3. Chapter: Definitions and Limitations

3.1. Introduction

This chapter elaborates on the concepts of terrorism and resilience to give the reader a clear understanding of the assumptions and thematic limitations of this work. The use of the terminology plays a crucial part, especially in a research area full of ambivalences and grey zones.[115] It is therefore necessary to take a closer look at the phenomenon of terrorism and *jihadi* terrorism, not as a theoretical exercise but how these groupings position themselves in practice and how they are perceived by a target society, which affects the society's resilience.

3.2. Definitions

3.2.1. Terrorism

The use of the term terrorism in this work is based on the assumption that perpetrators of terrorist acts are rational actors [116] and their resorting to terrorist tactics can be understood as a *"reasonable and calculated"*[117] action (even when they appear fanatical)[118] and who may generally be receptive of deterrence.[119] Correspondingly, medical studies have been unable to connect the cause of terrorism to psychopathology.[120]

While the behaviour may appear morally unjustifiable or may appear irrational, terrorism is "*an effective tactic*"[121] *or "operational method"* [122] that follows an internal strategic logic deemed instrumental to further the

115 See Jenkins 1980, 1; See Crenshaw 2007, 7 ; See Wojciechowski 2009, 5.
116 See Wheeler 1991, 11 ; See Zimmermann 2003, 14 ; See Trager and Zagorcheva 2006, 94 ; See Crenshaw 2009, 373.
117 *ibid*., 371.
118 See Wheeler 1991, 11.
119 See Quinlan 2006, 17 ; Trager and Zagorcheva 2006, 88.
120 See Radlauer 2006, 610.
121 Rothkopf 2016, 11.
122 Zimmermann 2003, 14.

terrorist's strategic objectives in a certain environment.[123] As terrorism threatens the state's monopoly of the use of force, the ensuing chaos threatens the legitimacy of the state.[124]

> *Terrorism is employed as a weapon of psychological warfare to help create a climate of panic, […] to destroy public confidence in government and security agencies and to coerce communities [...].*[125]

Perpetrators of terrorist acts understand that they "*have limited abilities to inflict pain on target societies, they are therefore likely to coerce those which they view as vulnerable to punishment.*"[126] Western democracies are seen as worthwhile targets, since their populations are perceived to "*have low thresholds of cost tolerance and high ability to affect state policy.*"[127] To do so, terrorists wage a type of *"atrocious nerve-warfare"*[128] with the intention to *"create a ripple [effect] of fear and uncertainty*."[129]

While currently seeming unable to mount large-scale concerted attacks in Western-Europe, even smaller scale knife- or vehicle attacks of no strategic significance for a country's overall security, are seen as symbols that terrorism always finds a way to strike, despite obstacles placed in its way by authorities.[130]

Consequently "*for the terrorists the message matters, not the victim*", making terrorism *"an act of communication" in the first place.*[131] If the terrorist's "message" is spread and echoed by social or mass media and by authorities, it can keep the societies caught in this "*struggle of attrition",* on their toes, faced with a seemingly constant risk of its "*eruption into murder and disruption.*"[132] Societies confronted with this perceived "*dread risk*" [133] of terrorism who react by altering their thinking and daily routines, based

123 See Crenshaw 2009, 373.
124 See Fach 1978, 334 ; See Rabert 1995, 55.
125 Wilkinson 1986, 6.
126 Pape 2009, 167.
127 *ibid.*
128 Wheeler 1991, 15.
129 Maguen *et al.* 2008, 15.
130 See Münch 2017, 88 ; See Doberke and Keilani 2016, 5.
131 Schmid and Graaf 1982, 14 .
132 Wilkinson 1986, 17.
133 Gigerenzer 2004, 286.

on a changed feeling of vulnerability, inflict and may be subject to large indirect damages.[134]

3.2.2. Jihadi Terrorism

Among different perpetrators, there are stark differences in the application of terrorist tactics.

These are influenced by the different causes or grievances, objectives, intentions, capabilities, motivation, stakeholders, group structure and leadership of a group amongst others. This has an effect on the designation of legitimate versus non-legitimate targets, legitimate versus illegitimate types and styles of attack, the choice of instruments and weapons, the acceptable level of violence and its internal and public justification.

The many variations become very apparent when comparing different terrorist groups, e.g. religious extremist groups, political extremist groups from the far right to the far left, ethno-nationalist groups, racist groups or animal rights extremist defenders.

In order to provide broad answers to help mitigating the negative effect of terrorism on open *Western* societies, the author has chosen for this work to exemplarily focus on *jihadi*-inspired terrorism which has undeniably posed a serious challenge to numerous societies in Europe over the past years and continues to do so, with its political fall-out noticeable across Europe.

