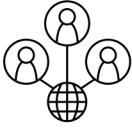





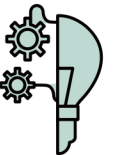





Violent Extremist & REMVE Online Ecosystems: Ecological Characteristics for Future Research and Conceptualization

This fact sheet provides a snapshot of considerations specific to future research and conceptualization of racially- and ethnically-motivated violent extremist (REMVE) online ecosystems from a RESOLVE Research Brief. Despite the increasing focus on violent extremist ecosystems in the online sphere, it is unclear the extent to which ecological terms in the literature on extremism—and particularly literature focused on the online space—are empirically validated or even consistently used. Indeed, there remain fundamental gaps in understanding and defining what we mean when we discuss the ecology of violent extremism and online violent extremist ecosystems. These gaps have notable implications for defining what an online ecosystem actually is—including its characteristics, impact, scope, and reach—and identifying appropriate policy responses to address them. Based on findings from a structured literature review examining the use of terms “ecosystem” and “ecology” in terrorism and violent extremism studies and related disciplines, the Research Brief presented a list of ten ecological characteristics for further consideration by those working in research, policy, and practice focused on online violent extremist ecosystems and provided examples of how those characteristics might be conceptualized in research on REMVE online ecosystems, given the increased attention REMVE online ecosystems have garnered in recent years. Based on the brief, this fact sheet expands on these further areas for consideration.

To learn more, please refer to the RESOLVE Research Brief by Jade Hutchinson, Julian Droogan, Lise Waldek, and Brian Ballsun-Stanton: [Violent Extremist and REMVE Online Ecosystems: Ecological Characteristics for Future Research and Conceptualization](#) (2022).

Ecological Characteristic	Characteristic Description	Characteristic Applied to REMVE Online
 Network	Interconnective characteristics that define the structure of interacting and connected phenomena, including but not limited to agents, environments, and entities	Network can denote REMVE online platforms and accounts interacting with or connected to one another. By moving focus from a platform-specific approach to characterizing a network as patterns of activity across platforms and over time, we can understand the drivers and patterns of REMVE online violent extremist networks to inform efforts to address them.
 Dynamism	State of continuous change and disturbance necessitating adaptive behaviors and resilience to survive	For example, dynamism can describe content moderation policies and REMVE user behaviors continuously shifting. Another example of dynamism is how bots are used to automatically repost content hosted on mainstream social media platforms to platforms with less stringent regulations to avoid disruption.
 Classification	Mechanism for identifying and categorizing elements within an ecosystem and relationships between them	In research on online REMVE ecosystems, it is important to develop and delineate definitional classification structures based on levels of violence in online rhetoric and content. Such structures can help delineate between far right versus REMVE content, with important implications for policy responses.
 Complexity	Divergent, interactive, and at times unknown variables functioning within an ecosystem	Complexity results from the interactions between REMVE users and the constraints of platform policy and moderation, leading to a process of adaptation. REMVEs cloaking their language in “irony” or “shitposting”, for example, makes the REMVE content more complex and its identification more difficult.

Ecological Characteristic	Characteristic Description	Characteristic Applied to REMVE Online
 Self-Organization	Self-formed functionality or organization towards an ordered stability	Understanding self-organization can help in identifying how different networks split off from or spawn others. An example are the many wellness-oriented online communities that became vectors for REMVE sentiment and propaganda during the COVID-19 pandemic.
 Swarm Intelligence	Phenomena wherein a group acts in synchronization without pre-planning	Swarm intelligence could be used to better understand how online violent extremist populations respond to selection pressures within dynamic digital networks, with particular utility for understanding collective, but uncoordinated, REMVE population responses in light of increased attention to REMVE content.
 Emergence	Properties that arise because of the interaction between components of a system that would not otherwise emerge on their own	The emergence of new patterns of behavior and ideologies within an online violent extremist community should be differentiated from the processes by which they first occurred. Violent extremist groups commonly appropriate already emergent phenomena online. The use and co-option of memes and shared languages that first emerged outside of extremist subcultures (i.e., “Pepe the Frog” or “Redpilling”) by REMVEs online is an example of this appropriation of emergent phenomena.
 Adaptation	Short term changes or variables that increase an element's suitability to their environment and chances for survival	Interactions between REMVE activities and environmental conditions (including platform moderation policies) may result in adaptations based on immediate issues. Understanding where and why those adaptations (including migration to new platforms, cloaking violent extremist content in irony, etc.) emerge is key to understanding and identifying the persistence and impact of REMVE activities online.
 Evolution	Accumulated changes and adaptations that inform the mutual development of organisms and environments over time	Evolution can describe the “inheritance” of different tactics from violent extremists generation-to-generation and group-to-group in online environments. Processes that could be tracked include how different types of violent extremists engage in formal or informal learning behaviors with one another, or how REMVEs mimic, engage with, and adopt the behaviors of non-REMVE groups.
 Non-linearity	Scenarios in which outputs are not directly proportional to inputs	Adopting a non-equilibrium and non-linear approach to online REMVE ecosystems could aid in addressing some of the issues caused by complexity in predicting future network formation and ecosystem evolution. Presupposing linearity in behaviors, without acknowledging or considering their non-linearity can result in misguided efforts to address and predict dynamics online.

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