

# **THE ECO-TERRORIST WAVE (1970-2016)**

By

João Raphael da Silva

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## ABSTRACT

The present research aims to shed light on the geographical and temporal spread of the ecological typology of terrorism – hereinafter referred as “Eco-Terrorism” – through the lens of the David C. Rapoport’s Wave and Tom Parker and Nick Sitter’s Strain Theories. This typology that has posed high levels of threats to the United States and the European Union member States remains uncovered by these two theoretical frameworks. My arguments are that, first, like many other typologies previously covered by the above-mentioned theories, Eco-Terrorism spread. Second, “Wave”, “Strain” or “Wavy Strain” should be able to explain the pattern followed by Eco-Terrorism. Making use of the “Contagion Effect” as an analytical tool, the present research found that, like in other typologies, as an indirect way of contagion, literary production has played a crucial role in the spread of Eco-Terrorism, with a slight difference on who was writing them. Eventually, they became leaders or members of an organization, but in most of the cases were philosophers and fiction authors. In addition, it was found that the system of organization of the ALF and the ELF contributes to the spread. As a direct way of contagion, aside from training like in other typologies, the spread occurs when members of a certain organization disaffiliate from an organization and found a new one, and sometimes when two organizations act in cooperation. Furthermore, the present research found that there was a Eco-Terrorist Wave between 1980 and 2012.

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## INTRODUCTION

### 1.1. Definition of Eco-Terrorism

In the present research, Eco-Terrorism is defined as an ecologically-oriented “[...] threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation.”<sup>1</sup> In most of the cases, the ecological orientation is directed towards animal rights and environmental protection/restoration.

However, the habitual disagreement among academics and practitioners on a definition of “terrorism”<sup>2</sup> seems to be intensified by adding of the prefix “eco-” as a qualifier. For instance, Steve Vanderheiden points out that some commentators define terrorism as a transgression to Just War principles.<sup>3</sup> One of them is the distinction between combatants and non-combatants. Then, he questions that if most of the attacks perpetrated by radical environmentalists are aiming to sabotage inanimate objects that are perceived to be contributing to the degradation of the environment, should they be classified as terrorists?<sup>4</sup>

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<sup>1</sup> National Consortium for the Study of Terrorism and Responses to Terrorism (START), *Global Terrorism Database – Codebook: Inclusion Criteria and Variables* (College Park: National Consortium for the Study of Terrorism and Responses to Terrorism (START)), 2017), 09, <https://www.start.umd.edu/gtd/downloads/Codebook.pdf>.

<sup>2</sup> See: Brian J. Phillips, “What is a Terrorist Group? Conceptual Issues and Empirical Implications,” *Terrorism and Political Violence* 27, no. 2 (2015): 225-242, <http://www.tandfonline.com/doi/10.1080/09546553.2013.800048>.

<sup>3</sup> See: “Just War Theory,” Michael Lacewing, accessed November 30, 2017, <http://documents.routledge-interactive.s3.amazonaws.com/9781138793934/A2/Political/JustWarTheory.pdf>.

<sup>4</sup> Steve Vanderheiden, “Eco-terrorism or Justified Resistance? Radical Environmentalism and the “War on Terror”,” *Politics & Society* 33, no. 3 (2005): 425-447, <http://journals.sagepub.com/doi/10.1177/0032329205278462>.

Travis Wagner<sup>5</sup> and David Thomas Sumner & Lisa M. Weidman<sup>6</sup> stress the role of newspapers in the U.S. in changing public perceptions on ecologically-oriented sabotage, also known as “eco-tage”, while framing them as terrorist attacks.

The Federal Bureau of Investigation (FBI) defines Eco-Terrorism as “[...] the use or threatened use of violence of a criminal nature against innocent victims or property by an environmentally-oriented, subnational group for environmental-political reasons, or aimed at an audience beyond the target, often of a symbolic nature. [...] as characterized by the Animal Liberation Front (ALF) and the Earth Liberation Front (ELF).”<sup>7</sup>

In contrast, the rhetoric of the North American Animal Liberation Press Office (NAALPO)<sup>8</sup> denies that organizations, such as the ALF, are practicing terrorism and argues that those who are targeted by them are the *de facto* terrorists:

Those who terrorize animals by imprisoning them, torturing them in laboratories, displaying them as objects in zoos and circuses, force them to fight each other, and murder them for their flesh and skins are the ones inducing terror, not compassionate activists who seek only to stop the suffering of animals.<sup>9</sup>

The present research, however, shares the same vision as Rachel Monaghan that the attacks of organizations, such as the ALF can be classified as terrorism. Whilst conducting a case study on the Animal Liberation Front, Animal Rights Militia and the Justice Department,

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<sup>5</sup> Tavis Wagner, “Reframing Ecotage as Ecoterrorism: News and the Discourse of Fear,” *Environmental Communication* 2, no. 1 (2008): 25-39, <http://www.tandfonline.com/doi/10.1080/17524030801945617>.

<sup>6</sup> David Thomas Sumner and Lisa M. Weidman, “Eco-terrorism or Eco-tage: An Argument for the Proper Frame,” *ISLE: Interdisciplinary Studies in Literature and Environment* 20, no. 4 (2013): 855-876, <https://doi.org/10.1093/isle/ist086>.

<sup>7</sup> “The Threat of Eco-Terrorism,” Federal Bureau of Investigation (FBI) News, accessed November 30, 2017, <https://archives.fbi.gov/archives/news/testimony/the-threat-of-Eco-Terrorism>.

<sup>8</sup> In 1994, the North American Animal Liberation Press Office (NAALPO) was created based on the argument that it was necessary a response to the mainstream media and the way it reports actions of animal liberation. See: “Homepage,” North American Animal Liberation Press Office, accessed November 27, 2017, <https://animalliberationpressoffice.org/NAALPO/>.

<sup>9</sup> “FAQ’s,” North American Animal Liberation Press Office, accessed November 27, 2017, <https://animalliberationpressoffice.org/NAALPO/f-a-q-s/>.

the author interrogated their attacks through the lens of the three core characteristics of terrorism: use of violence, political motive, and the intention to terrorize. She concludes that their attacks fit into all three of these characteristics, and can therefore be classified as terrorism.<sup>10</sup>

Even when there is consensus that these are terrorist attacks, nomenclatures attached to them differ. For Martha Crenshaw, organizations undermining nuclear power, for instance, are reformists.<sup>11</sup> For Richard Clutterbuck, organizations such as the Animal Liberation Front are a branch of left-wing terrorism.<sup>12</sup> For Bron Taylor organizations such as the Earth Liberation Front are part of “[...] a new religious movement that views environmental degradation as an assault on a sacred, natural world.”<sup>13</sup>

The present research, however, shares the same vision as Sivan Hirsch-Hoefler and Cas Mudde. In an analysis on what they call the Radical Environmental and Animal Rights (REAR) movement, the authors check and confirm the validity of the term “Eco-Terrorism” for organizations that perpetrated eco-terrorist attacks, such as the ALF and the ELF.<sup>14</sup>

## 1.2.The Puzzle

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<sup>10</sup> Rachel Monaghan, “Terrorism in the Name of Animal Rights,” *Terrorism and Political Violence* 11, no. 4 (1999): 159-169, <http://www.tandfonline.com/doi/10.1080/09546559908427538>.

<sup>11</sup> Martha Crenshaw, “The Causes of Terrorism,” *Comparative Politics* 13, no. 4 (1981): 379, <http://www.jstor.org/stable/421717>.

<sup>12</sup> Richard Clutterbuck, *The Future of Political Violence: Destabilization, Disorder and Terrorism*. (London: Palgrave Macmillan, 1986), 22.

<sup>13</sup> Bron Taylor, “Religion, Violence and Radical Environmentalism: From Earth First! to the Unabomber to the Earth Liberation Front,” *Terrorism and Political Violence* 10, no. 4 (1998): 1, <http://www.tandfonline.com/doi/10.1080/09546559808427480>.

<sup>14</sup> Sivan Hirsch-Hoefler and Cas Mudde ““Ecoterrorism”: Terrorist Threat or Political Ploy?,” *Studies in Conflict & Terrorism* 37, no. 7 (2014): 586-603, <http://dx.doi.org/10.1080/1057610X.2014.913121>.

During the 1980s and the 1990s, several authors explained the spread of terrorism in general, but without focusing on a specific typology.<sup>15</sup> Following the terrorist attacks on the World Trade Center on September 11, 2001,<sup>16</sup> David C. Rapoport argued that modern terrorism can be seen and understood in terms of "Waves". According to him, these are periods in which organizations share the same main ideology and tactics, composing a typology that predominates over others in terms of activity. At that moment, he claimed that a "Religious Wave" composed of organizations similar to al-Qaeda was in course since 1979, likely to last until 2025.<sup>17</sup>

After Rapoport, several authors have conducted research on the Wave Theory. Some of them have tested and confirmed it completely, such as Karen Rasler and William R. Thompson<sup>18</sup> o, partially, such as Leonard Weinberg and William Eubank<sup>19</sup>. Others, such as Jeffrey Kaplan<sup>20</sup> have defended and even gone further, arguing for the existence of a

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<sup>15</sup> See: Manus I. Midlarsky, Martha Crenshaw and Fumihiko Yoshida, "Why Violence Spreads: The Contagion of International Terrorism," *International Studies Quarterly* 24, no. 2 (1980), 262-298, <https://doi.org/10.2307/2600202>. | Gabriel Weimann and Hans-Bernd Brosius, "The Predictability of International Terrorism: A Time-Series Analysis," *Journal of Terrorism* 11, no. 6 (1988): 491-502, <http://www.tandfonline.com/doi/10.1080/10576108808435746>. | Bruce Hoffman, *Inside Terrorism*. (New York: Columbia University Press, 2006).

<sup>16</sup> James Barron, "Thousands Feared Dead as World Trade Center Is Toppled," *New York Times*, September 11, 2001, <http://www.nytimes.com/2001/09/11/national/thousands-feared-dead-as-world-trade-center-is-toppled.html>.

<sup>17</sup> David C. Rapoport, "The Four Waves of Modern Terrorism," in *Attacking Terrorism: Elements of a Grand Strategy*, ed. A. Cronin and J. Ludes (Washington, D.C.: Georgetown University Press), 47, 61-65.

<sup>18</sup> Karen Rasler and William R. Thompson, "Looking for Waves of Terrorism," *Terrorism and Political Violence* 21, no. 1 (2009): 28-41, <http://www.tandfonline.com/doi/10.1080/09546550802544425>.

<sup>19</sup> Leonard Weinberg and William Eubank, "An End of the Fourth Wave of Terrorism?," *Studies in Conflict & Terrorism* 33, no. 7 (2010): 594-602, <http://www.tandfonline.com/doi/10.1080/1057610X.2010.483757>.

<sup>20</sup> Jeffrey Kaplan, "The Fifth Wave: The New Tribalism?," *Terrorism and Political Violence* 19, no. 4 (2007): 545-570, <http://www.tandfonline.com/doi/10.1080/09546550701606564>. | Jeffrey Kaplan, "Terrorism's Fifth Wave: A Theory, a Conundrum and a Dilemma," *Perspectives on Terrorism* 2, no. 2 (2008): 12-24, <http://www.terrorismanalysts.com/pt/index.php/pot/article/view/26/html>. | Jeffrey Kaplan, "A Strained Criticism of Wave Theory," *Terrorism and Political Violence* 28, no. 2 (2016): 228-235, <http://www.tandfonline.com/doi/10.1080/09546553.2015.1112279>.



successive "Wave". Others, such as William R. Thompson<sup>21</sup>, Mark Sedgwick<sup>22</sup>, and Albert J. Bergesen and Omar Lizardo<sup>23</sup> have developed their own alternative Wave Theories.

Challenging the Wave Theory, Tom Parker and Nick Sitter argued that because there is no meaningful empirical evidence supporting the disappearance of any "Wave", modern terrorism can be better seen and understood in terms of "Strains" since the 1850s<sup>24</sup>. The "Strains" are the "Nationalist Strain", the "Socialist Strain", the "Religious Extremist Strain" and the "Social Exclusionist Strain".<sup>25</sup>

The emergence of the Islamic State of Iraq and the Levant (ISIL)<sup>26</sup> in the early 2010s fomented the concentration of Terrorism Studies on this organization and al-Qaeda and consequently the commonly called "Religious Terrorism".<sup>27</sup> Eco-terrorism, a typology often neglected in the field,<sup>28</sup> was set aside from all these approaches.

Rapoport defended his theory, but acknowledges that some gaps in the Wave Theory still need to be filled. According to him, "[...] since the original Wave Theory excluded the study of single-issued groups, there is a good reason to examine their relationship." Then,

<sup>21</sup> William R. Thompson (2006) "Emergent Violence, Global Wars, and Terrorism," in *Kondratieff Waves, Warfare and World Security*, ed. Tessaleno Devezas (Amsterdam: IOS Press), 186-194.

<sup>22</sup> Mark Sedgwick, "Inspiration and Origins of Global Waves of Terrorism," *Studies in Conflict and Terrorism* 30, no. 2 (2007): 97-112, <http://www.tandfonline.com/doi/10.1080/10576100601101042>.

<sup>23</sup> Albert J. Bergesen and Omar Lizardo, "International Terrorism and the World-System," *Sociological Theory* 22, no. 1 (2004): 38-52, <http://journals.sagepub.com/doi/10.1111/j.1467-9558.2004.00203.x>.

<sup>24</sup> Tom Parker and Nick Sitter, "The Four Horsemen of Terrorism: It's Not Waves, It's Strains," *Terrorism and Political Violence* 28, no. 2 (2016): 202, <http://www.tandfonline.com/doi/abs/10.1080/09546553.2015.1112277>.

<sup>25</sup> Parker and Sitter, "The Four Horsemen of Terrorism," 199.

<sup>26</sup> Also known as Islamic State of Iraq and Syria (ISIS), Islamic State (IS) or *Daesh*.

<sup>27</sup> See: Lawrence Wright, *The Looming Tower: Al-Qaeda and the Road to 9/11* (New York: Vintage Books, 2006) | Joby Warrick, *Black Flags: The Rise of ISIS* (New York: Doubleday, 2015). | Daniel Byman, *Al-Qaida, The Islamic State, and the Global Jihadist Movement: What Everyone Needs to Know* (Oxford: Oxford University Press, 2015). | Lawrence Wright, *The Terror Years: From Al-Qaeda to the Islamic State* (New York: Vintage Books, 2016).

<sup>28</sup> Rachel Monaghan, "Single-Issue Terrorism: A Neglected Phenomenon?," *Studies in Conflict & Terrorism* 23, no. 4 (2000): 255-265, <http://www.tandfonline.com/doi/10.1080/10576100050174977>.

the author cites the Animal Liberation Front and the Earth Liberation Front as examples of these kinds of organizations.<sup>29</sup>

Critically engaging in this debate, Charles Townshend raises some provocative questions, among which two sparked the present research: First, “Do we perhaps also need a category to contain, for instance, animal rights terrorism - which has enjoyed phases of very dangerous activity - or are such movements to be judged marginal?”. Second, “The kinetic effect of the wave, and the continuity of the strain, both correspond to a useful degree with messy reality. Maybe there is here a case for [...] deliberately mixing metaphors – producing a wavy strain, perhaps?”<sup>30</sup>

### 1.3. Research Questions and Hypotheses

*Question 1:* How has Eco-Terrorism spread geographically and temporally? How is this spread different from the spread of other typologies previously analyzed, or from terrorism in general?

