

COST Action C17: Fire Loss to Historic Buildings

Working Group 3: Cultural and Financial Value

Malicious Attacks on Heritage Buildings

Arson

1 Arson is now one of the most serious threats to heritage buildings throughout the World. The reasons for this form of attack vary enormously from economic fraud to cultural disaffection. The nature of the attack can likewise arise from sophisticated fire raising by criminals using science and technology to sudden unplanned attacks by vandals using any locally available materials. The impact however, regardless of the initiating event, may be the total loss of all the physical property both of contents and structure. The following real examples illustrate that the target can be a high profile internationally known building or a more generalised category of building type. Both serve to illustrate the task being confronted.

La Fenice

2 On Friday 30 March 2001 a court in Venice found two electricians guilty of setting fire to La Fenice opera house in the city in 1996. Enrico Carella and his cousin, Massimiliano Marchetti, were found to have set the building ablaze because their company was facing heavy fines over delays in repair work. Mr Carella, the company's owner, was sent to prison for seven years, while Mr Marchetti received a six-year sentence. The rebuilding of the famous theatre, for which Giuseppe Verdi composed several operas, was delayed and did not re-open until 2004. The fire on 29 January 1996 happened as the Teatro La Fenice was being renovated. The subsequent rebuilding did not go according to plan and the original German-Italian consortium of Holzmann Romagnoli had asked for supplementary and fee waivers before the work was re-tendered by the City Mayor Paolo Costa.

Sinsheim Mosque Germany

3 On the 18 November 2004 unknown individuals threw a Molotov cocktail at a mosque near Heidelberg Germany. A glass bottle filled with flammable liquid was tossed against the Sinsheim mosque's entryway around 12:30 a.m. The fire was discovered and extinguished after it caused around €10,000 damage to the wooden door and the glass window. In Holland shortly before the filmmaker Theo van Gogh was murdered by a suspected Islamic fundamentalist and this led to a series of attacks on Muslim and Christian facilities

Wooden Churches Poland

4 In Poland church fires were found to be a particularly high danger because between 1999 and 2000 50 churches burnt down. The most frequent cause of fire is not damage to electric installations, but a fire lit deliberately. Poland has a substantial amount sacred wooden architecture, which makes an important, often unique, contribution to the European heritage. It consists in part of wooden churches, built between the 14th and 19th centuries, mainly Catholic, but there are also other churches, including Protestant, Orthodox, Catholic-orthodox, Dukebor, Jewish and Mariavites churches. Wooden religious architecture also includes chapels, belfries and morgues. The scale of the task is significant given that

presently there are 2785 items of religious wooden architecture in Poland and six of them (from the 15th and 16th centuries) are nominated to the World Heritage List.

The Arson Threat

5 It is difficult to be precise about the growth in arson globally due to statistical variations but there is good evidence that in many developed countries arson is a growing problem. The CTIF Centre of Fire Statistics demonstrated in 8 selected countries [Canada, Germany, New Zealand, Russia, South Korea, Japan, USA and UK] between 1993 and 1999 that intentional fires accounted for 18 percent of all building and structure fires. This represents a huge level of unwanted and unwelcome activity given the fact that a significant part of any country's built environment contains numerous heritage sites [In some major cities like Edinburgh, Venice, and Rome the figure is very high] and that certain property classifications [like religious buildings] are subject to regular attacks of the sort identified earlier.

6 To illustrate the growth trend in the UK the incidence of arson in occupied buildings, according to the UK Arson Prevention Bureau, has steadily increased over the past decade as shown in the following Table.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Total number of fires	108.1	107.4	107.5	108.6	113.1	116.6	118.8	116.9	112.9	115.9	112.6	112.6
No. of Malicious	23.6	24.9	26.3	27.7	36.1	35.7	35.7	32.7	30.5	31.8	32.2	34.5
% malicious	29	23	24	25	32	30	30	28	27	27	28	30.6

7 Whilst there are many documented causes and solutions to the arson threat there are also particular circumstances related to heritage buildings that raise the risk presented from intentional attacks. For example historic structures may:

- Contain or be constructed in materials particularly vulnerable to fire like wood
- Elements of structure will contain voids due to adaptations that spread fire and its products
- Modernisation may hide building services and associated features or structural elements that heighten the risk of undetected initiation or early structural failure.
- Transfers and unclear ownership may lead to poor risk management
- Economic and funding priorities sometimes prevent investment in mitigating passive or active systems of fire defence
- Hazardous materials may be present on industrial or military heritage sites.
- Criminal activity such as smuggling or theft may give rise to arson to cover the original crime.

8 There are many documented responses to combating arson that suggest there is high value in the heritage community developing a sustainable and internationally supported strategy to help preserve the individual national heritage of each country.