While there are undoubtedly other types of terrorism which pose a threat to open European societies (e.g. far right, ethno-nationalist, far left, etc.), and terrorist acts committed by these groups had and may have terrible consequences for the citizens targeted, they have been no match to the perceived notoriety, inconsolability, depth and width of the terror threat posed by *jihadi* groups to the whole of Western societies over the past years.[135]

Beyond its statistically proven notoriety, *jihadi* terrorism has four specific characteristics which are discussed below, and which make this type of

134 See Gigerenzer and Gaissmaier 2007, 16–17 ; See Maguen *et al.* 2008, 17; See Levine and Levine 2006, 616.

135 See Senatsverwaltung für Inneres und Sport Berlin 2017, 4 ; Cronin 2009, 6.

terrorism appear especially frightening to the majority of members of the post-heroic secular Western society.[136]

Violence as a mandated, legitimate instrument for political change [137]

While the deliberate use of violence by non-state actors to advance political or ideological objectives is ostracized by the large majority of people in the Western society, the deliberate use of violence against innocent civilians as condoned by many terrorists is considered especially offensive and despicable. Jihadism is a modern Islamistic ideology that theologically legitimises and necessitates the use of violence to further its objectives.[138] To jihadis, jihad is the outer jihad, the prescribed violent struggle to defend and spread Islam.[139] In their ideology, violence is not just an option, it is mandated. Different from the mostly "*demonstrative terrorism*" conducted by the *Rote Armee Fraktion (RAF)* in Germany, *jihadi* terrorists are conducting "d*estructive terrorism*" which "is *more aggressive, seeking to coerce opponents*".[140] Accordingly these groups do not perceive "*violent combat solely as a means to an end*" but as "*a sacred end in and of itself*"[141]. This is a big difference to the most notorious and longest running campaign of political violence in Germany in the past, committed by the RAF and its splinter cells from the 1970ies to the -90ties. Their attacks, though also harming civilians, were most of the time carefully targeted, as the RAF was trying not to lose the sympathy of the (wrongfully) perceived well-meaning silent majority"[142]. Jihadis in contrast, use "*theologically ideologically legitimized*" violence to "*mobilize support for […] [their] cause*"[143], proving the higher lethality and notoriety of (pseudo-)religious groups and movements compared to secular terrorist movements.[144]

136 See Bhatt 2013; Biene and Junk 2017, 116 ; Zimmermann 2003, 11.
137 See Ashour 2009, 8.
138 See *ibid.* ; Ashour 2011 ; Senatsverwaltung für Inners und Sport Berlin 2017, 6.
139 See Biene and Junk 2017, 118.
140 Pape 2009, 161.
141 Ashour 2009, 5.
142 See Rabert 1995, 123-125.
143 Pape 2009, 161.
144 See Nacos 2007, 32.

Strong commitment to violence against civilians[145]

Apart from the general *"intolerance and the frequent use of violence"*[146], jihadism is characterised by the willingness of its militant followers to „*ideologically legitimize and practice violence against civilians and unarmed persons*"[147]. This is based on an absolute distinction, made between religious believers and non-believers and justified with the notion that *"no one is innocent; all are potentially guilty, if only by association"*.[148] As part of their *"destructive terrorism"* approach, they *"do not recognise any rules or conventions of war for combatants, non-combatants or the treatment of prisoners [...] [and] they use particularly ruthless weapons and methods to attack civilians."*[149]

Their display of no mercy towards defenceless, unarmed civilians can create a nimbus of viciousness and evilness which may under certain conditions elevate the acts and the perpetrators from simple criminals to scary "supervillains" in the eyes of the society.[150]

This use of indiscriminate violence against civilians, in defiance of even rudimentary standards and norms of civilisation evoke strong feelings in the society targeted and may threaten personal meaning of life, especially if the transgressions are not punished and rectified.[151] The random nature of the targeting may further increase the personal perception of risk and a surge in death-awareness which are catalysers for a feeling of uncertainty and for a loss of "*personal meaning*" when the existential "*idea that the world is just and predictable*" is violently challenged.[152] As the "*individuals' perception, processing, and appraisal of events*"[153] are affected by perceived threats to the personal meaning the individuals may react by ignoring and rejecting threatening information and their messengers, and instead may be developing strong support for aggression against people who hold opposing views, and thus lead to an exaggerated and radical nationalistic belief.[154]

145 See Bhatt 2013, 25-26.
146 Ashour 2009, 8.
147 *ibid.*, 5.
148 Wilkinson 1986, 4.
149 *ibid.*
150 See Furedi 2007, 7 ; Bhatt 2013.
151 See Maguen *et al.* 2008, 22 ; Park and Folkman 1997, 118 .
152 Maguen *et al.* 2008, 22.
153 *ibid.*, 21.
154 *ibid.*, 21–22.