*Hypothesis:* When there is an effort by an apparently successful organization to ideologically inspire and explain its tactics, others tend to learn from and emulate them. While literary production by individuals linked to these organizations plays a significant role as an indirect channel of influence, training plays a similar role as a direct one. There is however, a predominance of indirect contagion over the direct.

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<sup>29</sup> David C. Rapoport, “It Is Waves, Not Strains,” *Terrorism and Political Violence* 28, no. 2 (2016): 233, <http://www.tandfonline.com/doi/10.1080/09546553.2015.1112278>.

<sup>30</sup> Charles Townshend, “Waves and Strains,” *Terrorism and Political Violence* 28, no. 2 (2016): 225-227, <http://www.tandfonline.com/doi/10.1080/09546553.2015.1112280>.

My hypothesis is derived from the elements that generated the spread of typologies in both the Wave and Strain Theories. It is explained in further detail in “Chapter II - Literature Review”.

*Question 2:* Are "Waves" and/or a "Strains" accurate patterns to see and understand Eco-Terrorism, or can the so called "Wavy Strain" be more than a theoretical possibility and portray it better than its root patterns?

*Hypothesis:* It should be possible to see and understand Eco-Terrorism along similar lines as suggested by Rapoport's Wave, Parker & Sitter's Strain Theories or the suggestive Wavy Strain" of Townshend.

#### **1.4. Justification**

Although there is a lack of research on Eco-Terrorism by Terrorism Studies scholars, there is a profound focus on it by authorities in the U.S. and the European Union (EU). On the U.S. side, John E. Lewis, former Deputy Assistant Director of the Counterterrorism Division of the Federal Bureau of Investigation (FBI), affirmed that investigation and prevention of “[...] animal rights extremism and Eco-Terrorism is one of the FBI's highest

domestic terrorism priorities.”<sup>31</sup> On the EU side, according to the European Police Office (Europol), among all the single-issues behind the actions of organizations that perpetrate terrorist attacks, “environmental and animal rights subjects remains the main themes.”<sup>32</sup>

Focusing in on the organizations that compose the Eco-Terrorism typology, there are two main reasons for choosing the ALF and the ELF. First, these are the organizations mentioned by the U.S.<sup>33</sup> and the EU<sup>34</sup> authorities when talking about Eco-Terrorism. Second, according to the Global Terrorism Database (GTD),<sup>35</sup> these are the most active organizations that, in my opinion, can be classified under the Eco-Terrorism typology.<sup>36</sup> Perhaps, this is the reason Rapoport himself cites these organizations when pointing out that his Wave Theory has a gap regarding Eco-Terrorism.<sup>37</sup> The EF! does not receive the same attention by the EU and U.S. authorities and it is one of the organizations with the lowest activity according to the GTD. However, Eco-Terrorism Studies literature frequently highlights its importance for the typology, making several sources available.<sup>38</sup> Considering the relevance of the ALF, the

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<sup>31</sup> “Addressing the Threat of Animal Rights Extremism and Eco-Terrorism,” Federal Bureau of Investigation (FBI) News, accessed November 30, 2017, <https://archives.fbi.gov/archives/news/testimony/addressing-the-threat-of-animal-rights-extremism-and-Eco-Terrorism>.

<sup>32</sup> “EU Terrorism Situation and Trend Report (TE-SAT) 2017,” European Police Office, accessed November 30, 2017, <https://www.europol.europa.eu/tesat/2017/>.

<sup>33</sup> FBI, “Addressing the Threat of Animal Rights Extremism and Eco-Terrorism.”

<sup>34</sup> Europol, “EU Terrorism Situation and Trend Report (TE-SAT) 2017.”

<sup>35</sup> The Global Terrorism Database (GTD) is the largest database on terrorist attacks available, containing information on 170,350 occurrences, perpetrated by 2,725 individuals and organizations from 1970 to 2016, excluding the year of 1993. “[...] Incidents of terrorism from 1993 are not present in the GTD because they were lost prior to START’s compilation of the GTD from multiple data collection efforts. Several efforts were made to recollect these incidents from original news sources. Unfortunately, due to the challenges of retrospective data collection for events that happened more than 20 years ago, the number of 1993 cases for which sources were identified is only 15% of estimated attacks. As a consequence, we exclude all 1993 attacks from the GTD data to prevent users from misinterpreting the low frequency in 1993 as an actual count.” See: National Consortium for the Study of Terrorism and Responses to Terrorism (START), “Global Terrorism Database – Codebook: Inclusion Criteria and Variables,” 03.

<sup>36</sup> See Table 1.

<sup>37</sup> Rapoport, “It Is Waves, Not Strains,” 223.

<sup>38</sup>

EF! and the ELF in Eco-Terrorism, my suspicion is that not all, but most of the spread of this typology is somehow related to these two organizations.

The focus on organizations is the same approach used to construct the Wave and Strain Theories, drawing on concrete examples to further their hypotheses. For instance, Rapoport focus on the activity of al-Qaeda to demonstrate the period of occurrence of the “Religious Wave”.<sup>39</sup> In their turn, Parker and Sitter mention the successive emergence and activity of the Irish National Army (IRA), the Provisional IRA, the Irish National Liberation, Real IRA and the Continuity Army Council to demonstrate the continuity of the “Nationalist Strain”.<sup>40</sup>

Furthermore, there is some need in harmonizing both the ‘Waves’ and “Strains” patterns. For Rapoport, the “Strain” metaphor fails because it does not consider the phases of expansion and contraction of terrorism.<sup>41</sup> For Parker and Sitter, the “Wave” metaphor fails because it does not consider the existence of a typology of terrorism prior to and after its supposed “Wave” breaks. Therefore, it may be the case that the merging of both metaphors, through the suggestive “Wavy Strain”, can solve this point of tension between both of its root patterns.<sup>42</sup>

## 1.5. Methodology

The present research pre-assumes that Eco-Terrorism has spread geographically and temporally. As an analytical tool, the present research uses the “contagion effect”, the same

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<sup>39</sup> Rapoport, “The Four Waves of Modern Terrorism,” 63-65.

<sup>40</sup> Parker and Sitter, “The Four Horsemen of Terrorism,” 205.

<sup>41</sup> Rapoport, “It Is Waves, Not Strains,”

<sup>42</sup> Parker and Sitter, “The Four Horsemen of Terrorism,”

mechanism used in the Strain Theory to analyze the spread of terrorism. The “contagion effect” is likewise present in the Wave Theory, but only implicitly. The analytical assumption underlying this tool is that specific typologies of terrorism spread beyond their geographical and temporal origins. and that this spread can be explained by analyzing the main organizations, as a kind of “agent of contagion”, that fuel the spread of the typology.

To answer: “How has Eco-Terrorism spread geographically and temporally? How is this spread different from the spread of other typologies previously analyzed or from terrorism in general?”, the present research observes the global occurrence of eco-terrorist attacks from 1970 to 2016 as found within the GTD. Then, it carries out three case studies, at an organizational level where the units of analysis are the ALF, the EF! and the ELF. The strategy of research was chosen in accordance with Robert K. Yin, who argues that it is most appropriate to answer “how” and “why” questions.<sup>43</sup> Data used are collected from the ALF,<sup>44</sup> ELF,<sup>45</sup> and the Earth First!<sup>46</sup> respective websites, several texts produced by academics and practitioners, among others sources.

To answer the question: “Are “Waves” and/or a “Strains” accurate patterns to see and understand Eco-Terrorism, or can the so called “Wavy Strain” be more than a theoretical possibility and portray it better than its root patterns?”, this study applies the same approach as Rasler & Thompson<sup>47</sup> or Weinberg & Eubank.<sup>48</sup> These authors have tested the Wave

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<sup>43</sup> Robert K. Yin, *Case Study Research: Design and Methods* (California: SAGE Publications Ltd., 2014).

<sup>44</sup> “Homepage,” Animal Liberation Front, accessed November 27, 2017, <http://www.animalliberationfront.com>.

<sup>45</sup> “A Call to Action,” Earth Liberation Front, accessed November 27, 2017, <http://www.originalelf.com/earthlib.htm>.

<sup>46</sup> “Homepage,” Earth First!, accessed November 27, 2017, <http://www.earthfirst.org>.

<sup>47</sup> Rasler and Thompson, “Looking for Waves of Terrorism,” 28-41.

<sup>48</sup> Weinberg and Eubank, “An End to the Fourth Wave of Terrorism?,” 594-602.

Theory making use of International Terrorism: Attributes of Terrorist Events (ITERATE) and the National Memorial Institute for the Prevention of Terrorism (MIPT) database, respectively. However, as previously written, the present research uses the GTD.

As the analysis is carried out on an organizational level, those occurrences where the perpetrator is not coded as an organization by the GTD are excluded from my analysis. From 3,454 perpetrators coded, 2,725 are organizations. To ensure that all the occurrences analyzed were ecologically-oriented, in the columns “gname”,<sup>49</sup> “motive”,<sup>50</sup> and “summary”,<sup>51</sup> the following key terms were searched: “animal”, “earth”, “ecologist”, “ecology”, “environment”, “forest”, “earth”, and “tree”. This technique is similar to the one used by Carson, LaFree and Dugan.<sup>52</sup> As a result, it was possible to identify 20 organizations<sup>53</sup> perpetrating 241 eco-terrorist attacks from 1970 to 2016 (Table 1):

**Table 1:** Number of Terrorist Attacks per Organization (1970-2016)

Organization	Number of Attacks
Animal Liberation Front (ALF)	116
Earth Liberation Front (ELF)	72
The Justice Department	16

<sup>49</sup> It corresponds to the name of the perpetrator.

<sup>50</sup> It corresponds to the motive of the attack.

<sup>51</sup> It corresponds to the summary of the attack.

<sup>52</sup> In *Terrorist and Non-Terrorist Criminal Attacks by Radical Environmental and Animal Rights Groups in the U.S., 1970–2007* (2012), Jennifer Varriale Carson, Gary Lafree and Laura Dugan describe the features of terrorist and non-terrorist attacks related with ecological issues in the U.S. from 1970 to 2007. To find out what were the organizations engaged in Eco-Terrorism, they search in the columns “summary” and “comments” for some key-words (e.g. animal, earth, ecology and environment) and found 187 occurrences. See: Jennifer Varriale Carson, Gary Lafree and Laura Dugan, “Terrorist and Non-Terrorist Criminal Attacks by Radical Environmental and Animal Rights Groups in the U.S., 1970–2007,” *Terrorism and Political Violence* 24, no. 2 (2012): 295-319, <http://www.tandfonline.com/doi/10.1080/09546553.2011.639416>.

<sup>53</sup> One organization, the “Amazonas Liberation Front” was excluded from the analysis of the present research. It perpetrated 1 attack in 1983 at a hotel in Pará, Brazil, where the Minister of Mines and Energy of Brazil, at that moment, César Cals, was hosted. Considering the political position of the target and that “Amazonas” is the name of one of the largest rivers of the world this attack is probably another example of Eco-Terrorism. However, these are the only clues and, aside from these, GTD does not provide any further information. In addition, not even a research on Google, in English and Portuguese, language of the location of the attack, provided any information on the occurrence. For similar reasons, the Ecology and Antinuclear Revolutionary Party (CRAE) and the Fighting Ecologist Movement are excluded too.

Coalition to Save the Preserves (CSP)	8
Evan Mecham Eco-Terrorist International Conspiracy (EMETIC)	5
Animal Rights Militia	3
Earth First!	3
Environmental Life Force	2
Pacifist and Ecologist Committee	2
Farm Animal Revenge Militia (FARM)	2
Revolutionary Cells-Animal Liberation Brigade	2
Friends of Freedom	2
People's Brigade For A Healthy Genetic Future	1
Sea Shepherd Conservation Society	1
Animal Defense League	1
Earth Night Action Group	1
Revenge of the Trees	1
Militant Forces Against Huntingdon	1
Provisional RSPCA	1
Angry Foxes Cell	1
<b>Total</b>	<b>241</b>

**Source:** Elaborated by the Author – Based on the GTD



## CHAPTER II – LITERATURE REVIEW

### 2.1. Literature Review on Wave and Strain Theories

In *The Causes of Terrorism* (1981), Martha Crenshaw affirms that Terrorism Studies can be organized around three segments: causes, development, political and social consequences.<sup>54</sup> Focusing on the first segment, in *Causes of Terrorism: An Expanded and Updated Review of the Literature* (2004), Brynjar Lia and Katja Skjølberg present a wide variety of theories dedicated to explaining the causes of terrorism from different approaches and at different levels of analysis.<sup>55</sup>

According to them, there is a theoretical branch called “Contagion Theories of Terrorism”, aiming to explain the geographical and temporal spread of the phenomenon. and “[...] have demonstrated that the occurrence of terrorist attacks is far from random, but that there is a clear trend of periodical cycle in the occurrence of terrorist attacks, or *waves* of terrorism” [emphasis added].<sup>56</sup> In addition to this, they point out three main aspects that are usually present in “Contagion Theories of Terrorism”:

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<sup>54</sup> Crenshaw, “The Causes of Terrorism,” 379.

<sup>55</sup> Brynjar Lia and Katja Skjølberg, *Causes of Terrorism: An Expanded and Updated Review of the Literature* (Kjeller: FFI 10307, 2004).

<sup>56</sup> Lia and Skjølberg, *Causes of Terrorism*, 17.

1) “a high level of terrorism in one month is likely to be followed by few incidents in the next month, suggesting that the decision by terrorist groups to launch an attack is influenced by similar attacks elsewhere, hence, the ‘concept of contagion’”<sup>57</sup>;

2) “high levels of terrorism in one country often are associated with increased incidents of terrorism in neighboring states in the region, whether by the same organization, by ‘second-generation’ groups, by foreign sympathizers and coalition partners, or simply by imitators”<sup>58</sup> and;

3) “[...] terrorist groups learn from each other, and successful operations in one country are imitated by groups elsewhere.”<sup>59</sup>

Rapoport's Wave and Parker & Sitter Strain Theories were published after the article of Lia and Skjølberg. However, the authors would agree that both the Wave and Strain Theories, are both “Contagion Theories of Terrorism” because of the clear “Contagion Effect” that creates the “Waves” and “Strains”.

### **2.2.1. Rapoport's Wave Theory**

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<sup>57</sup> See: Weimann and Brosius, *The Predictability of International Terrorism*, 500.

<sup>58</sup> See: Midlarsky, Crenshaw and Yoshida, “Why Violence Spreads,” 262-298.

<sup>59</sup> Lia and Skjølberg, *Causes of Terrorism*, 18.