9 This is especially so when it is realised that within the European Union there are few special requirements placed in law on heritage buildings. A recent study supported by the European Union Community Action Programme in the Field of Civil Protection coordinated by Raddnings Verket, the Swedish Rescue Services Agency, found that no heritage specific fire safety legislative requirements were in force in Austria, Belgium, Denmark [except a 5 yearly inspection], Finland, Germany [other than a building permit for certain uses], Greece, Sweden, The Netherlands [Subject to some heritage and safety controls] and UK. In Ireland, Italy and Norway guidance or in Italy's case technical controls exist.

10 The proposal therefore is that the Cost C17 Working Group 3 should consider extending its investigations into the area of arson reduction and protection. This will require research into national statistics, identification of the national risk profile and subsequent identification of preventative action. Whilst there are cultural and national variations in the risk presented in any approach there is high value in sharing best practice to help improve sustainability and add intelligence to create an effective response to what is an increasingly alarming threat.

Terrorism

11 In the earlier section threats arising from vandals, criminals and activists have been described. Unfortunately it is now necessary to add to that form of attack the increased threat of extremist action from disaffected groups in society. Prior to September 11th it was the case that the number of lethal terrorist incidents in Europe had declined although the total number of incidents rose. The escalation of the terrorist incidents that had occurred in Europe and Eurasia, often were in fact acts of arson or vandalism. However terrorism has become an increasingly worrying threat to all those responsible for national icons or places of large public assembly.

12 This in part reflects the paradigm shift that occurred in New York when vehicles like aircraft became weapons instead of being defended against weapons. Sites that have crowds offer the terrorist anonymity and are internationally post card recognisable. Frequently they offer hard construction materials that cause maximum personal damage and lead to economic losses, including tourism. They have become the new targets. Well-known and frequently visited heritage buildings and sites that fall into this category are therefore susceptible. In addition security measures at higher-risk sites, like government centres, can serve to move the terrorist further away from the obvious iconic or transport centres to softer geographically open locations.

13 It is however important of course to retain a perspective. Lethal events are often infrequent and in comparison to the routinely accepted loss of life in any country are of a low order of magnitude. Usually the risk is simply disruptive as with left luggage [One example is 2.5 million emergency calls to unattended bags in a 10-year period in a transport environment with no active explosive devices found]. Society however demands active consideration of this threat and positive action to reduce both the possible occurrence and mitigate impact. This demands a sensible and systematic review of the likelihood and practical measures. In many areas action taken to reduce prevalent and active life threatening events such as fire and security will coincide with action designed to contain this extremist threat. There are many previous examples of this type of attack, especially where intolerance has existed, when individuals over generations have attempted and sometimes succeeded in destroying artefacts or symbols that they consider represent that intolerant burden.

14 Currently trans-national ideology based upon an Islamic fundamentalist cause that is global not geographically regionalised with localised extremism is seen as the new threat. This some commentators suggest is a misunderstanding of a threat that in reality comes from local groups that may share a common ideology but act independently and in sympathy without any central direction or control. The values ascribed to this fundamental form of belief demand subjugation and even annihilation. Personal relationships and sympathetic supporters therefore form the basis of the unstructured network of loose alliances. This is considerably different to the earlier and in some cases still current more usual form of threat in which the perpetrator belonged to an organisation that wanted to find a balance between mass innocent casualties and its political aim. That form of terrorist attack was often characterised by a warning and the terrorist seeking to escape and survive.

15 The economic cost of mounting a terror attack is low yet the economic impact can be extremely high. Reducing the risk is also difficult from the perspective of vigilance since the defender has to be systematically in advance of terrorist who needs only one success. This is a problem that some observers say will remain a real issue for some time with terrorism of this kind expected to last the next 20-30 years.

16 Again the practice of risk evaluation supported by sound policy and practice is the key. Co-ordination of best practice, education, investigation, advice, crisis management, business continuity planning, threat monitoring and risk assessment are all required. Technical issues that arise include the threat to people and contamination of the heritage site or workplace, physical violence and detection of weapons and malicious actions. The identification of specific high-risk sites and event scenarios, like those affecting faith premises as already observed in acts against Muslim and Jewish places of worship, is priority action since in this threat environment physically high levels of protection of all sites is impractical.

17 Intelligence and the recognition of connections attributed between causes [as with the desire to see the USA leave Islamic countries or resolve the Palestine issue] are important features to research and understand. Whilst these are simplifications they do serve to raise the matter as an important concern for those having the responsibility to protect national heritage.

Conclusion

18 There is a real and urgent need to evaluate the risk presented at heritage sites from malicious acts of vandalism, criminal attack and local or international terrorism. Many of the issues have common features there would be benefit in both gathering intelligence and knowledge collectively. That task could be an extension of the current role of the COST 17 Working Group 3 activity. The proposal would be subject to modest financial support to initially scope the issue and prepare a more definitive action programme bid seeking financial support from the European Union.

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