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Terrorist attacks against the natural environment

A phantom or a real danger

Ataques terroristas ao meio-ambiente Um fantasma ou um perigo real

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Dossiê TERRORISMO

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Terrorist attacks against the natural environment

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MARTIN HEGER*

Abstract

During the last two decades legal scholars have discussed scenarios of so-called "eco-terrorism". In fact there was one attack on a Tokyo underground station in the nineties involving poisonous gas and causing numerous deaths. This paper deals with the question whether the scenario of "eco-terrorism" is a real danger and how we should define this kind of offences.

Keywords: Eco-Terrorism; London Attack 2005; Fukushima Catastrophe.

Resumo

Durante as duas últimas décadas estudiosos têm discutido cenários do assim chamado "eco-terrorismo". Na verdade, houve um ataque em uma estação de metrô em Tóquio nos anos noventa envolvendo gás venenoso e causando numerosas mortes. Este artigo trata da questão sobre se o cenário do "eco-terrorismo" é um perigo real e como devemos definir este tipo de delito.

Palavras-chave: Eco-Terrorismo; Ataque de Londres em 2005; Catástrofe de Fukushima.

A. Introduction

During the last decades scholars have discussed various scenarios of modern terrorism. One of these scenarios – Islamic motivated terrorism¹ – came to light with the attacks on the World Trade Center on 11 September 2001. Another scenario discussed involves terrorist attacks against the natural environment as part of a so-called "eco-terrorism". These attacks are either carried out using traditional weapons or the often-discussed "dirty bomb", i.e. biological weapons manufactured and misused by terrorists.²

The term "eco-terrorism" can be misleading since its wording conveys the idea of terrorist measures aiming to protect the environment, i.e. ecologically motivated terrorism.³ In the following however, I will employ the term when referring to terrorist attacks against the natural environment.

1 Reality: Two terrorist cases

Let me start with two actual cases of terrorism that took place in the last two decades.

A group of religiously motivated terrorists attacked underground stations in two large cities, both capitals of important powers. In both cases a lot of people died and many more were injured. When looking at the subject of my speech however, there are significant differences between the two.

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The London attack 2005, conducted by an affiliate of the terror network Al-Quaida, involved tools customary in terrorist attacks during the last century, i.e. bombs, weapons and other explosive substances. 56 people were killed. Whereas ten years prior to this, the Tokyo attack in 1995 triggered by members of the Omu Shinrikyo sect, involving 13 deaths and more than 1000 injured, was executed with a poisonous gas called Sarin.

The people in London died of the impacts of the explosion such as the release of enormous pressure. The people in Tokyo died of inhaling the poisonous air.

Our natural environment's groundwork consists of water, soil and air. Drinking water, fresh air and soil that can be used for agriculture are the basis of human life throughout the world.

The terrorists in Tokyo abused one of the natural elements and used it as a killing instrument. They deprived humans of fresh air, thus shattered their basis of life. The attack in Tokyo was perhaps one of the first terrorist attacks involving elements of our natural environment and the ones that followed – namely the one on the Twin Towers in New York City and on the train station in Madrid in March 2004 – did not utilize any environmental medium to cause harm to people.

2 Fiction: One discussed scenario

In the light of the Fukushima catastrophe in Japan, a result of an earthquake and a Tsunami in March 2011, many discussions challenging the safety of nuclear power stations aroused throughout Germany and the world. One of the focal points were the possible consequences of an aircraft crashing into a nuclear power station.

The German scholar Hans-Georg Dederer of Bonn University for example, has dealt with the issue in: "Nuclear Power Stations in the sight of the terrorism". The official answer is that especially the older nuclear power stations in Germany are not prepared for a case like this. Airplane routes could be organized in a manner that will make it almost impossible for an accident to wind up in a crash as described above. But it is possible that terrorists will hijack an airplane and let it crash into a nuclear power station. The hijacking of an airplane is a scenario that, as we all can recall, was accomplished by the 09/11 terrorists ten years ago in a painfully successful way. The result of such a crash would be a disaster for the natural environment across many miles from the nuclear power station as well as for all the people living and working in the area. In Germany surely thousands would die and many more would be seriously injured. An area within a circle of approximately 40 km would be uninhabitable for centuries. It is certain that a crash on a German nuclear power station would cause more victims and damages than the attacks in New York and Washington in September 2001 altogether. In these days, terrorist attacks on our natural environment, the air, the soil and the water around nuclear power stations do not seem unrealistic.

On the basis of both these examples – the attack in Tokyo 16 years ago and the fictional scenario in Germany – I would like to discuss some contemplations on the figure of terrorism against the natural environment. The great danger involved may be discussed once in a while, but, as explained above, there are only a few cases.

B. Structural elements of terrorism against the natural environment

When talking about terrorist attacks against the natural environment there are two possible scenarios. On the one hand terrorists could pollute water, soil or air and destroy natural resources like forests or agricultural areas. On the other hand they could destroy constructions like dams or walls against water and the infrastructure that protect humans from natural forces.

Can every attack with an outcome like this be referred to as terroristic? The answer is no!