According to Rapoport, the ongoing “Religious Wave” is not an isolated case, but the fourth in a series of trends that initiated with the “Anarchist Wave” (1<sup>st</sup>) in the 1880s, replaced first by the “Anticolonial Wave” (2<sup>nd</sup>) in the 1920s, then by the “New Left Wave” (3<sup>rd</sup>) and finally, by the “Religious Wave” (4<sup>th</sup>) in the 1970s.<sup>60</sup> According to him, even though Nationalism was an element present in all of them, it does not represent their main ideology.

The author argues that although organizations and their corresponding "Waves" have different life cycles, "Waves" were and are composed of organizations. In certain cases some of them can even survive to the end of the original "Wave", such as the Irish Republican Army (IRA), an organization originally of the “Anticolonial Wave” , but still active when the "Religious Wave" was already occurring. In other cases, organizations can even be absorbed by other "Waves", such as the Palestine Liberation Organization (PLO), an organization originally of the “New Left Wave ” that became active in the "Religious Wave ". The "Anarchist Wave”, the “Anticolonial Wave”, and the “New Left Wave” are all stated to have lasted for about forty years, a life cycle that suggests a relationship between them and their concomitant generation "[...] in which dreams inspiring parents lose their attractiveness for children.”<sup>61</sup> When the organizations that compose a "Wave" are no longer able to “inspire” new members, this "Wave" breaks, allowing the next one to begins. <sup>62</sup>

Developments in communication and transportation are also considered as additional factors that facilitated the emergence of "waves ". For instance, in the last quarter of the 19<sup>th</sup> century, daily mass newspapers spread information about events that were occurring in one

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<sup>60</sup> Rapoport, “The Four Waves of Modern Terrorism,” 47.

<sup>61</sup> Rapoport, “The Four Waves of Modern Terrorism,” 48.

<sup>62</sup> Rapoport, “The Four Waves of Modern Terrorism,” 48.

country, and railroads allowed individuals to travel between countries quicker. These factors helped the spread of "Anarchist Wave".<sup>63</sup>

Aside from the same main ideology, the organizations of each "Wave" share a main tactic. During the "Anarchist Wave", it was the assassination of prominent political figures. In the 1890s, when several Heads of State were assassinated it became known as the "Golden Age of Assassination". Usually the weapon used was dynamite, which had been recently developed at the time. During the "Anticolonial Wave", it was the assassination of police officers and their families. In terms of tactics, it was the most used by the organizations of the "Anticolonial Wave". As military started to replace police in counter-terrorist measures, usually unproportional in terms of force, organized guerilla actions started to be used against troops. During the "New Left Wave", it was kidnapping, especially in Western Europe and South America. In addition, assassination of prominent political figures resurfaced. During the "Religious Wave", it is marked by suicide bombing.

In the Wave Theory, the "contagion effect" is implicit, but not absent, and it is mostly indirect. Rapoport argues that "[...] when a wave's energy cannot *inspire* new organizations, the wave disappears" [emphasis added].<sup>64</sup> This inspiration is exemplified when the author writes that "Russian writers created a strategy for terror, which became an inheritance for successors to use, improve, and transmit [...]. Their efforts perpetuated the wave",<sup>65</sup> but "the KKK had no emulators partly because it made no effort to explain its tactics."<sup>66</sup>

According to Rapoport, there are events with political relevance, sometimes domestic, sometimes international, and others both, that foster each "wave. The assassination

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<sup>63</sup> Rapoport, "The Four Waves of Modern Terrorism," 48-49.

<sup>64</sup> Rapoport, "The Four Waves of Modern Terrorism," 48.

<sup>65</sup> Rapoport, "The Four Waves of Modern Terrorism," 49.

<sup>66</sup> Rapoport, "The Four Waves of Modern Terrorism," 49.

of a Russian police commander by Vera Zasulich in 1878 (“Anarchist Wave”),<sup>67</sup> the signature of the Versailles Peace Treaty, which concluded World War I in 1919 (“Anticolonial Wave”),<sup>68</sup> the victory of the Viet Cong over U.S. troops in the Vietnam War in 1975 (“New Left Wave”)<sup>69</sup> and the Iranian Revolution, the beginning of a new Islamic century and the defeat of the USSR by Afghans in 1979 (“Religious Wave”).<sup>70</sup>

The author also argues that it is possible to identify technical works that contributed to the formulation of a structured knowledge for the organizations of each “Wave”: *Revolutionary Catechism* (Author: Sergei Nechaev / “Anarchist Wave”); *Guerrilla War* (Author: Georges Grivas / “Anticolonial Wave”); *Mini-Manual of the Urban Guerrilla* (Author: Carlos Marighella / “New Left Wave”) and; *Military Studies in the Jihad Against Tyrants* (Author: Osama bin Laden / “Religious Wave”). According to him, an analysis of the last work reveals a “[...] a paramount desire to become more efficient by learning from the experience of friends and enemies alike.”<sup>71</sup> Rapoport also mentions the role of the “[...] heroic model [...]” played by the PLO, which made training facilities available to other organizations in Lebanon.<sup>72</sup>

### 2.2.2. Post-Rapoport Wave Theories

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<sup>67</sup> Rapoport, “The Four Waves of Modern Terrorism,” 50-51.

<sup>68</sup> Rapoport, “The Four Waves of Modern Terrorism,” 52-53.

<sup>69</sup> Rapoport, “The Four Waves of Modern Terrorism,” 56.

<sup>70</sup> Rapoport, “The Four Waves of Modern Terrorism,” 61.

<sup>71</sup> Rapoport, “The Four Waves of Modern Terrorism,” 49.

<sup>72</sup> Rapoport, “The Four Waves of Modern Terrorism,” 60.

### 2.2.2.1. Sedgwick's Wave Theory

In *Inspiration and Origins of Global Waves of Terrorism* (2007),<sup>73</sup> Mark Sedgwick suggests a reshaping of the Wave Theory. According to him, ideologies (i.e. Anarchism) and major events (i.e. Vietnam War) are not as crucial as “[...] globally visible and apparently successful uses of terrorism [...]”,<sup>74</sup> to explain the emergence of a "Wave". As an analytical tool, the “contagion effect” is used along the following lines:

“Contagion” is possible at two levels, and can happen in two ways. On one level, a group might copy a particular terrorist technique, and on another level a group might copy a general terrorist strategy. Either of these might happen directly or indirectly. Direct contagion might occur when a member of one established terrorist group personally assists in training members of another group in a particular technique, or personally assists in establishing a distinct, new terrorist group. Alternatively, there might be no direct contact; contagion might be indirect, when a group observes the apparent success elsewhere of either a technique or a general strategy. All these forms of contagion take place. The primary form, however, is the adoption of a general terrorist strategy without direct contact. All other forms of contagion are secondary to this. A particular terrorist technique is only of interest to a group that has already made the decision to adopt a terrorist strategy; a technique cannot on its own cause a resort to terrorism. Similarly, a radical group will normally enter into direct contact with an established terrorist group only once the decision to adopt a terrorist strategy has already been made. This article, therefore, will now look at the primary form of “contagion”: inspiration.<sup>75</sup>

### 2.2.2.2. Other Alternative Wave Theories

In *Emergent Violence, Global Wars, And Terrorism* (2006),<sup>76</sup> William R. Thompson suggests some amendments to the Wave Theory. According to him, global wars and terrorism

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<sup>73</sup> Sedgwick, “Inspiration and Origins of Global Waves of Terrorism,” 97-112.

<sup>74</sup> Sedgwick, “Inspiration and Origins of Global Waves of Terrorism,” 97.

<sup>75</sup> Sedgwick, “Inspiration and Origins of Global Waves of Terrorism,” 102.

<sup>76</sup> Thompson, “Emergent Violence, Global Wars, and Terrorism,” 186-194.

are co-evolving phenomena and this relationship results in numerical and temporal tweaking and extension to the Wave Theory.

In *International Terrorism and the World-System* (2004),<sup>77</sup> Albert J. Bergesen and Omar Lizardo develop a Wave Theory with a sociological account, instead of a historical one, like Rapoport<sup>78</sup>, Thompson<sup>79</sup> and Sedgwick<sup>80</sup> do. According to him, because some societies feel their sense of local ownership being threatened and suffer harmful economic collateral effects of globalization, they engage in international terrorism as a resistance, or as the authors call, backlash or blowback to globalization. It occurs when these societies are not able to channel their resistance through peaceful means (e.g., democratic elections). Therefore, globalization and international terrorism are correlated phenomena.<sup>81</sup>

Thompson and Bergesen and Lizardo's Wave Theories are important to demonstrate that there were debates between different Wave Theories, however, because the "contagion effect" is not as crucial as for these approaches as it is for my arguments, and because of length constraints, neither of them are discussed in detail.

## **2.2. Parker and Sitter's Strain Theory**

According Parker and Sitter, it better represents the historical record of the phenomenon because the typologies neither disappear or replace each other. Instead, they co-

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<sup>77</sup> Bergesen and Lizardo, "International Terrorism and the World-System," 38-52.

<sup>78</sup> Rapoport, "The Four Waves of Modern Terrorism," 46-73.

<sup>79</sup> Thompson, "Emergent Violence, Global Wars, and Terrorism," 186-194.

<sup>80</sup> Sedgwick, "Inspiration and Origins of Global Waves of Terrorism," 97-112.

<sup>81</sup> Bergesen and Lizardo, "International Terrorism and the World-System," 43-44.

exist and their main ideology and tactics can be transferred and absorbed between and within "Strains".

The author argue that the "Strains" were resilient to ideological and technological revolutions of the 20<sup>th</sup> and 21<sup>st</sup> centuries and essentially differ in ideological terms between each other, but not necessarily in terms of tactics.<sup>82</sup> Most of their article describes and lists organizations that composed or compose the "Strains", aiming to demonstrate their continuity across decades.

For instance, in the "Nationalist Strain" there is an emphasis on Northern Ireland. This starts with Michael Collins, who accumulated the functions of President of the Irish Republican Brotherhood, Adjutant-General of the Irish Volunteers and Director of Information of the government. He was responsible for leading an urban guerrilla during the 1910s that had a crucial role for the independence of the country in 1921. From the 1950s to the 1990s, there was the emergence of the IRA, the Provisional IRA, the Irish National Liberation, Real IRA and the Continuity Army Council.<sup>83</sup>

In the Strain Theory, the "contagion effect" is explicit and of an indirect nature. Parker and Sitter argue that emulation is preceded by learning and that "terrorists have emulated both groups they admire and their fiercest adversaries"<sup>84</sup>. It can be seen, for example, in the influence of *People's War*, written by Mao across organizations such as the Red Army Faction, Shining Path and the Red Brigades, which are all components of the "Religious Extremist Strain". In this context, these organizations are described as "learning

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<sup>82</sup> Parker and Sitter, "The Four Horsemen of Terrorism," 212.

<sup>83</sup> Parker and Sitter, "The Four Horsemen of Terrorism," 205.

<sup>84</sup> Parker and Sitter, "The Four Horsemen of Terrorism," 200.



organizations”. According to Parker and Sitter, the influence of *People’s War* can be seen over other warfare theorist too, such as Carlos Marighella himself.<sup>85</sup>

Parker and Sitter also mention the case of the Japanese Red Army and the Popular Front for the Liberation of Palestine (PFLP), which cooperated in the Bekaa Valley in the early 1970s.<sup>86</sup>

In short, we know from both terrorists and analysts that terrorist groups actively and deliberately learn from each other. Not only ideology, but also strategy (elaboration of what a group’s goal should be and how it is best pursued) and tactics (how to turn strategy into practice) are often shaped by other terrorist’s groups’ experience. While direct learning, in the shape of training and support, might be limited to contemporary groups, it is clear that a number of terrorists have found inspiration in older groups or even adopted models from rival or opposing organizations.<sup>87</sup>

Similar to the Wave Theory, domestic and international events with political relevance, can foster each "Strain". In addition to this, they highlight the possibility to identify a “patient zero”, the first individual to introduce an innovative method that initiated each "Strain": Felice Orsini (Nationalist Strain), Karl Heinzen (Socialist Strain), John Brown (Religious Extremist Strain) and Nathan Bedford Forrest (Social Exclusionist Strain).<sup>88</sup>

### 2.3. Literature Review on Eco-Terrorism Studies

Perhaps, negligence is not even the correct way to call the absence of Eco-Terrorism from the debate between Wave and Strain Theories because, in some cases, the typology was

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<sup>85</sup> Parker and Sitter, “The Four Horsemen of Terrorism,” 207.

<sup>86</sup> Parker and Sitter, “The Four Horsemen of Terrorism,” 201.

<sup>87</sup> Parker and Sitter, “The Four Horsemen of Terrorism,” 201.

<sup>88</sup> Parker and Sitter, “The Four Horsemen of Terrorism,” 204.

identified, then, deliberated excluded. For instance, when testing the Wave Theory, Rasler and Thompson excluded every organizations that did not fit into any of the four typologies (i.e. Anarchist, Anticolonial, New Left, Religious), among which are those related with environmental protection.<sup>89</sup> When suggesting a reshaping on the Wave Theory, Sedgwick identified attacks related to animal rights, but decided to not consider them as terrorist because their perpetrators did not aim to overthrow the State.<sup>90</sup> Those authors who have conducted research on Eco-Terrorism have focused on the historical development of the typology.

Aside from discussions about whether or not Eco-Terrorism exist, some authors have already conducted research on about the historical development of the typology and organizations related to it.

In *From Spikes to Bombs: The Rise of Eco-Terrorism* (1996), Sean P. Eagan describes the philosophy (e.g., “Deep Ecology”), history, targets and tactics of the organizations Greenpeace, the Sea Shepherd Conservation Society, the EF!. Then, the author briefly addresses some psychological factors that may lead individuals to practice Eco-Terrorism, using the case of Paul Watson, founder of the Sea Shepherd Conservation Society.<sup>91</sup>

In *Animal Rights and Violent Protest* (1997),<sup>92</sup> Rachel Monaghan correlates the evolution of the philosophical grounds behind the animal rights movement and the increasing emergence of organizations willing to use violence against people to advance animal rights.

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<sup>89</sup> Rasler and Thompson, “Looking for Waves of Terrorism,” 34.

<sup>90</sup> Sedgwick, “Inspiration and Origins of Global Waves of Terrorism,” 103.

<sup>91</sup> Sean P. Eagan, “From Spike to Bombs: The Rise of Eco-Terrorism,” *Studies in Conflict & Terrorism* 19, no. 1 (1996): 1-18, <http://www.tandfonline.com/doi/10.1080/10576109608435993>.

<sup>92</sup> Rachel Monaghan, “Animal Rights and Violent Protest,” *Terrorism and Political Violence* 9, no. 4 (1997): 106-116, <http://www.tandfonline.com/doi/10.1080/09546559708427432>.

According to her, *Animal Liberation* (1975),<sup>93</sup> by Peter Singer and *The Case of Animal Rights* (1985),<sup>94</sup> by Tom Regan “[...] led to a revival in the animal protection movement [...]” and had “[...] an effect on campaigning styles [...]” of the organizations.<sup>95</sup> While in the *Animal Liberation* it was proposed that animals should be treated equally to humans because they can experience and desire to avoid pain, in the *The Case of Animal Rights* it is argued that they should be treated equally because the fact they are alive gives them an inherent value.