Compelling narrative with absolute distinction between the believer and non-believers

In their constructed absolute view of the world as "us versus them" and "black & white", and thus as a conflict between "the West" and Islam, where all Muslims are exclusively portrayed as victims[155] of an alleged conspiracy of the unbelievers with the aim of destroying Islam and Muslims[156], jihadis leave no room for compromise as they condone violence against the alleged enemies in the West, near or distant, as a duty of outer jihad.[157]

The contrived absolute distinction between the believers and the non-believers[158] and the rejection of Western societies and their underlying concepts of *"democracy as well as the legitimacy of political and ideological pluralism",* give the appearance of an existential antagonistic struggle without any hope of cessation or compromise.[159]

On the one hand, this development of a violent and absolute antagonism on the terrorist side, spilling over into a clash of civilisations or cultures without shared values nor common norms or rules, may create feelings of fear and anxiety in pluralist open Western societies. But on the other hand, the potential narrative of an existential struggle "us versus them", "open societies versus totalitarianism" could strengthen the modern society's identity and provide strong meaning and purpose which are understood to be crucial for building resilience.[160]

The problem is however that without a positively binding meaning and purpose, a principally constructive value-based rallying around the flag may turn into an effective co-radicalisation of the targeted open society and may end up polarising it along the lines of the attributed identity and lead to the society's disintegration into in-groups and out-groups, pitted against each other.

The risk of a negative outcome is higher today. Adverse foreign state actors have the ability to fuel the internal debates by covertly pushing vitriolic and divisive content through social media platforms and by overtly providing a platform for divisive fringe voices on their foreign language

155 See Biene and Junk 2017, 117.
156 See Frankenberger 2017, 64.
157 See Biene and Junk 2017, 118 ; Senatsverwaltung für Inneres und Sport Berlin 2017, 6.
158 See Bhatt 2013.
159 Ashour 2009, 4.
160 See Smith 2017, 73-96.

television and media channels and through the direct political address of diaspora communities in the targeted country. [161]

The other problem is that the *jihadi* narrative of a just and morally mandated battle against the supposedly suppressive, hypocritical and morally degenerated *Western* societies, has found followers in Western societies.[162] This does not only refer to the home-grown terrorists who through their rejection of their own open native societies, shatter the society's self-concept and its esteem, but also by the broader embrace of this narrative by domestic anti-*Western* movements and their rejection of a positive nation-wide shared identity.[163]

To Kilcullen, it is evident that the terrorist threat in Europe only at first sight is primarily an armed battle, but even more so it is an intellectual battle, an "i*deological competition between open societies and takfiri* [*jihadi*] *groups*.[164] Countering the jihadi narrative is not sufficient, according to Kilcullen but "*Western countries [...] must also as a matter of priority, articulate and enact their own narrative*"[165]

Confirming Furedi's assessment that „*idealism seems to be monopolized on the wrong side of the conflict*"[166], the political leadership of Western societies have shown to be lacking the ability to precisely define what their societies shared values, purpose and identity are. Therefore, they have struggled to understand the conflict and the enemy and thereby failed to compellingly explain the situation to their own people in a credible comprehensive narrative of their own that would provide meaning and direction.[167]

If history may provide a lesson, it is maybe that Communist, terrorist and ideology-based movements in Western-Europe at the time of the Cold War, were not overcome by military/law enforcement means alone, but that these movements lost the intellectual battle first, as the *Western* governments were able to demonstrate to and persuade their publics of "*the falsity of the [Soviet] ideology, the illegitimacy of the regime, the possibility of successful resistance and the bankruptcy of the Soviet world-view*".[168] Today

161 Nemr and Gangware March / 2019, 14–26.
162 See Furedi 2007, 92.
163 See *ibid*., 77-101.
164 Kilcullen 2009, 247.
165 *ibid*., 286.
166 Furedi 2007, 92.
167 See *ibid*., 77-101.
168 Lenczowski 2012, 109.

in the intellectual battle with Anti-*Western* jihadism, Western governments are still struggling to achieve this upper hand.

Concept of Paradisiology[169]

"*Suicide terrorism is the most aggressive form of terrorism*"[170]. This act of self-denial is a powerful symbol of a cosmic or sacred act where the perpetrator transitions from weakness to power by sacrificing his life for a higher cause, a concept foreign to an individualistic, liberal and secular post-heroic society.[171]

While the frequently high casualty numbers from a suicide attack may alienate moderate sympathisers, it helps to attract support from radical elements.[172] In addition, the apparent defiance of death, expressed in the suicide attack, has a unique coercive effect:[173] This ultimate act of self-denial, focused on the certain reward in paradise, once again denies the opportunity for accommodation or coercion here and now. The seemingly irrational behaviour creates a distressing vagueness about the looming threat in the targeted society.[174] If the public knowledge about jihadism is still sketchy today,[175] then fear is the natural reaction to the inability to recognize an ordering structure that provides clarity and orientation about the threat.[176]

3.2.3. Resilience

If *Strategic Resilience* is an answer to strategic vulnerability of modern, liberal post-heroic societies,[177] one has to take a closer look at the definition of resilience.