1 "Common" crimes against the natural environment

The pollution of our natural environment involving massive risks for humans may also be considered a regular crime against the environment⁵ and must not automatically be categorized as a terrorist attack. Section 330 paragraph 2 of the German Criminal Code for instance, declares the following as an especially serious case of an environmental crime: "Whoever, by an intentional act under Sections 324 to 329: 1. places another human being in danger of death or serious health damage or a large number of human beings in danger of health damage; or 2. causes the death of another human being, shall in cases under number 1, be punished with imprisonment from one year to ten years, in cases under number 2, with imprisonment for not less than three years."

And Section 330a penalizes the Serious Endangerment by Release of Poisons:

- (1) Whoever diffuses or releases substances which contain or can generate poisons and thereby causes the danger of death or serious health damage to another human being or the danger of health damage to a large number of human beings, shall be punished with imprisonment from one year to ten years.
- (2) If by the act the perpetrator causes the death of another human being, then the punishment shall be imprisonment for not less than three years.

2 Traditional "core" crimes

Similar conclusions may be drawn looking at the destruction of natural resources or buildings. These actions are in most cases considered as Damaging Property (Section 303), Destruction of Structures (Section 305) or Arson (Section 306). For example Section 305 paragraph 1 states: "Whoever unlawfully destroys, in whole or in part, a building, ... dam, ... or another structure, which is the property of another, shall be punished with imprisonment for not more than five years or a fine." If someone destroys a dam and causes a flood in a city, he can be punished for the Destruction of structures.

To set a fire in a forest can be categorized as Arson; see for instance Section 306 paragraph 1 of the German Criminal Code: "Whoever sets fire to or, as a result of setting a fire, destroys in whole or in part: [...] 5. forests, heaths or moors; 6. agricultural, nutritional or forestry facilities or products, shall be punished with imprisonment from one year to ten years." Heavier penalties statutes Section 306b paragraph 1: "Whoever, as a result of an arson under Sections 306 ..., causes serious health damage to another human being or health damage to a large number of human beings, shall be punished with imprisonment for not less than two years." According to Section 306c: "If the perpetrator, as a result of an arson under Sections 306 to 306b, at least recklessly causes the death of another human being, then the punishment shall be imprisonment for life or for not less than ten years."

3 Acts of terrorism

Typically these cases are not related to terrorist attacks. The destruction of a wall or something likewise in most cases fulfills the criminal offence of Damaging or Sabotage. Categorizing such an act as terrorism against the natural environment can only be considered for exceptional cases. In order to label a crime as terroristic, it is required that the pollution or destruction of the natural environment is combined with the intent to kill or to harm people as part of a terrorist plan. It makes a difference whether someone just wants to destroy the natural environment or wants to destroy the natural environment combined with the intent to kill or to harm people in the very same way it could have been achieved using bombs or other weapons.

4 War Crimes against the natural environment

On the other hand damages to the natural environment can be collateral damages of military attacks during an armed conflict. This was the case when in the late sixties U.S. Forces bombed a Jungle Route in Vietnam using Agent Orange, an insecticide. Today this would be considered a war crime under the Rome Statute of the International Criminal Court of 1998.⁷ So enunciates Art. 8 paragraph 2 b) (iv) of the ICC-Statute: "Intentionally launching an attack in the knowledge that such an attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated."

This is the first codification of crimes against the natural environment under International Law⁸ but it does not offer a genuine link to terrorism. A military attack in an international armed conflict involving chemical or biological weapons or causing collateral damages to the natural environment cannot be referred to as an act of terrorism. However, it is possible that a group of terrorists may act in a way that is by all means comparable to military procedures in an international armed conflict. Some politicians and lawyers compared the terrorist attacks on the World Trade Center to a bombardment in war. But let me, at this point, come back to one of my examples: The usage of poisonous gas was a prominent feature of World War I but it was also utilized in operations against the Kurds conducted by Saddam Hussein in 1988 in Northern Iraq. Since some decades the usage of poisonous gas in war is prohibited by international law. Today "Employing poison or poisoned weapons" is a war crime, a criminal offence under Article 8 of the ICC-Statute (Art. 8 paragraph 2 b) (xvii)). But nevertheless it remains an instrument of modern terrorism; this is especially underlined by the attack on the Tokyo underground station in 1995.

Furthermore there are activities involving damage to the natural environment that model a legal grey area in between military acts and measures of ecological terrorism. Again Saddam Hussein, who gave the order to inflame the oil-rigs in Kuwait during his retreat from there at the end of the second Gulf war in February 1991, can serve as an example. ¹² As a result of this, the oil-rigs were on fire until November 1991 causing massive oil pollution in the region. This measure is, speaking for myself, to be considered as *revenge* for failure in war and cannot be referred to as a military act.

C. Poisoning of drinking water

1 A short retrospective in legal history

Looking at legal history especially considering terrorist crimes against the natural environment, we will find one interesting criminal offence: The poisoning of drinking water in a contained spring. In the words of the famous German philosopher Otfried Höffe of Tübingen University this criminal offence is an example of intercultural crime. This assumption is especially based on the awareness that a phenomenon like the criminalization of the poisoning of drinking water can be found throughout all epochs of legal history and across criminal codes of every modern society. Therefore the poisoning of drinking water is in the view of Höffe an intercultural environmental crime. I am not sure about his categorization as an intercultural crime but I think that the existence of such an offence in nearly every contemporary and historical legal system suggests that attacks against the natural environment with the intent to harm numerous people – as it is typical for modern terrorism – are not novel. There were similar criminal acts in the past.