Then, the author then notes that the emerging organizations are more willing to use violent means against people. After the emergence of the ALF in the 1970s, other organizations with similar views emerged: The Animal Rights Militia in the 1980s and the The Justice Department in the 1990s. What differentiates them is that the newer organizations are more willing to target people than the previous ones.<sup>96</sup>

In *Environmental Terrorism: A Case Study* (1991),<sup>97</sup> Edward V. Badolato affirms that Eco-Terrorism in the U.S. “[...] has potential to become the nation's number one domestic terrorism problem [...]” According to him, since the foundation of the EF! in 1980, there was a shift in the strategy of the organization, from actions “[...] normally used by protest groups [...]” (e.g., letter-writing campaigns, staged protests, lawsuits, theatrical demonstrations, among others) “[...] to guerrilla warfare and sabotage against developers and the lumber, oil, and electricity industries [...]”.<sup>98</sup>

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<sup>93</sup> See: Peter Singer, *Animal Liberation* (New York: HarperCollins, 1975).

<sup>94</sup> See: Tom Regan, *The Case of Animal Rights* (Berkeley: University of California Press, 1983).

<sup>95</sup> Monaghan, “Animal Rights and Violent Protest,” 108.

<sup>96</sup> Monaghan, “Animal Rights and Violent Protest,” 109-112.

<sup>97</sup> Edward V. Badolato, “Environmental Terrorism: A Case Study,” *Studies in Conflict & Terrorism* 14, no. 4 (1991): 237-239, <http://www.tandfonline.com/doi/10.1080/10576109108435882>.

<sup>98</sup> Badolato, “Environmental Terrorism,” 237-238.

In *Violence and the Environment: The Case of 'Earth First!'* (1995),<sup>99</sup> Martha F. Lee explains the usage of violent tactics by the EF! based on the argument that it is a millenarian movement. According to the author, there has been an increase in awareness concerning environmental problems since the 1970s. To address them, some movements started to emerge. Some of whom decided to go through political means (e.g., lobby), where others became millenarian movements willing to resort to violence if needed. Under this second category, she affirms that EF! was the most active and visible in the U.S. by the time her research was published.<sup>100</sup>

Lee divides the history of EF! into three phases: First, from 1980 to 1982, all adherents were following a millenarian doctrine and were willing to use any tactics to achieve their goals. Second, from 1983 to 1987, there were two factions present within the organization. The original adherents kept increasingly advocating biocentrism, biocentric equality and eco-tage, such as tree spiking, to achieve their goals. At some point, this emphasis became so strong that the movement moved from a millenarian to an apocalyptic doctrine. Younger adherentes stressed social justice and civil disobedience, reinterpreting the former millenarian doctrine. Thirdly, from 1987 to the the time her research was published, this covers the period from after the apocalyptic faction left the movement so that the younger faction took over the leadership. Although other forms of eco-tage continued to be encouraged, tree spiking was officially renounced and, social justice and civil disobedience continued to be stressed.<sup>101</sup>

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<sup>99</sup> Martha F. Lee, "Violence and the Environment", *Terrorism and Political Violence* 7, no. 3 (1995): 109-127, <http://www.tandfonline.com/doi/10.1080/09546559508427308>.

<sup>100</sup> Lee, "Violence and the Environment," 110.

<sup>101</sup> Lee, "Violence and the Environment," 123.

In *The Earth Liberation Front and Environmental Terrorism* (1995), Stefan H. Leader and Peter Probst argue that there is a potential shifting of targets of the ELF from research facilities to nuclear plants and people. According to them, although there was no record of attacks against nuclear facilities by the time their research was being published, a sympathizer of the ELF affirmed it would start to occur if the Bush Administration continued to encourage the expansion of the nuclear industry. The sympathizer also suggests that, executives or their homes would be targeted if the facilities they are related to were too well protected.<sup>102</sup>

Then, the authors argue that because of their close relation with the ALF, the ELF can be seen to start to use similar tactics to facilitate its attacks. According to them, since the establishment of between them, “[...] there has been a convergence of leadership, membership, agendas and funding [...]”<sup>103</sup> Consequently, tactics may also converge, for instance, by infiltrating the workforce of their targets to collect information about their vulnerabilities.<sup>104</sup>

The history of each of the three organizations covered by the present research: the ALF, the EF! and the ELF can be also respectively accessed in documentaries *Behind the Mask: The Story of The People Who Risk Everything to Save Animals* (2006), about the ALF, *If a Tree Falls: A Story of the Earth Liberation Front* (2011), about the ELF and *Earth First! The Politics of Radical Environmentalism* (1987), about the EF!.

To be fair to those authors who have conducted research on Eco-Terrorism, there are a few instances of arguments that assert that typology has spread geographically and

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<sup>102</sup> Stefan H. Leader and Peter Probst, “The Earth Liberation Front and Environmental Terrorism,” *Terrorism and Political Violence* 15, no. 4 (2003): 37-58, <http://www.tandfonline.com/doi/10.1080/09546550390449872>.

<sup>103</sup> Leader and Probst, “The Earth Liberation Front and Environmental Terrorism,” 38.

<sup>104</sup> Leader and Probst, “The Earth Liberation Front and Environmental Terrorism,” 42, 47.

temporally. Monaghan notices that since the emergence of the ALF, the number of members of the organizations grew from 30 to around 2,000 and 2,500 individuals by the moment her article was published.<sup>105</sup> However, there is no indication as to how the organization grew. Badolato argues that “[...] it is evident that Earth First! tactics are *spreading* [...]” [emphasis added].<sup>106</sup> because in 1990, the Earth Night Action Group downed two wooden power poles and one one-hundred-foot steel transmission tower.<sup>107</sup> However, there is no further elaboration on what is the exact link. Eagan affirms that Eco-Terrorism spread throughout North America, Europe and Asia.<sup>108</sup> However, there is no single mention of organizations of specific countries. The author also affirms that there was a link between Dave Foreman, founder of the EF! and the Evan Mecham Eco-Terrorist International Conspiracy (EMETIC).<sup>109</sup> However, there is no further elaboration on the number of attacks, organizations and/or countries where this spread supposedly occurred.

### 2.3. Assessment of the Debate on “Waves” and “Strains”

With a debate between both the Wave and Strain Theories inaugurated, Rapoport responded to Parker & Sitter. The author criticized the absence of a debate between both theories and what he perceived as a denial to consider the phases of expansion and contraction of terrorism. According to him, it led to a disconnection between the flow of the Strain Theory with politics or time.<sup>110</sup>

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<sup>105</sup> Monaghan, “Animal Rights and Violent Protest,” 112.

<sup>106</sup> Badolato, “Environmental Terrorism,” 238.

<sup>107</sup> This occurrence is coded in GTD under the code: 199004220006.

<sup>108</sup> Sean P. Eagan, “From Spike to Bombs,” 8.

<sup>109</sup> Sean P. Eagan, “From Spike to Bombs,” 7.

<sup>110</sup> David C. Rapoport, “It Is Waves, Not Strains,” 217-224.

In *A Strained Criticism of Wave Theory* (2016)<sup>111</sup>, Jeffrey Kaplan defends the Wave Theory, on which he had researched before. According to the author, the article of Parker and Sitter “[...] displays a thorough knowledge of history, but shows little real understanding of what terrorism is and what it is not.”<sup>112</sup>

Townshend is more harmonious and establishes a dialogue between both the Wave and Strain Theories, deepening into the later. The author suggests that the significant influence of the Wave Theory in Terrorism Studies is derived in part from the power of metaphor. Quoting Fowler, he warns, however, that “[...] the habit of metaphor and the habit of accuracy do not always go together.”<sup>113</sup>

Critically engaging with the Strain Theory regarding its typologies, he points out a difficulty in working with the "Social Exclusionist Strain" and "Nationalist Strain". It happens with the first because it is ideologically incoherent. Apparently, the "Social Exclusionist Strain" is composed of any homophobic, racist, xenophobic, pro-lifers, or any other type of issue. It happens with the later because of an inexistence of the typology itself. He writes: "there was no single wave of Nationalist terrorism, for instance: Nationalism was present before Socialism or Anarchism, and continues after them, as Rapoport himself acknowledged."<sup>114</sup> Regarding terminology, he criticizes the mixed use of "Strains", "chains" and "horsemen" working as the same element inside the theory, which for him would considerably change the arguments.<sup>115</sup>

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<sup>111</sup> Kaplan, "A Strained Criticism of Wave Theory," 228-235.

<sup>112</sup> Kaplan, "A Strained Criticism of Wave Theory," 231.

<sup>113</sup> Townshend, "Waves and Strains", 225.

<sup>114</sup> Townshend, "Waves and Strains," 225.

<sup>115</sup> Townshend, "Waves and Strains," 226.

On the other hand, the author stresses that the great advantage of the Strain Theory over the Wave Theory is its capacity to accommodate an extended existence of a certain typology and its “contagion effect” between organizations. In the last paragraph of his article, the author writes the following conciliatory words:

Both make sense. In the end, it may not really be an issue of choosing between waves and strains; the analytical frames of Rapoport and Parker and Sitter both possess convincing explanatory and ordering power. The kinetic effect of the wave, and the continuity of the strain, both correspond to a useful degree with messy reality. *Maybe there is here a case for defying Fowler and deliberately mixing metaphors—producing a wavy strain, perhaps?* What we do not need is to add a third metaphor: the horsemen would be better riding off into the sunset. [emphasis added]<sup>116</sup>

From my perspective, Townshend is right in affirming that both the Wave and Strain Theories have a useful explanatory power<sup>117</sup>, but not entirely right in affirming that the “Contagion Effect” gives the Strain Theory an advantage over the Wave Theory. As previously demonstrated, although the term “Contagion Effect” is not explicitly used, this mechanism is not absent from the Wave Theory, as Townshend seems to suggest. It is worth mentioning that because of the relationship between the PLO and the PFLP, and the fact that the Bekaa Valley is situated in Lebanon, the authors may be referring to the same case when talking about training where individuals and organizations share tactical knowledge.

The Wave Theory, in my opinion, has one crucial element is missing: a definition of terrorism. It is present in the Wave Theories of Thompson<sup>118</sup>, Sedgwick<sup>119</sup>, Bergesen and

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<sup>116</sup> Townshend, “Waves and Strains,” 227.

<sup>117</sup> Townshend, “Waves and Strains,” 227.

<sup>118</sup> In his article, terrorism is defined as “[...] unconventional violence designed to influence public attitudes about political legitimation and inequality”. See: Thompson, “Emergent Violence, Global Wars, and Terrorism,” 188.

<sup>119</sup> In his article, terrorism is defined as “[...] the use of violence for the sake of its indirect political and psychological consequences by a group aiming to take political power”. See: Sedgwick, “Inspiration and Origins of Global Waves of Terrorism,” 102-103.



Lizardo<sup>120</sup> and the Strain Theory of Parker and Sitter<sup>121</sup>. At a first glance, it may not appear as such a critical weakness, but one could argue, for instance, that by not including a definition of the phenomenon, Rapoport is able to randomly fit occurrences into each "Wave", strengthening his arguments. Of course, by questioning it, one would be implicitly attacking the ethics of the author as a researcher, which is not my intention. Equally, one could define terrorism in such a way that some occurrences would no longer fit into this "Wave", weakening his arguments.

In the Strain Theory, there is a lack of empirical evidence upon which to base some of their arguments. For instance, to support that the “Strains of Terrorism” have a relationship of learning from and copying each other, they state that People’s War theory (“Socialist Strain”) influenced Provisional IRA (“Nationalist Strain”). My questions are: How? Based on what actions of the Provisional IRA it is possible to demonstrate it? In addition, there are a few organizations that, in my opinion, do not necessarily fit into the "Strain" in which they were classified. For instance, if the KKK identifies itself as a Christian organization<sup>122</sup>, why is it not a component of the “Religious Extremist Strain”? Additionally, if the KKK as a white supremacist organization reflects the “Exclusionist Strain”, why does John Brown as an anti-slavery individual reflect the “Religious Extremist Strain”? In this regard, Townshend raises a similar question: “In what sense was John Brown a terrorist, and specifically a

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<sup>120</sup> In their article, terrorism is defined as the “[...] the premeditated use of violence by a nonstate group to obtain a political, religious, or social objective through fear or intimidation directed at a large audience”. However, the authors are only looking at international terrorism, “[...] where the perpetrator, target group or national locale of the incident involves at least two different countries”. Bergesen and Lizardo, “International Terrorism and the World-System,” 38-39.

<sup>121</sup> In their article, terrorism is defined as terrorism “[...] the intentional use of or threat to use violence against civilians or against civilian targets, in order to attain political aims [...]” See. Parker and Sitter, “The Four Horsemen of Terrorism,” 199.

<sup>122</sup> “Ku Klux Klan,” Southern Poverty Law Center, accessed November 30, 2017, <https://www.splcenter.org/fighting-hate/extremist-files/ideology/ku-klux-klan>.

religious terrorist, rather than simply an actionist?”.<sup>123</sup> A remark that could summarize my impression on the article of Parker and Sitter was written by Townshend too: “[...] inference is more visible than evidence in their essay.”<sup>124</sup>

Organizations and “patient zeros” are not the only weakness of the “Religious Extremist Strain”. According to the authors, there are five decades of inactivity from its emergence until the foundation of the Society of Muslim Brothers or Muslim Brotherhood was founded in Egypt in 1928. Does it not contradict the central argument that “Strains” do not disappear?

As a common weakness, neither the Wave nor the Strain Theory were developed based on a times series analysis, but this fact has different impacts upon them differently. For the Wave Theory it is not such a critical weakness because the author is trying to frame what is the predominant typology during a certain period. For the Strain Theory, it could be framed as an existential weakness. As the authors are trying to demonstrate that there is no disappearance of any typology, it is reasonable to expect that it is possible to identify all typologies co-existing since their respective emergences. However, as Rasler & Thompson<sup>125</sup> or Weinberg & Eubank<sup>126</sup>, who have tested the Wave Theory making use of ITERATE and MIPT, respectively, a time series analysis of the Strain Theory would lack a database capable of covering the entire period that the authors are observing.

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<sup>123</sup> Townshend, “Waves and Strains,” 227.

<sup>124</sup> Townshend, “Waves and Strains,” 226.

<sup>125</sup> Rasler and Thompson, “Looking for Waves of Terrorism,” 28-41.

<sup>126</sup> Weinberg and Eubank, “An End to the Fourth Wave of Terrorism?,” 594-602.