Since the middle of the last century, "resilience" has come to wide-spread use, become a kind of buzz-word used in different disciplines like ecology,

169 See Bhatt 2013.
170 Pape 2009, 161–162.
171 See Bhatt 2013.
172 See Pape 2009, 161–162 ; See Bhatt 2013.
173 See Pape 2009, 162.
174 See Radlauer 2006, 611 .
175 See Biene and Junk 2017, 116.
176 See Klein 1987, 53.
177 See Münkler and Wassermann 2012.

engineering, sociology or psychology.[178] The use of the term and general concept of resilience which has seen consistent growth since 9/11, also found its way into the *National Security Strategy* of the United States, built on the painful realisation that it is impossible "*to deter or prevent every single threat*."[179] Today, the term is in use beyond national security and has proliferated into nearly all areas of life. The visual snapshot of a systematic literature review of "*research articles related to defining and quantifying resilience in various disciplines*" published between 2000 and 2015, Hosseini et al. underlines the discipline-crossing nature of resilience research.[180]

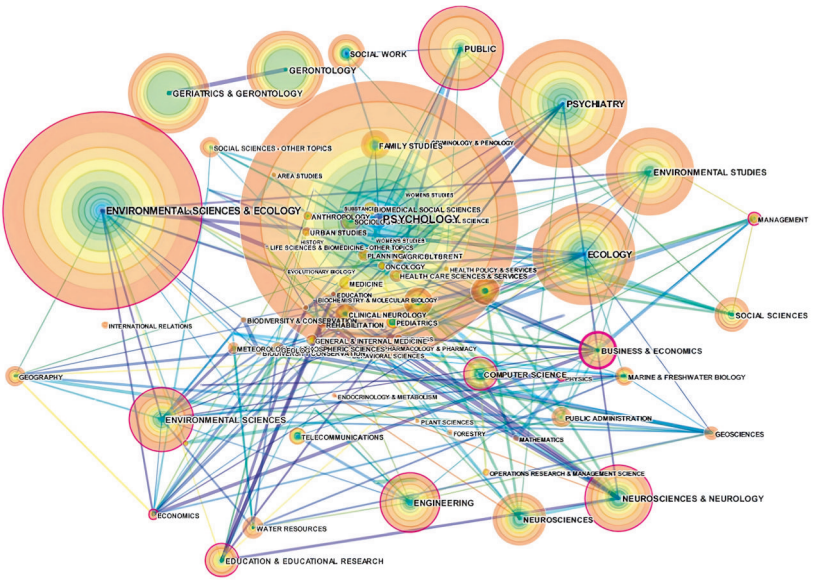
Similarly, a simple foreign language book search on www.amazon.de in 2020 produces 8000 book titles with the term "resilience" and 2000 titles when searching for the German equivalent "*Resilienz*".

Irrespective of the discipline the common understanding of the term "resilience" in all different disciplines is related to and has the same linguistic origin – Latin. The Latin verb "resilire" is formed by the prefix „re", meaning „back", and the verb "salire", translating into "to jump".[181] Thus the translation of the verb "resilire" is to "jump back, to leap back, to recoil or to rebounce". [182]

This basic translation is at the core of all usage of the noun "resilience" and of the adjective "resilient" and is its common denominator. The use of the term "resilience" in one discipline at least in part, can be transferred into the usage in another discipline and thus can widen its scope of use. In a wider sense, the idea defining "resilience" shows a similarity in all disciplines using it: robust, flexible and redundant. This similarity makes the transfer of an intellectual approach easier: "Resilience" takes effect whenever a living being, a material or a system is touched by stress.

178 See Bara and Brönnimann 2011, 6 ; See Roth and Prior 2014, 105.
179 The White House 2010, 18.
180 Hosseini *et al.* 2016, 50.
181 Georges 1902, 2234.
182 *ibid.*, 2234.

Figure 3: A snapshot of clusters based on category, created by CiteSpace.[183]



In a general definition resilience can be described as "the *ability of an entity or system to return to normal condition after the occurrence of an event that disrupts its state*."[184] In another definition a system can be described as resilient if it is able and has the competence and capacity to mentally and materially handle crisis – or disaster-induced stress and to return to the status-quo-ante." [185]

Due to the complexity of the resilience construct and its context sensitivity there are different definitions for resilience for each discipline that are context specific.[186] Many of the offered definitions for resilience though do *"overlap with a number of already existing concepts such as robustness, fault-tolerance, flexibility, survivability, and agility, among others*."[187]

183 Image and description Hosseini et al. 2016, 50.
184 Hosseini *et al.* 2016, 47.
185 See Lucini 2014, 31.
186 Southwick *et al.* 2014.
187 Hosseini *et al.* 2016, 47.

Due to the interconnectivity of the expressions of "resilience" in the different disciplines, it makes sense to take a look at their understanding and use of „resilience".