2 The offence of "Poisoning Dangerous to the Public"

Today Section 314 paragraph 1 of the German Criminal Code criminalizes "Poisoning Dangerous to the Public": "Whoever poisons, or mixes materials which are dangerous to health into: 1. water in contained

springs, wells, pipes or drinking water storage facilities ..., shall be punished with imprisonment from one year to ten years." Section 308 statutes that "(2) If by the act the perpetrator causes serious health damage to another human being or health damage to a large number of human beings, then punishment of not less than two years shall be imposed". Furthermore: "(3) If by the act the perpetrator at least recklessly causes the death of another human being, then the punishment shall be imprisonment for life or for not less than ten years."

In today's legal practice in Germany very few cases involving "Poisoning Dangerous to the Public" are recorded. Nevertheless the poisoning of drinking water could be a prototype of terrorist attacks against the natural environment.

D. Concluding remarks

Let me, at this point, offer you a conclusion: People's fear of terrorist attacks against the natural environment is induced by several factors. Terrorism against the natural environment is not the most frequently used method of terrorism but we can surely detect examples in the past and can furthermore easily imagine terrorist attacks against the natural environment in our near future. It is absolutely essential that we distinguish terrorist attacks from other crimes against the natural environment. Here we must especially regard crimes involving attacks on property and the infrastructure as well as war crimes against the natural environment.

If we do not sharply distinguish the crimes mentioned above, the strong procedural means designed to fight terrorism might also be applied on these other crimes. Only if the perpetrator acts as a member of a terrorist group or with a special terrorist intent we can categorize his crimes against the natural environment as acts of terrorism and use all the available procedural measures to fight terrorism under national procedure law.

Notes

- For details see *Mark A. Zöller*, Terrorismusstrafrecht, C.F. Müller Verlag, Heidelberg 2009, p. 45-83. To the term "terrorism" in criminal law in general *Maunuel Cancio Meliá*, Zum strafrechtlichen Begriff des Terrorismus, in: Goldtammer's Archiv für Strafrecht (GA) 2012, p. 1-13.
- ² For the history of biological weapons see *Friedrich Hansen*, Biologische Kriegsführung im Dritten Reich, Campus-Verlag, Frankfurt 1992. For a list of modern biological weapons see *Bernd Heinrich*, Münchener Kommentar zum Strafgesetzbuch, Band 5, Waffenrecht, Teil A, Abschnitt II: biologische Waffen.
- ³ See *Clive Walker*, Terrorism and the Law, 2011 (Oxford University Press), para 1.121.
- ⁴ See i. e. *Hans-Georg Dederer*, Kernkraftwerke im Visier des Terrorismus, in: Die Öffentliche Verwaltung (DÖV) 2005, p. 621-632.
- ⁵ For details see Karl Lackner/Kristian Kühl, Strafgesetzbuch, Kommentar, 27. ed. Verlag C.H. Beck, München 2011, Vor § 324 § 330d StGB.
- ⁶ Translation hereandafter by Michael Bohlander.
- ⁷ For further details see *Matthias Reichart*, Umweltschutz durch völkerrechtliches Strafrecht, Verlag Peter Lang, Frankfurt a. M. 1999, passim.
- ⁸ For further details see *Christian Tomuschat*, Schädigung der Umwelt als Verbrechen nach Völkerstrafrecht, in: Festschrift für Walter Rudolf, p. 104 ff.; *Martin Heger*, Die Europäisierung des deutschen Umweltstrafrechts, 2009, p. 27-33; *Gerhard Werle*, Principles of International Criminal Law, 2. ed. T.M.C. Asser Press, 2009, para 1201 1210.
- ⁹ See i. e. *Hans-Georg Dederer*, Kernkraftwerke im Visier des Terrorismus, in: Die Öffentliche Verwaltung (DÖV) 2005, p. 621-632.
- ¹⁰ See i. e. Hans-Georg Dederer, Krieg gegen den Terror, in: Juristenzeitung (JZ) 2004, p. 421 ss. (424 ss., 429).
- ¹¹ For further details see *Ines Petersen*, Die Strafbarkeit des Einsatzes von biologischen, chemischen und nuklearen Waffen als Kriegsverbrechen nach dem IStGH-Statut, Berliner Wissenschafts-Verlag, 2009.
- ¹² Michael Kloepfer/Hans-Peter Vierhaus, Umweltstrafrecht, Verlag C. H. Beck, München, 2. ed. 2002, para 170; Matthias Reichart, Umweltschutz durch völkerrechtliches Strafrecht.
- ¹³ See *Otfried Höffe*, Eine Konversion der kritischen Theorie, in: Rechtshistorisches Journal (RJ), 1993, p. 70, 77, and Gibt es ein interkulturelles Strafrecht?, 1999.