## CHAPTER III – THE SPREAD OF ECO-TERRORISTS

### 3.1. The Starting Point of Eco-Terrorism

Eagan suggests that “[...] perhaps the first environmental organization to employ "direct action"<sup>127</sup> to further the cause of ecological preservation was Greenpeace [...].”<sup>128</sup> This would place the roots of contemporary forms of Eco-Terrorism in Canada from 1971 on, the country and year of which this NGO was founded.<sup>129</sup> According to my research, however, this typology began in the U.K. in the 1950s. In August 1958, several members of the League Against Cruel Sports (LACS)<sup>130</sup> planted fake scents in the area where the Devon and Somerset Staghounds<sup>131</sup> would hunt, to confuse their dogs while trying to scent stags. This action does not fit into the definition of Eco-Terrorism of the present research, because, unless the fake scents injured or killed the dogs or even the hunters, which did not occur, the violent element is missing. However, it attracted media, public attention and was emulated with the use of violence.<sup>132</sup>

In December 1963, John Prestige founded the Hunt Saboteurs Association (HSA). In its first two years, the organization targeted the South Devon Hunt<sup>133</sup>, using the same tactic

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<sup>127</sup> Edward V. Badolato considers “direct action” as a “[...] a euphemism for Eco-Terrorism [...]”.

See: Badolato, “Environmental Terrorism: A Case Study”, 238.

<sup>128</sup> Sean P. Eagan, “From Spike to Bombs: The Rise of Eco-Terrorism,” 4.

<sup>129</sup> “About Greenpeace,” Greenpeace, accessed November 27, 2017,

<http://www.greenpeace.org/international/en/about/>.

<sup>130</sup> “Homepage,” League Against Cruel Sports, accessed November 27, 2017, <https://www.league.org.uk>.

<sup>131</sup> “Homepage,” The Devon and Somerset Staghounds, accessed November 27, 2017,

<http://www.devonandsomersetstaghounds.net/>.

<sup>132</sup> “1963 - Protest to Resistance,” Hunt Saboteurs Association, accessed November 27, 2017,

<http://www.huntsabs.org.uk/index.php/about-the-hsa/hsa-history>.

<sup>133</sup> “Homepage,” South Devon Hunt, accessed November 27, 2017, <http://www.southdevonhunt.co.uk/wp/>.

that the LACS used against the Devon and Somerset Staghounds. As the hunts were canceled, the actions were successful and more members started to join the organizations in different areas of the U.K. in the months that followed.<sup>134</sup>

However, the actions of HSA started to produce unfortunate consequences for its members, with some falling subject to violent attacks. In February 1965, two members were attacked by individuals wielding axes. The guitar of one of them was broken with an axe, but no one was injured or killed. In March, nine members had their vehicles surrounded and their windows broken as well as a driver, Leo Lewis, had his jaw broken while being beaten by four individuals.<sup>135</sup>

In 1972, Cliff Goodman and Ronnie Lee, two members of the HSA decided that the defense of animals should be expanded to those kept in farms, laboratories, and other facilities. Together with other four people, they founded the Band of Mercy.<sup>136</sup> Ronnie Lee reported that, when the organization was founded, its members decided that the attacks should only target properties and not individuals, for both moral and tactical reasons. In the same year, its first attacks included; damaging vehicles used to transport animals to foxhunt kennels and laboratories, damaging a boat used to slaughter baby seals; burning down a vivisection laboratory under construction, and numerous other damages. These actions do fit

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<sup>134</sup> “1963 - Protest to Resistance,” Hunt Saboteurs Association, accessed November 27, 2017, <http://www.huntsabs.org.uk/index.php/about-the-hsa/hsa-history>.

<sup>135</sup> Hunt Saboteurs Association, “1963 - Protest to Resistance.”

<sup>136</sup> This name was inspired on a homonym youth organization founded also in the U.K. in 1875, to educate people towards a harmonious relation with animals. All the members were required to sign a declaration stating that “We agree to be kind to animals, and to do all in our power to protect them from cruelty and promote their humane treatment”. In 1883, the organization became part of the Royal Society for the Prevention of Cruelty to Animals (RSPCA). See:

in the definition of Eco-Terrorism as classified by the present research. However, the organization folded in 1974, when Cliff Goodman and Ronnie Lee were arrested.<sup>137</sup>

Leader and Probst affirm that the ALF was founded in the U.K. as an offshoot of the organizations such as Greenpeace and the Sea Shepherds Conservation Society.<sup>138</sup> However, Ronnie Lee, founder of the ALF, reports that he founded the organization after being released in 1976, and without an explicit connection to these organizations.<sup>139</sup>

### **3.2. Indirect Contagion: Inspiring. Providing Tactical Knowledge and Philosophically Grounding**

In *Ecodefense: A Field Guide to Monkeywrenching* (1985),<sup>140</sup> edited by Bill Haywood and Dave Foreman, founder of the EF!,<sup>141</sup> a manual is provided for the perpetration of eco-terrorist attacks, and it includes practical examples. It is composed of more than three hundred pages of detailed guidance on several techniques (i.e. tree spiking, smoke bomb, fence cutting) and complemented with propaganda (i.e. poster and silent agitators, spray paint slogans) and security advice (i.e. avoiding arrest, camouflage). Badolato notes that 11,000 copies of this book have been sold by the time his article was published.<sup>142</sup>

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<sup>137</sup> Ronnie Lee, "Direct Action History Lessons: The Formation of the Band of Mercy and A.L.F.," accessed November 27, 2017,

[http://www.animaliberationfront.com/ALFront/Premise\\_History/RonnieLee\\_NoComp.htm](http://www.animaliberationfront.com/ALFront/Premise_History/RonnieLee_NoComp.htm).

<sup>138</sup> Leader and Probst, "The Earth Liberation Front and Environmental Terrorism," 38.

<sup>139</sup> Lee, "Direct Action History Lessons."

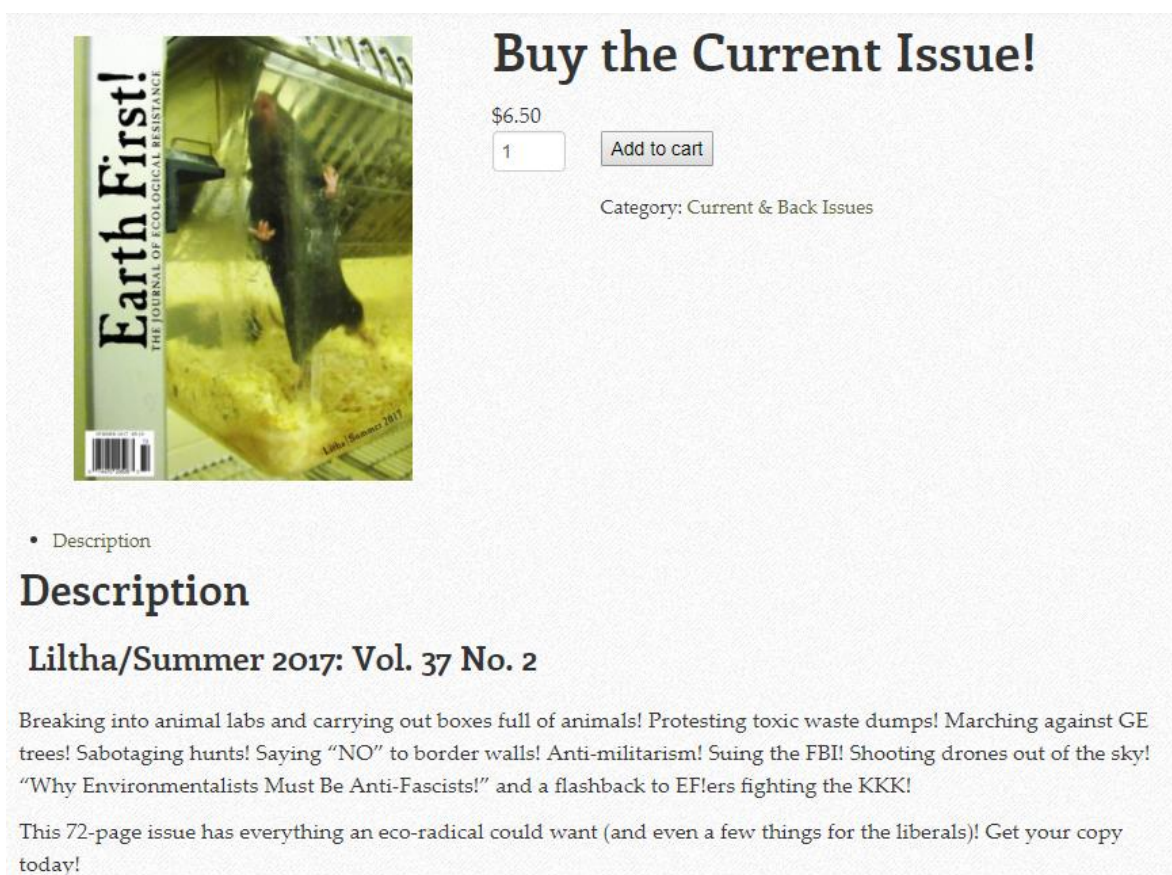
<sup>140</sup> See: Dave Foreman, *Ecodefense: A Field Guide to Monkeywrenching* (Tucson: Ned Ludd Books, 1985).

<sup>141</sup> In the EF! website, it is possible to download this and others manuals for free. See: "Downloadable Manuals," Earth First!, accessed November 27, 2017, <http://earthfirstjournal.org/store/product-category/literature/manuals/>.

<sup>142</sup> Edward V. Badolato, "Environmental Terrorism," 238.

The *Ecodefense: A Field Guide to Monkeywrenching* can be analogously seen as what Rapoport identifies as technical works that contributed to the formulation of a structured knowledge for the organizations of each "Wave".

In a regular periodicity, it is possible to buy *Earth First! Journal* through the website of the organization. It is a quarterly printed magazine in English that has been in publication since 1980. In Figure 1, it is possible to see a screenshot of the announcement of the current issue of the publication containing articles, such as *Breaking into Animal Labs and Carrying Out Boxes Full of Animals!* and the apparent attempt to induce people to buy this issue in the sentence "this 72-page issue has everything an eco-radical could want [...]."



The screenshot displays the 'Buy the Current Issue!' section of the Earth First! Journal website. On the left is a thumbnail image of the journal cover, which features a dark, vertical title 'Earth First!' and a photograph of a person in a lab coat. To the right of the image, the price '\$6.50' is shown above a quantity selector set to '1' and an 'Add to cart' button. Below these elements, the category 'Current & Back Issues' is listed. A 'Description' section follows, with the title 'Liltha/Summer 2017: Vol. 37 No. 2'. The description text includes: 'Breaking into animal labs and carrying out boxes full of animals! Protesting toxic waste dumps! Marching against GE trees! Sabotaging hunts! Saying "NO" to border walls! Anti-militarism! Suing the FBI! Shooting drones out of the sky! "Why Environmentalists Must Be Anti-Fascists!" and a flashback to EF!ers fighting the KKK!'. It concludes with: 'This 72-page issue has everything an eco-radical could want (and even a few things for the liberals)! Get your copy today!'.

**Figure 1:** Screenshot of the Announcement of the Earth First! Journal, Vol. 37, No. 2. (Summer 2017)  
**Source:** <http://earthfirstjournal.org/store/product/buy-the-current-issue/> – (Official EF! Website)

There are parallels to be drawn between the *Earth First! Journal* and *Inspire*, published by al-Qaeda. *EF! Journal* is an online magazine in English, which was published for the first time on July 11, 2010, containing articles, such as *Make a Bomb in the Kitchen of Your Mom*, providing step-by-step instructions on producing an explosive device.<sup>143</sup> This kind of literary production is not mentioned by either the Wave or Strain Theories.

In addition, ALF, ELF and EF! all provide a substantial number of signposts towards literature related to Eco-Terrorism. On the ALF website there are hundreds of texts and external links, divided into novels, poetry, essays, stories, quotes and interviews related to Eco-Terrorism.<sup>144</sup> Comparatively, on the website of the ELF, there are only a few texts and external links.<sup>145</sup> Whereas on the EF! website it is not only possible to download manuals,<sup>146</sup> but in its store, it is possible to buy the current and previous editions of the *Earth First! Journal*, bags, buttons, stickers, t-shirts, and, even a CD named *No Compromise: Punk / Hardcore EF! Benefit CD*,<sup>147</sup> etc.<sup>148</sup>

However, the authors of some of the most influential literary production related to Eco-Terrorism do not necessarily link themselves to an organization. Sometimes, these authors do not even have field experience and their books may be fictional in nature whilst still seeming to play a relevant role in inspiring and providing tactical knowledge to individuals and organizations. For instance, on the website of the Environmental Life Force,

<sup>143</sup> ADL. "Al Qaeda Releases First-Ever English Terror Magazine." *ADL*, July 15, 2010.

<https://www.adl.org/news/article/al-qaeda-releases-first-ever-english-terror-magazine>.

<sup>144</sup> "AR Literature and Authors," Animal Liberation Front, accessed November 27, 2017,

<http://www.animalliberationfront.com/Saints/Authors/authors.htm>.

<sup>145</sup> Earth Liberation Front, "A Call to Action."

<sup>146</sup> Earth First!, "Downloadable Manuals."

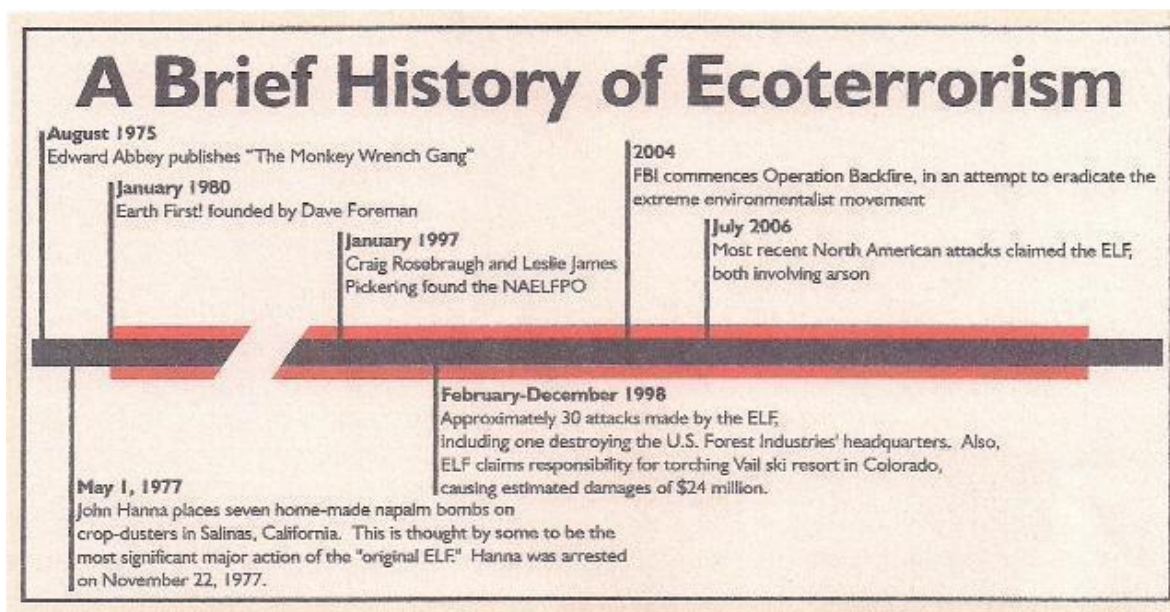
<sup>147</sup> "No Compromise: Punk / Hardcore EF! Benefit CD," Earth First!, accessed November 27, 2017,

<http://earthfirstjournal.org/store/product/no-compromise-punk-hardcore-ef-benefit-cd/>.