In engineering resilience is described as the ability of a material to absorb energy through elastic deformation and still return to its original state, without suffering plastic deformation.[188] This is an important distinction to "toughness", which describes the ability of a material to absorb energy not only by elastically deforming but from plastic deformation as well. [189]

Ecological resilience is concerned with the ability of ecosystems to maintain their fundamental characteristics despite being exposed to ecological disturbances. This means that a resilient eco-system is able to adapt to a changing environment, to a changing world, instead of dying out. As mentioned before (in engineering resilience), this is the difference between resilience and toughness. Holling who put the concept of resilience into ecology proposed the definition:

> *Resilience determines the persistence of relationships within a system and is a measure of the ability of these systems to absorb changes of state variables, driving variables and parameters and still persist. In this definition resilience is a property of the system and persistence or probability of extinction is the result.* [190]

Taking the same systemic perspective and showing its multi-disciplinary disposition, resilience also found its way into sociology. Specifically "within the context of the sociology of disaster, crisis and disaster management, and disaster planning", Lucini found, the concept of resilience has gained great importance.[191] This is also reflected in the *Hyogo Framework for Action 2005–2015* published by the *United Nations Inter-Agency Secretariat of the International Strategy for Disaster Reduction*, a disaster risk-reduction programme which strongly emphasis community resilience to bounce back and recover following disaster. [192] Therein *disaster resilience* is defined as

> *the capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain*

188 See Redwing 2018a.
189 See Redwing 2018b ; See Redwing 2018a.
190 Holling 1973, 17.
191 Lucini 2014, 31.
192 See United Nations Inter-Agency Secretariat of the International Strategy for Disaster Reduction (UN/ISDR) 2015.

> *an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organising itself to increase this capacity for learning from past disasters for better future protection and to improve risk reduction measures.*[193]

In its definition of community resilience, the *U.S. National Institute of Standards and Technology* echoes the multiple determinants for mustering a resilient response and clearly emphasise the importance of anticipation and preparedness besides response and recovery:

> *the ability to prepare for anticipated hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions. Activities, such as disaster preparedness—which includes prevention, protection, mitigation, response and recovery—are key steps to resilience.*[194]

While these mentioned determinants of resilience from a systemic perspective are dependent on a host of different interacting factors[195], the individual always plays a central role which makes taking a closer look at individual psychological resilience necessary.

In the First World War, „shell shock" or what is called today *post-traumatic stress disorder* (PTSD) was diagnosed among casualties in the trenches in sizable numbers.[196] Right then and since the 1922, „*Report of the War Office Committee of Enquiry into Shell Shock*" the research into resilience of individuals, although the term resilience was not in use then, and how to investigate it, has been subject of research.[197]

The first primarily military driven-driven question has been, how people are able to cope with traumatic stress from experiences like disasters or the trenches of "World War One" in such a way that they would carry on afterwards. What makes people withstand the most difficult of situations without breaking and to develop further in a positive way?

Psychological resilience can be defined in a more concrete way as the ability to cope with existential crises by using all available resources, to use them (existential crises) as a push for further personal development in a dynamic process of adaptation and development *that* will enable the

193 *ibid*., 4.
194 National Institute of Standards and Technology 2018.
195 Southwick *et al.* 2014, 2.
196 Linden and Jones 2014, 525.
197 See *ibid*., 520–521 ; For a reprint of the report see Her Majesty's Stationery Office 2014.

"healthy, adaptive, or integrated positive functioning over the passage of time in the aftermath of adversity"[198]. This definition is so wide that it fits society and the individual alike. Even wider and more encompassing, covering all areas requiring resilience, is the definition that *"resilience refers to the capacity [of a dynamic system] for successful adaptation to disturbances that threaten system function, viability, or development."*[199]

Following a comprehensive holistic approach to resilience the system analogy mandates that a system is only as resilient as its parts are.[200] Thus in regard of terrorism, a society is as resilient as its members. But one could also postulate that if a system is resilient, there is a good chance that the individual could be resilient too.[201]

Resilience as a genetic disposition

If the reaction of an individual to a disaster or to an act of terrorism describes the degree of his or her resilience to the event, it is important to understand whether individuals are generally "programmed" to be resilient, in other words whether they are resilient by nature, with their resilience being a distinct characteristic to them. As an alternative possibility resilience would not be a hereditary trait, would not be found ingrained in the personal fabric of an individual and forever there, but could be trained and could be learnt.[202]

The proverbial "stiff upper lip", the keeping of which is attributed to the British people as remaining stoic and unemotional in the face of adversity or danger could be part of the genes of an individual. Its origins in the studies of the Classics in British public schools may have been bred into generations of young people. But this is not necessary so: In "World War One", over 80.000 British soldiers were treated in British hospitals suffering from "shell shock".[203]

In 1939 at the beginning of the Second World War; His Majesty's Government's Ministry of Information tried to build on the image of "*sober*

198 Southwick *et al.* 2014, 1.
199 Masten 2016, 298.
200 See Vasu 2007.
201 See Kim 2016, 464.
202 See Wedding and Furey 2013.
203 See Linden and Jones 2014, 525.

restraint" by printing "*2.45 million posters*" with the slogan "*Keep Calm And Carry On*" to be "*issued in the event of war*"[204]

