategic vacuum

Bouthoul's polemology demonstrates a remarkable ability to adapt to contemporary changes in conflict phenomena. His initial ambition - to scientifically understand the mechanisms of war in order to better prevent it - retains all its relevance in a world where forms of conflict are diversifying and hybridizing. The global approach he advocated, integrating demographic, social and psychological factors, is particularly well suited to analyzing the complexity of today's conflicts (Hintermeyer, 2022).

Bouthoul's work also suggests that any attempt to break out of the strategic vacuum requires in-depth consideration of the psycho-social dimension of conflict. Attention to collective representations in the formation of strategic responses proves crucial. The persistent influence of myths in collective mobilization cannot be overlooked in the development of a coherent strategic response. Recent crises, from the war in Ukraine to Sino-American technological tensions, demonstrate the impossibility of a purely rational or technical approach to conflicts.

Bouthoul's legacy also invites us to fundamentally rethink our approach to strategy. Faced with global challenges such as climate change or the regulation of cyberspace, only a thorough understanding of psycho-social mechanisms can enable the development of truly strategic rather than merely tactical responses. The development of quantitative methods and artificial intelligence is opening up new perspectives for polemology. Early warning systems based on Big Data analysis can identify the warning signs of conflict with increasing precision. The *Armed Conflict Location & Event Data* Project (ACLED) illustrates this potential by mapping conflict dynamics on a global scale. These methodological innovations extend the original scientific ambition of polemology, while renewing its analytical tools (Raleigh et al., 2010).

The integration of ethnographic approaches and field studies also enriches our understanding of local conflict dynamics. Work on conflicts in the Democratic Republic of Congo has shown the importance of combining structural analysis with detailed observation of the mechanisms of violence at the microsocial level. The fundamental concepts developed by Bouthoul have thus found renewed relevance. The notion of "polemogenic structures" helps us understand how demographic and social imbalances fuel contemporary conflicts, as illustrated by the persistence of tensions in the Middle

East. The "over-youthfulness" of populations, identified by Bouthoul as a major factor in conflict, remains a determining factor in many regions of the world, particularly in the Sahel-Saharan strip, where the high proportion of young people in the population fuels political instability and armed conflict (Courbage, 1997).

The theory of "belligerent complexes" is enriched by contributions from modern social psychology and studies on radicalization. The mechanisms of enemy designation and collective mobilization identified by Bouthoul are now manifesting themselves through social networks and digital media, creating new forms of social polarization and collective antagonisms. This development confirms the relevance of Bouthoul's psychosociological approach to conflict, while calling for its updating to incorporate new modalities of collective violence.

However, contemporary polemology faces several major challenges. The first involves adapting its conceptual tools to new forms of conflict, particularly in cyberspace. The second involves integrating new methods of analysis, notably artificial intelligence and the processing of massive data, while preserving the qualitative and interpretative dimension essential to understanding conflict phenomena. Bouthoul's legacy thus invites us to pursue our efforts in the scientific theorization of conflicts, while remaining attentive to their contemporary mutations. Twenty-first-century polemology must combine the methodological rigor of its founder with an openness to new tools and concepts that allow us to grasp the growing complexity of modern confrontations. This updating is a prerequisite for its continued relevance as an instrument for understanding and preventing conflict (Molina Cano, 2024). The way out of the strategic vacuum is to reintegrate a long-term strategic vision, taking into account all the factors identified by polemology.

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