<sup>148</sup> "Shop," Earth First!, accessed November 27, 2017, <http://earthfirstjournal.org/store/>.



the organization has published a chronology Eco-Terrorism (Figure 2), according to which, *The Monkey Wrench Gang* (1975),<sup>149</sup> by Edward Abbey, is the starting point in mid-1970s.



**Figure 2: A Brief History of Eco-Terrorism**

Source: <http://www.originaelf.com/earthlib.htm> – (Website of the ELF)

In this novel, George Washington Hayduke III, a veteran of the Vietnam War, joined by a feminist saboteur, a wilderness guide and a billboard torcher, believe that the American wilderness need to be protected against the industrial exploitation of coal, oil and power companies. For this, the characters launched a series of eco-tages, targeting machines, railways, tractors, etc. Buell refers to this book as "[...] a catalytic inspiration for the Earth

<sup>149</sup> See: Edward Abbey, *The Monkey Wrench Gang* (Philadelphia: Lippincott Williams & Wilkins, 1975).



First! [...].”<sup>150</sup> Badolato see this book as the tenet for the tactics of the Earth First!.<sup>151</sup> Not coincidentally, the previously mentioned *Ecodefense: A Field Guide to Monkeywrenching* is dedicated to Edward Abbey, who himself wrote the preface.

In *State of Fear* (2004),<sup>152</sup> also a novel, written by Michael Crichton, the Environmental Liberation Front, a clear inspiration on the ELF, decides to raise awareness about global warming during a conference sponsored by the National Environmental Resource Fund (NERF), a clear inspiration on the Natural Resources Defense Council (NRDC).<sup>153</sup> For this, the characters launched a series of mass murders, intending to make them look like natural disasters caused by the global warming. Buell, together with *The Monkey Wrench Gang*, highlights this book as influential, even for the public perception about Eco-Terrorism.<sup>154</sup>

In addition to novelists, other category of authors of influential literary production are the philosophers. Still without being linked to any organization or having field experience, but seeming to play a relevant role in philosophically grounding individuals and organizations. For instance, In *The Shallow and the Deep, Long-Range Ecology Movement* (1973),<sup>155</sup> Arne Næss develops the concept of “Deep Ecology”. Some of the underlying ideas of this concept are the biocentrism, biocentric equality and biodiversity. It means that all living beings (e.g., humans or animals, trees, etc) have inherent value, are equal and should

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<sup>150</sup> Lawrence Buell, “What is called ecoterrorism,” *Gamma: Journal of Theory and Criticism* 16, (2009): 1, <https://dash.harvard.edu/bitstream/handle/1/4262048/1275004626-What%20Is%20Called%20Ecoterrorism.pdf?sequence=2>.

<sup>151</sup> Edward V. Badolato, “Environmental Terrorism,” 238. Also See: Lee, “Violence and the Environment: The Case of ‘Earth First!,’” 111. | Sean P. Eagan, “From Spike to Bombs,” 6. | <http://www.earthfirst.org/about.htm>

<sup>152</sup> Crichton, *State of Fear*.

<sup>153</sup> “Homepage,” NRDC, accessed November 27, 2017, <https://www.nrdc.org/>.

<sup>154</sup> Lawrence Buell, “What is called ecoterrorism,” 1.

<sup>155</sup> See: Arne Naess, “The Shallow and the Deep, Long-Range Ecology Movement.” *Inquiry* 16, no 1-4 (2016): 95-100, <http://www.tandfonline.com/doi/10.1080/00201747308601682>.

co-exist. More than environmental protection, this concept advocates for rethinking about the current lifestyle and and abrogation of industrialization. Therefore, followers of the “Deep Ecology” are not satisfied with environmental protection because what is already destroyed must be restored. The ALF, the EF! and the ELF all present philosophies based on this concept.<sup>156</sup>

In *Animal Liberation* (1975), launched in the same year, the philosopher Peter Singer argues that, such as racism and sexism, which led some individuals to discriminate against others with a different skin color and sexes, respectively, speciesism led some individuals to perceive animals in an inferior status to that of human beings. According to Singer, this perception and the conditions to which animals are treated because of it should change. Best sees in this book “[...] a vital role in shaping the contemporary animal rights movement [...]”.<sup>157</sup>

In *The Case of Animal Rights* (1985), Tom Regan, who is also a philosopher, argues that that, like humans, animals are subject-of-a-life, which means that these creatures are inherently valuable and should not be used as a means to an end. According to Regan, therefore, to take away their lives to eat or to injury for entertainment disrespect their condition as a subject-of-a-life that should be protected. Hirsch-Hoefler and Mudde mention this and all the previously mentioned books as influential to the REAR movement.

It is worth mentioning, however, that inspiration may not be restricted to have literary production as a channel. In a communique, the ELF affirms: “[...] we take inspiration from from Luddites, Levellers, Diggers, the Autonome squatter movement, the ALF, the

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<sup>156</sup> Lee, “Violence and the Environment”, 113-116. | Sean P. Eagan, “From Spike to Bombs: The Rise of Eco-Terrorism”, 5. | Leader and Probst, “The Earth Liberation Front and Environmental Terrorism,” 39-40.

<sup>157</sup> Steven Best, “Philosophy Under Fire: The Peter Singer Controversy,” accessed November 27, 2017, <http://www.animalliberationfront.com/Saints/Authors/Interviews/Peter%20Singer--summary.htm>.

Zapatistas, and the little people - those mischievous elves of lore.[...].”<sup>158</sup> Since there is no further elaboration on this statement, the ELF could be taking inspiration from books written by individuals linked to these movements and organizations, but also from observation, storytellings, etc.

### 3.2.1. Leaderless Resistance

An element unexplored by both the Wave and Strain Theories that seems to play a crucial role as an indirect way of contagion is the system of organization of the ALF and the ELF, conceptualized as “leaderless resistance”:

A system of organization that is based upon the cell organization, but does not have any central control or direction, that is in fact almost identical to the methods used by the Committees of Correspondence during the American Revolution. Utilizing the **Leaderless Resistance** concept, all individuals and groups operate independently of each other, and never report to a central headquarters or single leader for direction or instruction, as would those who belong to a typical pyramid organization. [emphasis in original]<sup>159</sup>

According to Gray, both the ALF and the ELF are examples of this organization structure.<sup>160</sup> Indeed, a quick look on the website of both organizations testifies that:

The Animal Liberation Front consists of small autonomous groups of people all over the world who carry out direct action according to the ALF guidelines. *Any group of people who are vegetarians or vegans and who carry out actions*

<sup>158</sup> Leslie James Pickering, *The Earth Liberation Front - 1997-2002* (New York: Arissa Publications, 2003), 10.

<sup>159</sup> “Leaderless Resistance,” The Seditonist, accessed November 27, 2017, <http://www.louisbeam.com/leaderless.htm>.

<sup>160</sup> Phillip W. Gray, “Leaderless Resistance, Networked Organization, and Ideological Hegemony,” *Terrorism and Political Violence* 25, no. 5 (2013): 655-671, <http://www.tandfonline.com/doi/10.1080/09546553.2012.674077>. See Also: Joseph M. Brown, “Noted to the Underground: Credit and Organizing in the Earth Liberation Front,” *Terrorism and Political Violence* (2017): 1-20, <http://dx.doi.org/10.1080/09546553.2017.1364637>.

according to ALF guidelines have the right to regard themselves as part of the ALF. [emphasis in original]<sup>161</sup>

As originally conceived by Hanna, the ELF would have no central leadership or chain of command. Each cell was intended to be autonomous and an individual could join or drop out at will. Anyone could call him or herself a member of ELF but no one can be an ELF leader.<sup>162</sup>

Gray adds that, if an organization that uses terrorism as a strategy achieves success with it, this organization will tend to develop, adopt and provide “Standard Operation Procedures” (SOP) “[...] of styles and uses of violence, focusing on certain forms of weaponry, targets, and means of communicating” to its “free-floating” cells. This dynamic, however, takes place with no direct contact between the organization and what he calls “free-floating” cells.<sup>163</sup>

In this regard, it is possible to see the ALF website working as a platform to publicize its SOPs in a section called “Activist Index”. There, it is possible to read *Animal Liberation: A Graphic Guide* (1985),<sup>164</sup> and to access a map link of the animal research facilities in the U.S., which is where the organization has been the most active. These provisions are also visible in some of the guidelines of both the ALF and ELF:

1. TO liberate animals from places of abuse, i.e. laboratories, factory farms, fur farms, etc, and place them in good homes where they may live out their natural lives, free from suffering. 2. TO inflict economic damage to those who profit from the misery and exploitation of animals. [...] 4. TO take all necessary precautions against harming any animal, human and non-human.<sup>165</sup>

<sup>161</sup> “The ALF Credo and Guidelines,” Animal Liberation Front, accessed November 27, 2017, [http://animalliberationfront.com/ALFront/alf\\_credo.htm](http://animalliberationfront.com/ALFront/alf_credo.htm).

<sup>162</sup> “A Call to Action,” Earth Liberation Front, accessed November 27, 2017, <http://www.originalelf.com/earthlib.htm>.

<sup>163</sup> Gray, “Leaderless Resistance,” 656.

<sup>164</sup> “Animal Rights Direct Action Activists - Index,” Animal Liberation Front, accessed November 27, 2017, <http://www.animalliberationfront.com/ALFront/Activist%20Tips/activist-index.htm>.

<sup>165</sup> Animal Liberation Front, “Animal Rights Direct Action Activists - Index.”

- 1) To cause as much economic damage as possible to a given entity that is profiting off the destruction of the natural environment and life for selfish greed and profit. [...] 3) To take all necessary precautions against harming life.<sup>166</sup>

Once “free-floating cells” attack following the guidelines, these individuals pledge adherence to one of them, depending on the justification of the action (e.g., animal rights or environmental protection/restoration).

In another section, called “Examples of Activism – Index”, there are dozens of videos, pictures and reports of past actions, aiming not only to guide, but to inspire new ones.<sup>167</sup> Advice on online security, dealing with legal issues and medical injuries resulted from actions, among other kinds of guidance are also provided.<sup>168</sup>

Among several benefits listed by the author, one of them is the inversion of the process of integration. Instead of the central organization’s need to recruit individuals, those individuals ideologically compatible with the central organization should seek to be part of it by themselves.<sup>169</sup> Ideological guidance is exemplified in the substantial amount of previously demonstrated literature related to Eco-Terrorism available in the ALF website . The attractiveness of the central organization, however, is linked reputational strength. In this regard, Gray argues that:

For environmental extremists, both groups have high levels of reputational strength: both have undertaken well-publicized attacks/actions, both have a certain modus operandi that make them notable, and both have constructed a “useable past” about themselves, such as appropriating historical figures as exemplars, situating themselves within civil rights discourse, providing lists and stories of various “heroes” and “martyrs” (usually those cell members caught for various crimes).<sup>170</sup>

<sup>166</sup> Pickering, “The Earth Liberation Front - 1997-2002”, 00.

<sup>167</sup> “Examples of Activism - Index,” Animal Liberation Front, accessed November 27, 2017, <http://www.animalliberationfront.com/Practical/Shop--ToDo/Activism/ExamplesofActivism.htm>.

<sup>168</sup> “Security, Protection, and Self Defense,” Animal Liberation Front, accessed November 27, 2017, [http://www.animalliberationfront.com/ALFront/Activist%20Tips/Security/Security\\_Protection\\_and\\_Self\\_Defense.htm](http://www.animalliberationfront.com/ALFront/Activist%20Tips/Security/Security_Protection_and_Self_Defense.htm)

<sup>169</sup> Gray, “Leaderless Resistance,” 659.

<sup>170</sup> Gray, “Leaderless Resistance,” 661.

Indeed, a quick look on the ELF website testifies that:

Only convicted ELF activists, such as Grant Barnes, Nathan Block, Marie Mason, Eric McDavid, Daniel McGowan, John Clark Hanna, Eva and Lili Holland, Bryan Lefey, Jonathan Paul, Briana Waters, Joyanna Zacher and others that have served or are serving their prison sentences honorably (without snitching), can make official comments and speak as a legitimate ELF spokesperson. Prison validates an ELF spokesperson's credentials; they've earned their stripes.<sup>171</sup>

It is likely that the major benefit is the low risk of an arrest or infiltration compromising the entire organization, as the “free-floating” cells are not linked to the central organization, and are usually not even linked to each other.<sup>172</sup>

During Ronnie Lee’s time in prison, he “[...] *learned to mimic* the Irish Republican Army (IRA), adopting the organizational structure of decentralized, small, autonomous cells” [emphasis added].<sup>173</sup> It is highly significant, because this endorses the argument of Parker and Sitter in that different typologies can influence each other.

If the ELF has not learned and copied from the ALF, it may have learned from mistakes of the Environmental Life Force. On May 1<sup>st</sup>, 1977, the Environmental Life Force, founded by John Hanna, produced, planted and detonated seven bombs of napalm in an aircraft of crop-duster in Salinas, California. In an interview, John Hanna affirms that on November 22, 1977, John Hanna was arrested at his house by the ATF<sup>174</sup> and Santa Cruz SWAT<sup>175</sup>, which conducted investigations for months before tracking him. He confessed being the only one responsible for the attacks of the organization and for this he was

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<sup>171</sup> “A Call to Action,” Earth Liberation Front, accessed November 27, 2017, <http://www.originalelf.com/earthlib.htm>.

<sup>172</sup> Gray, “Leaderless Resistance,” 659.

<sup>173</sup> Donald Liddick, *Eco-terrorism: Radical Environmental and Animal Liberation Movements* (Westport: Praeger, 2016), 40.

<sup>174</sup> Acronym for “Bureau of Alcohol, Tobacco, Firearms and Explosives”.

<sup>175</sup> Acronym for “Special Weapons and Tactics”.

sentenced to five years in prison, which were later converted into a supervised probation. After this, the organization was over.<sup>176</sup>

The suggestion that the ELF has learned from mistakes of the Environmental Life Force is far from being an unlikely hypothesis, regarding the ELF. In the Environmental Life Force website it is written: that “the original ELF (Environmental Life Force), disbanded in 1978 but the ELF name and its guerrilla tactics were copied in the early 1990's by the Earth Liberation Front.”<sup>177</sup> On the ELF website, John Hanna is referred as “[...] the founding father of the ELF concept, a philosophy that has been adopted by Earth Liberation Front and continues to this day.”<sup>178</sup> If the organizations have learned what to do, it is reasonable, at least to me, to argue that they may have learned what to not do.

This system of organization “[...] accelerates the rate at which physical distance is minimized for terroristic activity: *by encouraging action from autochthonous, ‘free-floating’ cells, the core organization can affect states and their policies at much greater distances than the core’s infrastructure would usually allow.*” [emphasis added]<sup>179</sup>

### 3.3. Direct Contagion: Teaching and Learning Tactical Knowledge

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<sup>176</sup> “Homepage,” Environmental Life Force, accessed November 27, 2017, <https://www.originaelf.com/>.