The experience of "World War One" apparently had shown that the theory of an inborn resilience in the human beings did not hold water nor was verifiable for each and every person in case of adversity, disaster or threat to life. Beside the genes there must be something else, even though there are many genes, possibly hundreds of them which will lend resilience to people. But scientists believe that genes only have an indirect influence on a resilient personality and behaviour, with a very low impact of the single gene.[205]

This does not mean that genetic contributions are not factors in the origin of resilience, but the genes are extremely sensitive to environmental influences.[206] Resilience can change to the better or to the worse during an individual's lifetime.[207] Yehuda et al. are even talking about a possible epigenetic reprogramming of the gene function which means that the genetic blueprint or the DNA sequence is not modified, although the effect of the genes is changed by outer influence.[208] Understanding exactly which as Southwick et al. assert, that "*there are many different factors that could make some people more resilient than others*." [209] As far as not genetically programmed, resilience is developing dynamically in a process taking place between the individual and as required by the respective environmental situation, which includes the supporting infrastructure.[210]

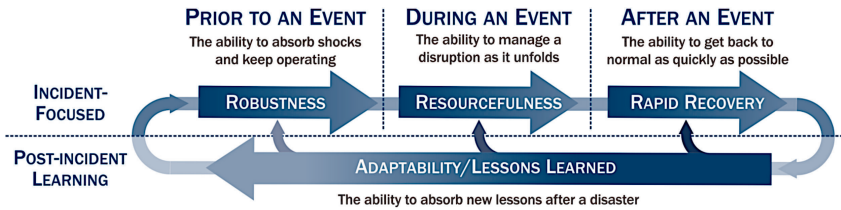
Resilience of Critical Infrastructure

In this day and age, the public of modern open societies are used to and expect their infrastructure to function and deliver, even in case of disasters or terrorists acts. So, in the many applications of the resilience concept the resilience of critical infrastructure has strong prominence and is high

204 University of London 2019, online.
205 See Southwick et al. 2014.
206 See Yehuda et al. 2013.
207 Kim-Cohen and Turkewitz 2012, 1303.
208 Yehuda *et al.* 2013.
209 Southwick et al. 2014, 5.
210 Kim-Cohen and Turkewitz 2012, 1303.

on the agenda of national and local governments as is reflected in the framework by the National Infrastructure Advisory council in figure 4.[211]

Figure 4: "A Framework for Establishing Critical Infrastructure Resilience Goals" published by the National Infrastructure Advisory Council. [212]



The strongly intertwined and interdependent economies in open societies, illustrated well in the figure below from the *Homeland Security Affairs* journal, however, can make them particularly vulnerable to shocks *"as the failure of one or multiple infrastructure elements can cascade and affect the resilience of the entire system"* [213]

Critical failure in such "system of systems" can suddenly expose citizens across a whole region or country to the effects of the *Security Psychological Vulnerability Paradox.*[214]

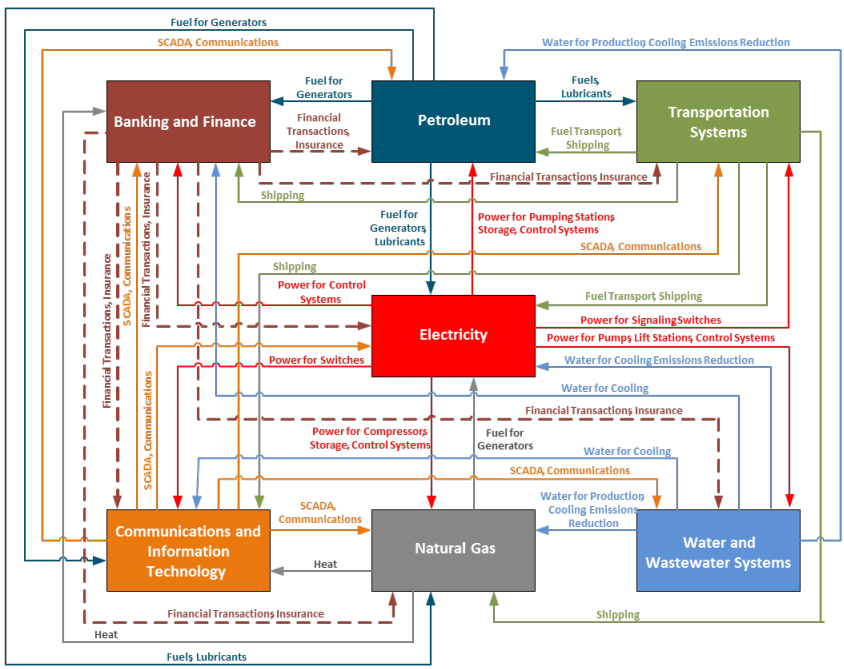
The public in open societies do not only have to show resilience passively, but they are also an active part of the resilience system as the resilience definition in sociology, described above, clearly states when it declares that the handling of a crisis requires *mental and material* coping capabilities.[215]