<sup>177</sup> Environmental Life Force, “Homepage.”

<sup>178</sup> “A Call to Action,” Earth Liberation Front, accessed November 27, 2017, <http://www.originaelf.com/earthlib.htm>.

<sup>179</sup> Gray, “Leaderless Resistance, Networked Organization, and Ideological Hegemony”, 658.

In the EF! website, it is possible to find a calendar of events<sup>180</sup>, such as *Animal Rights Gathering 2018*<sup>181</sup> and *Advancing Earth and Animal Liberation: A Conversation on Tactics*<sup>182</sup>. All these annual gatherings and training camps, some of them organized and held by the organization, are publicized and open to any individual or related organizations.<sup>183</sup> However, other kinds of interactions between individuals and organizations practicing Eco-Terrorism seems to play a relevant role in geographically and temporally spread the typology. The training camps of the EF! can be analogously seen as the the ones of the PLO/PFLP in Lebanon mentioned by the Wave and Strain Theories, respectively.

Occasionally, organizations have cooperated, such as the case of The Family. This umbrella was created after an official alliance between the ALF and the ELF was established in the U.S. in 1997. During its campaign, there were five “Book Clubs” meeting, where the real intention “[...] was to provide training for new members, share lessons learned from recent actions, and plot the way forward [...]”. For the Family, ‘Book Clubs’ were the tool to promote learning and teach tactics.”<sup>184</sup>

The group’s tactics can be characterized as ‘low tech’ (requiring very little technical expertise to execute), effective against the selected targets in most cases, using readily available and inexpensive materials, requiring very little logistical support (e.g., to construct devices), easily taught and learned, easily rehearsed, and producing a significant visual impact (scorched buildings and burning flames

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<sup>180</sup> “Events,” Earth First!, accessed November 27, 2017, <http://earthfirstjournal.org/events/>.

<sup>181</sup> “Homepage,” Animal Rights Gathering 2018, accessed November 27, 2017, <https://argathering2018.wordpress.com/>.

<sup>182</sup> Burning Books, “Advancing Earth and Animal Liberation: A Conversation on Tactics,” Facebook, November 27, 2017, <https://www.facebook.com/events/1913029898964418/>.

<sup>183</sup> Horacio R. Trujillo, “The Radical Environmentalist Movement,” In *Aptitude for Destruction, Volume 2: Case Studies of Organizational Learning in Five Terrorist Groups* (Pittsburgh: Rand Corporation, 2005), 141-176.

<sup>184</sup> Nick Deshpande and Howard Ernst, *Countering Eco-Terrorism in the United States: The Case of ‘Operation Backfire’* (College Park: Science and Technology Directorate, U.S. Department of Homeland Security, 2012) [https://www.start.umd.edu/sites/default/files/files/publications/Countermeasures\\_OperationBackfire.pdf](https://www.start.umd.edu/sites/default/files/files/publications/Countermeasures_OperationBackfire.pdf).



guaranteed news coverage). The overall theme was *simplicity*, and this allowed the Family to achieve a rapid organizational learning cycle.<sup>185</sup>

Acting together, these two organizations were responsible for the most damaging eco-terrorist attack in the country to date. On October 19, 1998, it arsoned the Vail Ski Resort in Vail, Colorado, in which damages were estimated at \$12 million.<sup>186</sup> From the 241 eco-terrorist attacks identified in the GTD, another 21 attacks were perpetrated by both the ALF and the ELF in the U.S. between 1995 and 2001.

At times, the vision and intentions of individuals or factions are no longer aligned with the norms and rules of an organization, and they split from it, resulting in the founding of a new organization. Believing the methods used as being ineffective, Cliff Goodman and Ronnie Lee left the HSA and founded the Band of Mercy.<sup>187</sup> The Animal Rights Militia was founded by a faction that left the ALF unsatisfied with the rule of non-violence against human life, it was founded from a faction that split from the ALF. Some authors, however, suggest that the Animal Rights Militia is not a new organization, but just a new name to claim responsibility over attacks “[...] too violent [...]” for the guidelines of the ALF.<sup>188</sup> Some others suggest there is evidence that the ALF is an umbrella for the Animal Rights Militia and the Justice Department and the different names are an attempt to create the impression of a bigger movement. Frustrated with the unwillingness to act illegally, the ELF was founded, directly inspired by the ALF as a faction that split from the EF!.<sup>189</sup> This is the apocalyptic faction

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<sup>185</sup> Nick Deshpande and Howard Ernst, *Countering Eco-Terrorism in the United States*.

<sup>186</sup> Fox News. “FOX Facts: Vail Firebombing Attack Timeline.” *Fox News*, May 19, 2006, <http://www.foxnews.com/story/2006/05/19/fox-facts-vail-firebombing-attack-timeline.html>.

<sup>187</sup> Liddick, *Eco-terrorism*, 40.

<sup>188</sup> Monaghan, “Terrorism in the Name of Animal Rights,” 161.

<sup>189</sup> Sivan Hirsch-Hoefler and Cas Mudde, ““Ecoterrorism”: Terrorist Threat or Political Ploy?,” *Studies in Conflict & Terrorism* 37, no. 7 (2014): 591, <http://www.tandfonline.com/doi/10.1080/1057610X.2014.913121>.

observed by Lee.<sup>190</sup> In the future, both the ALF and the ELF became more geographically widespread and perpetrated more attacks than their root organizations.

These cases can be analogously seen as the split between al-Qaeda and ISIL. After ISIL disobeyed the instructions of al-Qaeda to kill fewer civilians, the alliance between both organizations in Iraq ended in 2013. Because ISIL disobeyed these instructions from al-Qaeda, the alliance split between both of the organizations in Iraq in 2013. Since then, ISIL emerged as an independent organization and its attacks are more geographically widespread, making it the most active and deadliest in the world since 2015.

Knowing that the ELF was founded by a faction that left the EF! called my attention to the fact that another learning and adjustment processes may have occurred between these two organizations. As a result of an infiltration in the EF!, the FBI arrested Dave Foreman for having provided funds and two copies of the *Ecodefense: A Field Guide to Monkeywrenching* to individuals attempting to attack a nuclear power plant in Palo Verde California, U.S. in 1989.<sup>191</sup> Perhaps, the ELF learned not only from mistakes of the Environmental Life Force, but also from the EF!, which seems to be more likely, indeed.

It is worth mentioning that counter-terrorism measures have also influenced tactics of the organizations. For instance, To deal with tree spiking, timber companies started to use metal detectors to locate the spikes. The EF! learned, adapted and started to use ceramic or stone nails, materials invisible to metal detectors.<sup>192</sup>

Aside from the organizational level of analysis, it worth mentioning that sometimes individuals who were not part of an organization that practiced Eco-Terrorism later decided

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<sup>190</sup> Lee, "Violence and the Environment," 110.

<sup>191</sup> Lee, "Violence and the Environment," 122.

<sup>192</sup> Sean P. Eagan, "From Spike to Bombs," 7.

to join in after a trigger of personal or professional frustration. John Hanna was accidentally sprayed with Parathion by a crop duster while driving out of his house in the countryside of Watsonville, U.S., causing skin damage, and he subsequently founded the Environmental Life Force. Frustrated with the Roadless Area Review and Evaluation II (RARE II)<sup>193</sup> Dave Foreman quit his job as lobbyist for the Wilderness Society and founded the EF!.<sup>194</sup> After Greenpeace adopted measures against the destruction of properties during its actions, Paul Watson left the organization and founded the Sea Shepherd Conservation Society.<sup>195</sup>

### 3.4. Conclusion

Restating, the questions addressed in the present Chapter are: How has Eco-Terrorism spread geographically and temporally? How is this spread different from the spread of other typologies previously analyzed or from terrorism in general?

My hypothesis was that when there is an effort by an apparently successful organization to ideologically inspire and explain its tactics, others tend to learn from and emulate them. While literary production by individuals linked to those organizations plays a significant role as an indirect channel of influence, training plays a more direct role. However, there is a predominance of indirect contagion over direct influence.

According to my analysis, my hypothesis was partially true. There is evidence regarding the role that literary production has played not only in inspiring motivation, but also in providing technical knowledge and philosophically grounding individuals and

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<sup>193</sup> [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5116928.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5116928.pdf).

<sup>194</sup> Lee, "Violence and the Environment," 112. | Sean P. Eagan, "From Spike to Bombs: The Rise of Eco-Terrorism," 5.

<sup>195</sup> Sean P. Eagan, "From Spike to Bombs," 5.

organizations practicing Eco-Terrorism. Interestingly, the authors of some of influential books are not directly linked to an organization or have field experience like in those that have influenced the typologies observed by the Wave and Strain Theories.

The present research observed the system of organization of the ALF and the ELF, and identified and explained its positive contribution to the spread of Eco-Terrorism. Being a “Leaderless Resistance”, these organizations provide several sources of ideological inspiration, technical knowledge and philosophically grounding to individuals without direct contact. Neither the Wave or Strain Theories consider this element.

A few instances were also found of in-person trainings in teaching tactical knowledge to individuals and organizations practicing Eco-Terrorism. What is interesting is the usage of places like bookstores by The Family for this kind of activity.

The present research also observed and explained the positive contributions that splits of individuals or factions from an organization contributed to the spread of Eco-Terrorism. When leaving an organization that practices Eco-Terrorism to found another one, these individuals or factions bring tactical knowledge and, sometimes, lessons learned from past mistakes from their former organization. It allows them to use the same tactics as their former organization, but it allows them to be more geographically widespread. Neither the Wave or Strain Theories look at this element.

The difference in authorship of some influential literary productions and in the location of in-person trainings results in considerable consequences for how Eco-Terrorism can be analyzed and even fought. For instance, in 2011, Ahmed Faraz, a bookseller in Birmingham, U.K., was convicted of selling books that have inspired “Religious Terrorism”. Among the books, there was “[...] an al-Qaeda training manual, bomb making instructions

[...]”, among others.<sup>196</sup> Having said that, my question is: Can someone be convicted of disseminating a fictional book like *The Monkey Wrench Gang* or a philosophical book like *Animal Liberation* because it has clearly inspired Eco-Terrorism?

Additionally, because “Book Club” meetings can occur in any small bookstore, there is the necessity of special infrastructure to provide certain tactical knowledge. Being usually located in commercial areas and attended by numerous kinds of people, bookstores are not a remote place that can be targeted with the same level of caution that the U.S. targeted for being alleged training camps in remote areas in the Middle East.<sup>197</sup> Having said that, my question is: How to prosecute training sections in places and events made for discussion in nature, like book clubs? Perhaps as a business it is easy to access the identities of the individuals attending so as to enable future tracking. Still, the approach to fight it is not the same as for other typologies.

Because my analysis is done on the organizational level, my research does not satisfactorily address the spread of terrorism at the individual level. As previously written, John Hanna, Dave Foreman and Paul Watson started to practice Eco-Terrorism after personal or professional frustrations. Although the last case is modestly addressed by Eagan<sup>198</sup>, this is a direction that future research on Eco-Terrorism can move towards. Questions such as why and how individuals decide to practice Eco-Terrorism and if this decision-making process differs from those that led individuals do engage in other typologies were not addressed so far.

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<sup>196</sup> BBC, “Bookseller Ahmed Faraz jailed over terror offences,” *BBC*, November 27, 2017, <http://www.bbc.com/news/uk-16171251>.

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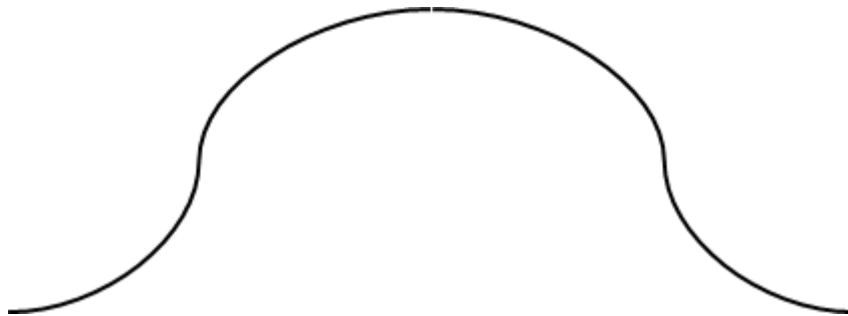
<sup>198</sup> Eagan, “From Spike to Bombs,” 11-14.



## CHAPTER IV – WHAT IS THE PATTERN FOLLOWED BY ECO-TERRORISM?

### 4.1. Is Eco-Terrorism a “Wave” or a “Strain”?

By using a certain term to describe an object different from which it is usually used to describe, a metaphor transfers the characteristics of one object to another. Most of us have already seen a "Wave" and a "Strain". When the Wave and Strain Theories argue that it is possible to see and understand terrorism along these terms, respectively, our minds go to the graphical representations of them (Figures 3 and 4), catching their characteristics and making their unusual application more familiar and tangible for us.



**Figure 3:** Graphical Representation of a “Wave”  
**Source:** Elaborated by the Author



**Figure 4:** Graphical Representation of a “Strain”  
**Source:** Elaborated by the Author

Translating my graphical representations of a "Wave" and a "Strain" into characteristics, it seems reasonable to argue that a "Wave" concerns a temporary predominance and a "Strain" concerns a permanent continuity.

Graphically representing a "Wave" and a "Strain", however, only was possible because most of us have seen both. Then, the first question that arises when starting to consider whether a "Wavy Strain" is more than a theoretical possibility brought up by a merging a "Wave" and a "Strain" is: How should a "Wavy Strain" look? Building on its root patterns, Figure 5 is my graphical representation of it.



**Figure 5:** Graphical Representation of a "Wavy Strain"  
**Source:** Elaborated by the Author

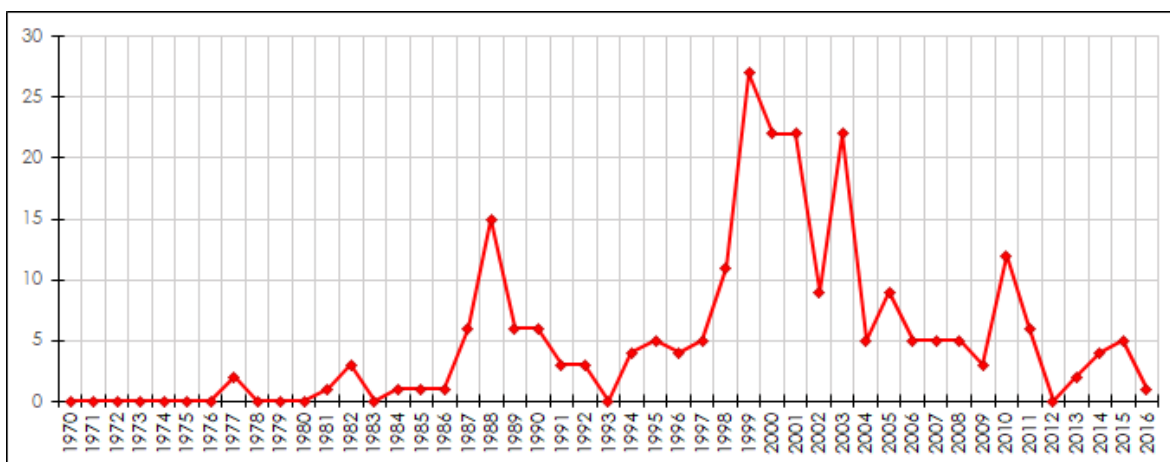
It also seems reasonable to argue that: it is essentially about oscillation or it is essentially about waving. Therefore, if my graphical representations of a "Wave", a "Strain" and a "Wavy Strain" can accurately catch their characteristics, a "Wave" would mean to emerge, rise, peak, decline and disappear, a "Strain" would mean to continuously exist, and a "Wavy Strain" would mean to emerge, which brings it to existence, then to rise, peak, decline, disappear and start all over again multiple times.

Furthermore, for Rapoport, the "Strain" metaphor fails because it does not consider the phases of expansion and contraction of terrorism. For Parker and Sitter, the "Wave" metaphor fails because it does not consider the existence of a typology of terrorism prior to and after its supposed "Wave" breaks. Following my characterization of a "Wavy Strain", this seems to solve this point of tension between both of its root patterns.

As previously written, the GTD lost the data of the year of 1993. So, excluding this year to further my interpretations, it seems reasonable to argue that clearly there was an Eco-Terrorism Wave from 1980 to 2012. Putting this in perspective with the characteristics



previously written, there is an emergence in 1980; rising between 1980 and 1996, peaking between 1996 and 2005, when when 136 (56,43%) occurred, decline between 2005 and 2012 and a disappear in 2012.



**Figure 6:** Global Historical Record of Eco-Terrorism per Number of Attacks Perpetrated (1970-2016)  
**Source:** Based on GTD – Elaborated by the Author

Regarding the "Strain" metaphor, it does not seem to accurately characterize Eco-Terrorism because there was not permanent continuity. On the other hand, the simultaneity with other typologies is accurate because the Eco-Terrorist *Wave* [emphasis added] coexisted with the "New Left Wave", then, "Religious Wave".

Regarding the "Wavy Strain" metaphor, the lines drawn by the number of occurrences look like my graphical representation of a "Wavy Strain" (Figure 5) between 1970 and 1980. It may be the case that before being predominant enough to become a "Wave", Eco-Terrorism passed through a ripening. In this scenario, the "Wavy Strain" pattern would be a period of emergence of it as another more stable pattern.

It is still early to make predictions about the future of Eco-Terrorism after 2012, but it may also be the case that after being predominant enough to be a "Wave", Eco-Terrorism

is passing through a struggle to survive. In this scenario, the pattern would be a period of disappearance of it as a more stable pattern.

#### **4.2. What Wave and Strains Theories Would Argue about Eco-Terrorism?**

Through the lens of the Wave Theory, regarding its life cycle, Kirk Engdall, a former U.S. Attorney who led Operation Backfire, would disagree with Rapoport about the relationship between "Waves" and their concomitant generation. It was launched by the FBI against the both the ALF and the ELF, or simply The Family<sup>199</sup>, on December 7, 2005. In an interview in 2012, he affirmed:

It's generational. People have a short-term memory. For a while, [Backfire] really quashed activity, but I think people are going to forget, and move forward anyway. There's no long-lasting effect for deterrence and crime. People are young and dumb and think 'well, I can do it better and quicker'. They don't do the research. Nobody is a historian anymore. It helps for a little while – I think the conclusion of the case has helped – but I think in the end, they're going to do it again.

While for Rapoport a new generation tends to grasp a new ideology that will motivate a new "Wave", for Engdall, a new generation tends to think that the mistakes of the former generation can be fixed if motivated by the same ideology. Following this logic, an ideology always has the chance to re-emerge in future generations.

Confirming the argument that organizations following the "Wave" pattern share the same tactic as well as the same main ideology, from the 241 eco-terrorist attacks coded during my search in the GTD, 187 (77,59%) have the attack type coded as "Facility/Infrastructure

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<sup>199</sup> "Operation Backfire Searching for Two Final Fugitives." Federal Bureau of Investigation (FBI), December 6, 2015. <https://www.fbi.gov/contact-us/field-offices/portland/news/stories/operation-backfire>.

Attack”. It is described as “an act, excluding the use of an explosive, whose primary objective is to cause damage to a non-human target, such as a building, monument, train, pipeline, etc. Such attacks include arson and various forms of sabotage [...]” It is, in nature, another nomenclature for eco-tage, a characteristic of organizations practicing Eco-Terrorism already discussed by several authors.

From the 20 organizations identified perpetrating eco-terrorist attacks, 17 (85%) have deployed at least one “Facility/Infrastructure Attack”. The first occurrence dates back to 1981 and the last time in 2016.

Although the first organizations practicing Eco-Terrorism were founded and active in the U.K., from the 241 eco-terrorist attacks, the U.S. staged 180 (74,69%) perpetrated by twelve organizations.<sup>200</sup> This is reminiscent of the fact that Rapoport notices a preference for American targets since the “New Left Wave” emerged as a reflex of the importance of the U.S. since the Cold War. However, it may not be the most convincing explanation in the case of Eco-Terrorism.

My argument is that there is a relationship between the number of available targets, or number of areas to be protected/restored, and the number of attacks. For instance, there were 48 attacks perpetrated by eight organizations between 1977 and 2010. Considering animal rights as one of the ecological orientations possible, there are 143 animal research facilities in California, more than in any other U.S. state.<sup>201</sup> As previously written, there is a

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<sup>200</sup> ALF, Coalition to Save the Preserves (CSP), EF!, ELF, Earth Night Action Group, Environmental Life Force, Evan Mecham Eco-Terrorist International Conspiracy (EMETIC), Farm Animal Revenge Militia (FARM), People's Brigade For A Healthy Genetic Future, Revenge of the Trees, Revolutionary Cells-Animal Liberation Brigade and The Justice Department.

<sup>201</sup> “Animal Research Facilities: California,” The Humane Society of the United States, accessed November 27, 2017, [http://www.humanesociety.org/issues/biomedical\\_research/facts/usda\\_map/usda\\_map\\_california.html?credit=web\\_id158820434](http://www.humanesociety.org/issues/biomedical_research/facts/usda_map/usda_map_california.html?credit=web_id158820434).

map on the ALF website which provides access to this information. Considering environmental protection as the other ecological orientation possible, there are 144 American Wilderness' areas<sup>202</sup> in California, more than any other U.S. state.<sup>203</sup>

As the “Contagion Effect” is the essence of Strain Theory, there is not that much that that can be argued aside from what was already analyzed in Chapter III. Even so, the prediction that organizations composed of different typologies can influence or “infect” others is remarkable. As previously written, according to Parker and Sitter, the IRA composes the “Nationalist Strain”. According to Rapoport, it composes the “Anti-colonial Wave”. However, not sharing in the same ideology, Ronnie Lee learned and copied the system of organization from the IRA to apply in the ALF. Also, as previously written, the ELF mentioned the Zapatista as a source of inspiration for the organization. The Zapatistas, a shortened name for Zapatista National Liberation Army<sup>204</sup>, like the other sources of inspiration, are not mentioned in either the Wave or Strain Theories. However, they would very likely be classified as components of the “New Left Wave” and “Socialist Strain”, respectively.

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<sup>202</sup> The *Wilderness Act* established the National Wilderness Preservation System in September 3, 1964. By definition, “wilderness” is “[...] in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.” See: <https://wilderness.nps.gov/document/wildernessAct.pdf>.

<sup>203</sup> “America’s Wilderness Areas,” National Geographic, accessed November 27, 2017, <http://ngm.nationalgeographic.com/2014/09/wilderness-act/usa-map>.

<sup>204</sup> In Spanish: Ejército Zapatista de Liberación Nacional - EZLN

### 4.3. Discussion of Results

Restating, the questions addressed in the present Chapter are: Are "Waves" and/or a "Strains" accurate patterns to see and understand Eco-Terrorism, or can the so called "Wavy Strain" be more than a theoretical possibility and portray it better than its root patterns?

My hypothesis was that it should be possible to see and understand Eco-Terrorism along similar lines as suggested by Rapoport's Wave, Parker & Sitter's Strain Theories or the suggestive Wavy Strain" of Townshend.

According to my analysis, there is an Eco-Terrorism Wave between 1980 and 2012. Some of the movements which occurred at a certain moment deserve a more careful look. The periods of emergence (e.g., 1980) and rise (e.g., 1980-1996), for instance, suggest a powerful influence of the literary production previously discussed in the present research. The first publications of *The Shallow and the Deep*, *Long-Range Ecology Movement*, *The Monkey Wrench Gang*, *Animal Liberation* and *The Case of Animal Rights Ecodefense: A Field Guide to Monkeywrenching*, all dating between 1970 and 1985.

The period of decline (e.g., 2005-2012) is highly suggestive because it follows the beginning of Operation Backfire. By January 20, 2006, 11 individuals<sup>205</sup> have already been caught.<sup>206</sup>

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<sup>205</sup> Chelsea Dawn Gerlach, Daniel Gerard McGowan, Darren Todd Thurston, Jonathan Mark Christopher Paul, Joseph Dibee, Josephine Sunshine Overaker, Kevin M. Tubbs, Rebecca Rubin, Sarah Kendall Harvey, Stanislas Gregory Meyerhoff and Suzanne Savoie. See: <https://archives.fbi.gov/archives/news/stories/2006/january/elf012006>

<sup>206</sup> <https://archives.fbi.gov/archives/news/stories/2006/january/elf012006>.

More interesting, the decade following Operation Backfire is already the most geographically spread of Eco-Terrorism so far, according to the GTD. As it is possible to see in Table 2, during the 1950s to the 2000s, there were occurrences in no more than three countries in Western Europe and two in North America. During the 2010s, the number of countries in Western Europe increased to seven, among which four appeared for the first time. In North America, it increased to three, among which one appeared for the first time. Consequently, it spread throughout the entire region. Perhaps, most importantly, it spread to five other countries including Australasia & Oceania, Eastern Europe and South America for the first time. The only geographical spread that was not made by either the ALF or the ELF was towards Eastern Europe, where an organization named Friends of Freedom perpetrated their first attacks.

**Table 2:** Eco-Terrorism per Country and Region across Decades

	<b>Western Europe</b>	<b>North America</b>	<b>Eastern Europe</b>	<b>South America</b>	<b>Australasia &amp; Oceania</b>
<b>1950s</b>	U.K.				
<b>1960s</b>	U.K.				
<b>1970s</b>	U.K.	U.S.			
<b>1980s</b>	France Iceland U.K.	U.S.			
<b>1990s</b>	U.K. Belgium	Canada U.S.			
<b>2000s</b>	U.K. Austria Netherlands	Canada U.S.			
<b>2010s</b>	U.K. Finland France Germany Greece Netherlands Sweden	Canada Mexico U.S.	Belarus	Chile	Australia New Zealand

**Source:** Elaborated by the Author – Based on the GTD

From my perspective, this geographical reallocation allows different interpretations and poses interesting questions for future research. For instance, if a counter-terrorist measure against the most active organizations of a certain typology led them to diversify their location of attacks, even though with less frequency, the problem is not solved but dissolved. Therefore, my question is: How to prevent this geographical diversification? If someone does not consider Eco-Terrorism as such a significant threat, at the time the present research is being published, a similar movement is occurring in Western Europe because of a U.S.-led military coalition against ISIL in Iraq.

Applying the Wave Theory to Eco-Terrorism, regarding a relationship between "Waves" and their concomitant generation, there are two opposing views between Engdall and Rapoport. Because the present research is being published less than one decade after the break of the Eco-Terrorism Wave, it may be interesting to observe if there will be a reemergence of this typology or even those covered by both the Wave and Strain Theories in the following decades.

Regarding a main tactic, it is clear that Eco-Terrorism possesses one: eco-tage. In this regard, it is worth mentioning that it is a remarkable characteristic of this typology since its emergence in 1958.

The geographical concentration of eco-terrorist attacks in the U.S. seems to differ from the reason American targets are focused during the "New Left Wave" and "Religious Wave". Considering the dual ecological orientation of the organizations practicing eco-terrorism (e.g., animal rights and environmental protection/restoration), it should not be a coincidence that California is the state in the U.S. with the highest number of animal research facilities, American Wilderness' areas and highest number of occurrences of eco-terrorist attacks. Even though other conditions need to be existent to make a terrorist attack possible,

this apparent correlation, is an interesting subject for future research on Eco-terrorism and, even on other typologies too, since neither the Wave or Strain Theories provide explanations on the reasons the “New Left Wave” was most prominent in Western Europe and South America or the “Nationalist Strain” in Ireland, respectively.

The “Contagion Effect” as an end in itself of the Strain Theory made that there was nothing left to be analyzed aside from what was written in Chapter III.

The Strain Theory does not seem to provide anything to analyze aside from the “Contagion Effect”, previously discussed in Chapter III. However, if the Wave Theory also presents this mechanism<sup>207</sup>: What is the actual utility of the Strain Theory? It opens a gap for the “Wavy Strain” pattern.

One can argue that the “Wavy Strain” does not constructively contribute to the visualization and understanding of terrorism. However, one should agree that it is a pattern more likely to be empirically proven and more accurate than the “Strain”. As previously demonstrated and criticized, according to Parker and Sitter themselves, the “Religious Extremist Strain” has disappeared for decades. If “Strains” are about a permanent continuity, there was simply no “Religious Extremist Strain” following their own showing of the historical record.

One can also argue that my comprehension about “Strains” is too severe about the expectation that can be derived from the Strain Theory, and that five decades of disappearance for a ‘Strain’ is a small margin or error. As previously suggested, a “Wavy Strain” can indicate either ripening before a certain typology is predominant enough to become a “Wave” or a struggle to survive after being predominant enough to be a “Wave”.

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<sup>207</sup> See Section “2.2.1. Rapoport’s Wave Theory”



Therefore, being a "Wavy Strain" do not necessarily exclude the possibility that a typology was or can become either a "Wave" or "Strain", depending on the lens of who is analyzing.

Considering the timeline of the Wave Theory, the Eco-Terrorism Wave started during the “New Left Wave” and it lasted until the ongoing “Religious Wave”. If Sedgwick is right and “beneath and between waves of terrorism there is a ‘normal’ level of terrorism; not every terrorist group need to be part of a wave”,<sup>208</sup> Eco-Terrorism may be a case of “normal” level of terrorism. What is the pattern followed by the typologies that do not follow the "Wave" pattern? Perhaps, it is the same as other single-issued typologies, such as Anti-Abortionist, still uncovered by the Wave Theory. Last but not least, if Eco-Terrorism is actually beneath and between “Waves” or simply cannot be one because there were others co-existing, we have a “Eco-Terrorist Ripple”.

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<sup>208</sup> Sedgwick, “Inspiration and Origins of Global Waves of Terrorism,” 98.

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