There is a strong temptation to try to secure and safeguard resilience of critical infrastructure as well as of society primarily by technical means. Resilience there is seen as just an aspect of securitization. This is a technocratic and economic expectation that given enough high-tech and enough funding, disaster can be avoided.[216] This model may have certain advant-

211 See Bara and Brönnimann 2011, 26-27; Kaufmann 2015, 30 ; Prior and Hagmann March / 2012, 10–11.
212 Image taken from Berkeley and Wallace 19.2010, 17.
213 Verner *et al.* 2017, 7.
214 See *ibid.* ; Münkler and Wassermann 2012, 91.
215 See Vasu 2007, 4.
216 See Kaufmann 2015, 305-309 ; See Lucini 2014, 185.

ages by promoting investments into hardware and creating new jobs. But infrastructure is serving the community and its individuals and thus resilience of infrastructure is serving the resilience of the community and its individuals.

Figure 5: Exemplary "interdependencies among seven different infrastructure sectors and subsectors".[217]



At the same time resilience of infrastructure also interacts with community resilience and the resilience of its members. The resilience of communities and their individuals is depending on the resilience of critical infrastructure and vice-versa. They cannot be achieved one without the other.[218] For "*professional resilience*" to work it requires its protagonists to function in times of extreme duress.[219] The individual first-responder, police officer, fire

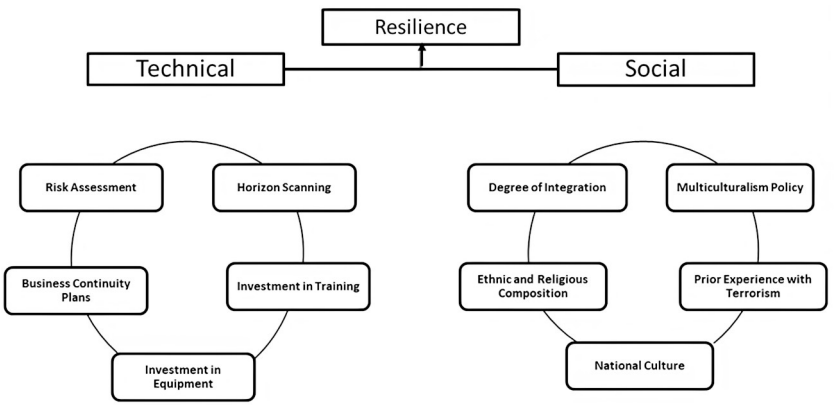
217 Quote and graphic taken from Verner *et al.* 2017, 7.
218 See Bara and Brönnimann 2011, 33.
219 See Lucini 2014, 50.

fighter, nurse or operator of a critical infrastructure has to be trusted to stand his man or her woman under the most adverse conditions. [220]

The engineering and ecosystems' resilience which together forms the resilience of critical infrastructure is part of a system which encompasses their subsystems on the one hand and the resilience of communities and their subgroups or individuals on the other hand.[221]

This important connection between critical infrastructure (technical component) and the community (social component) as jointly underlying components of overall resilience is also reflected in Vasu's model "*Resilience as a complex system*."[222] The correct balance between technical resilience and social resilience decides on the success of the concept.

Figure 6: "Resilience as a complex system".[223]



3.2.4. Strategic Resilience

There are many different types of shocks societies are faced with, including damages to their critical infrastructure. But the object of our analysis – the pluralist open society – has distinct qualities which affect its vulnerability and its resilience to it.

220 See O'Boyle *et al.* 2006, 351–357 ; For a negative example refer to the *Hurricane Katrina After Action Report* from Centers for Disease Control and Prevention February 2006 or read Bara and Brönnimann 2011, 33.
221 See *ibid.*, 35.
222 See Vasu 2007, 4.
223 Quote and graphic adapted from *ibid.*

In the definition adopted for this work, it may be described as a nation-state-centred pluralistic social construct, based on shared meaning and functioning on mutual trust and the rule of law in an inter-connected and interdependent efficiency-focused open-market economy. The population is characterised by putting a high value to individual freedom, cooperation, convenience and self-indulgence. At the same time, the people have little tolerance for pain, disruption or inconvenience, linked with the highest expectation for their safety and security for which responsibility has been handed over to the state's organs. Control over the government is exercised through democratic elections which give the population a direct influence on politics.

The threat of terrorism to the open society as described at the beginning of this chapter, does share similarities with the threats posed by other life risks (floods, storms, wildfires, industrial accidents, plane crashes, pandemics etc.) which authorities try to build technical and social resilience against. But this threat is also uniquely distinct from other life risks threatening and able to evoke stronger negative emotions in a society as the comparison below shows.

Table 2: The different effects on society from terror attacks versus other disasters.[224]

OTHER DISASTERS		TERROR ATTACK
Accidental	versus	Targeted
Tragic	versus	Callous
Expectable	versus	Random
Bad luck or negligence	versus	Malice
Common	versus	Rare
Local effect	versus	Global effect
Explainable	versus	Poorly understood
Mostly preventable	versus	Unstoppable
Mostly direct victims	versus	Mostly indirect victims
Local trauma	versus	National Trauma
Local destruction	versus	Destruction of *Global Meaning*
Fraternisation	versus	Division
Post Disaster Certainty	versus	Post Disaster Uncertainty

224 Author's own work.

The special nature of the threat of terrorism described at the beginning of the chapter, and its perceived deliberate impact generates a massive amount of fear in the open society's population, although in comparison other life risks have a much higher statistical probability to kill or seriously harm citizens, even slipping on a banana peel and breaking your neck – but in the citizens' opinion, the banana peel is "not out to get them".

The premeditation of these disturbances negatively affects the emotional need for trusting in relationships in the open society as its adversaries are not openly identifiable. Instead, they act clandestinely and ambush callously and purposefully in order to sow ethno-cultural distrust.[225]

Based on the above interrelated definitions of resilience, especially by Lucini and Masten, resilience in the *open society* may be understood as the will and ability of a society to prevent, withstand and recover from incidents which alter connections and relationships (including the trust in them) in the society and to the society and are perceived as negative, by mustering its material, social and psychological capital in a concerted effort.

Strategic Resilience may be understood as a subset of the Open Society Resilience which is concerned with such incidents which have been deliberately caused with a terrorist intent.

3.3. Limitations

Although ensuring the security of the citizens is the most rudimentary task and noble duty of the state, there is widespread negligence of this fact, also in open societies. Any terrorist attack on its civilian population or other soft targets is an attack on the sovereignty and legitimacy of the state and its acting authorities. In any response to the terrorist threat against its citizens, it is first and foremost the state which has the commanding, coordinating and instructing role. Without a carefully and professionally led effort by the government as a whole, a joint approach by the society as a whole which is necessary for *Strategic Resilience* against terrorism is not possible. Reflective of this indispensable role of the authorities in this effort, this work is focusing on identifying and defining the essential levers the government and the authorities respectively need, to generate, to activate and to sustain the desired resilient response. This is done in absolute clarity

225 See National Security Coordination Centre 2004, 65.

that the success of a whole-of-society-approach as advocated in the *Strategic Resilience* concept, hinges on the actions and cooperation of non-government stakeholders across the society.

The author is aware that the characterisation of the open society, as used in this work, is generalised and not all countries which identify themselves as open societies would fit this description in its entirety. The author is also aware that societies, despite sharing the qualities here attributed to an "open society", do have their own national culture, history, identity, leadership and demographics which may equally affect how each society addresses and responds to a potentially traumatic event, like a terrorist attack. Allowing this inherent diversity in the efforts of open societies to mitigate and muster a resilient response to the terrorism threat, in this research the author believes that it will give additional relevance and credibility to any general patterns the analysis will be able deduce from the societies' behaviours recorded in the case studies.

As terrorist methods and patterns of attack are constantly developing across the globe, the authorities also are responding with new counter- or mitigating measures of their own. The description of activities in Chapter Six and Seven cover programmes and measures up to the end of 2019. The findings of each case study however demonstrate that each country over time appears to develop strong preferences in regard to how they choose to address the terrorism threat and build resilience. The author therefore suggests that the state measures, assessed till the end of 2019, the types and styles of measures chosen reflect more than merely a picture of a certain point in time, but rather have a general validity.

While the work has been informed in preparation for and during the writing through background conversation with practitioners among others during the *RUSI Resilience Conference* 2015 (London), *OECD Counter Terror Conference* 2016 (Berlin), *World Counter Terror Congress* 2016 (London) *CBRN Conference* 2018 (Berlin) and *Crisis Prevention Conference* 2019+20 (Berlin), all information in this document is solely based on open-source materials. This means that in the analysis of the country case studies in Chapter Six and Seven, also only such programmes and measures were assessed which were publicly acknowledged by the authorities at the time of writing.[226] Occasionally the author has been unable to independently verify

226 Public acknowledgement of existing capabilities may be delayed as one example from Singapore shows: As a response to a bomb attack on its oil refineries and a hi-jacking of a ferry, by members of the *Japanese Red Army* and *Popular Front for*

official government statements concerning a country's existing specific capability to deal with the terrorism threat. To reduce the reliance on a single source of information in security critical areas the author had to rely on his own estimates based on historical evidence of the authorities' specific capabilities in dealing with equally serious – though not terrorism-related – disasters in the past, like the SARS or H1N1pandemic for example.

the Liberation of Palestine in July 1983, the Singapore Government in secrecy set up a dedicated counter- terrorism police similar to the German *GSG 9*. Only 1991, after the successful raid on Singapore Airlines flight at Changhi Airport hi-jacked by Pakistani terrorists, by that newly formed unit, its existence became public and was officially acknowledged. See Public Service Division at Prime Minister's Office Singapore 2015 ; See National Security Coordination Centre 2004, 20–21.