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**DISASTER VICTIM IDENTIFICATION IN THE INFORMATION
AGE: THE USE OF PERSONAL DATA, POST-MORTEM PRIVACY
AND THE RIGHTS OF THE VICTIM'S RELATIVES**

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Abstract

The digital age as we know it nowadays has not only transformed the way we communicate, bond and form relationships with each other, but has also created a digital world in which we are no longer anonymous anymore. The fast growth and advances in digital technology and on-line services have left many areas of research still unexplored, particularly related to post-mortem privacy following a disaster. In the immediate aftermath of a disaster, unmoderated footage and photos of the scene and/or deceased may be circulated across the globe before even the emergency services or media have reached the site. It is now easier than ever to learn about the victims and their personal lives due to advances in handheld mobile technology combined with ease-of-access to on-line social networking services (SNS) and micro-blogging technology. Although those advances may be used by next-of-kin actively searching for their missing relatives, they can also easily be exploited by trolls, scammers and the media. The paper's aim is to raise awareness of post-mortem privacy-related themes associated with disasters and in particular the issues affecting the deceased and needs of the surviving next-of-kin. The author's field of expertise is in the identification of victims of disasters, and as such the issues of post-mortem privacy raised here will not be discussed and analysed from a purely legal perspective, although reference to legislation will be made where relevant. Rather, this paper is intended to provide an in-sight into privacy themes relating to the interests of victims experienced in global disasters, whether survivors, the deceased or next-of-kin.

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1. Introduction

It is recognised that each disaster is different from another in scale and variety and, as such, a major disaster is an episode in which the number of fatalities is in excess of that which can be dealt with using the normal mortuary facilities¹ often creating challenges and problems mainly of a humanitarian nature. In the aftermath of a disaster, all too often interests of persons affected by natural disasters are insufficiently taken into account, particularly with regards to privacy issues. In this context it has been noted that ‘ordinary individual lives can be mercilessly exposed to the glaring spotlight of unwanted publicity’² as ‘if the dead were celebrities’³. Following a disaster, it is now easier than ever to learn about the victims and their personal lives. An authorised user of Facebook will be able to obtain information about a person without having to make an explicit effort to communicate with him/her. Nor do they need to share a personal relationship with each other⁴. Social media are playing an increasingly important role in disasters, not only for reporting or alerting purposes, but also as a means of tracing missing persons in recent disasters. Micro-blogging sites such as Twitter and Social Networking Services like Facebook are not only used to communicate with lost relatives and share missing person information but may also be used to share images of the deceased in an attempt to identify them.

2. Post-mortem Relational Privacy: a Fine Line between Privacy, Decency and ‘the Right to Know’

Disasters often attract widespread media attention. The increasing use of Internet and, subsequently, social networking and micro-blogging sites, has changed the way information and news are distributed. In the immediate aftermath of a disaster, unmoderated visual material taken by bystanders and status updates may be circulated across the globe before even the emergency services or the media have reached the site; the bystander becomes in many ways the journalist. Death, economic loss, human suffering, and social disruption are the standard themes in the media’s portrayal of disaster⁵. Large natural disasters may have a serious impact on local communities and survivors due to loss of relatives, their homes, possessions, livelihoods, unemployment, the social issues of displacement and breakdown of traditional social support. Sudden invasion of privacy and publication of photographs

¹ A. Busuttill, J Jones and M Green, *Deaths in Major Disasters – The Pathologist's Role* (London, The Royal College of Pathologists, 2001), at 5.

² R Cohen-Almagor, “Privacy: Ethical and Legal Considerations” (2006) 6 *Communication Law Review* 47-72.

³ J Scanlon and C McCullum “Media Coverage of Mass Death: Not Always Unwelcome” (1999) *Australian Journal of Emergency Management* 14 (3) at 55-59.

⁴ V Chen, T Gho and W Li, “Welcome to Facebook: How Facebook Influences Parent-Child Relationship” (2010) Available at <http://owni.fr/files/2010/10/Welcome-to-Facebook-How-Facebook-influences-Parent-child-relationship.pdf> (accessed 10 January 2013).

⁵ D Wenger, J Thomas, and C Faupel, *Disaster Beliefs and Emergency Planning* (Newark, Disaster Research Center, 1980), at 40.

of their misfortune that were taken during the media coverage of a disaster are often met with resentment from local communities⁶, however research data also suggests that some victims and relatives welcome a chance to talk to reporters, albeit in a controlled situation⁷. Information on the missing persons or deceased and eye-witness accounts are considered ‘hot’ news, or as Shipp portrays it: “*dead sells news*”⁸. In the next paragraphs, the concept of post-mortem privacy will be explored followed by an examination of privacy issues which may arise in the aftermath of a disaster.

2.1 Context of Post-mortem Privacy in Disaster Victim Identification

Before we explore the concept of post-mortem relational privacy, we need to understand what a ‘disaster’ and ‘privacy’ entail.

Disaster Victim Identification (DVI) has been defined from both humanitarian and forensic perspectives; however no universally accepted definition has been agreed. The World Health Organization’s (WHO) definition of a disaster is focussed on the humanitarian effort by declaring it “a sudden ecological phenomenon of sufficient magnitude to require external assistance”. The most commonly adopted definition in the forensic literature refers to a disaster as “*an episode in which the number of fatalities is in excess of that which can be dealt with using the normal mortuary facilities*”⁹. The latter definition is flexible albeit subjective and its applicability very much depends on the local capability to deal with an event involving multiple deaths. What is clear, however, is that there is no universally agreed definition of disaster victim identification.

The term “privacy” is frequently used in sociological and legal contexts, yet there is no single definition or analysis or meaning of the term. It is, however, commonly understood as an insulation from observability, a value asserted by individuals against the demands of a curious and intrusive society¹⁰. An intrusion of privacy can be regarded as “*demeaning to individuality and an affront to personal dignity*”¹¹. Berg pointed out that throughout life, two principles are of importance for an individual to control his/her identity¹²: 1) the ability to control what information other people know

⁶ S Becker, “Psychosocial Care for Adult and Child Survivors of the Tsunami Disaster in India” (2007) 20 *Journal of Child and Adolescent Psychiatric Nursing* 148–155.

⁷ J Scanlon, “Research about the Mass Media and Disaster: Never (Well Hardly Ever) The Twain Shall Meet” in D McEntire (ed), “*Disciplines, Disasters and Emergency Management Textbook - FEMA EMI Higher Education online textbook*” (2009) available at <http://training.fema.gov/EMIWeb/edu/ddemtextbook.asp> (accessed 3 January 2013)

⁸ D Shipp, “Inflated Casualty Reports: Inaccurate and Unethical” (2006) 15 *Journal of Information Ethics* 11-13.

⁹ Royal College of Pathologists, “*Deaths in Major Disasters—The Pathologists Role*” (2000), 2nd edn. London: Royal College of Pathologists.

¹⁰ R Post, “The Social Foundations of Privacy: Community and Self in the Common Law Tort” (1989) 77 *California Law Review*, at 957.

¹¹ J Whitman, “The Two Western Cultures of Privacy: Dignity versus Liberty” (2004) 113 *Yale Law Journal* 1151-1164.

¹² J Berg, “Grave Secrets: Legal and Ethical Analysis of Postmortem Confidentiality” (2001) 34 *Connecticut Law Review* 81-122

and; 2) the ability to shape his/her own public image and personality or in other words, to control what others know about them.

It has been argued that legal rules suggest that the dead do not have rights.¹³ Indeed, the EU data protection and privacy directives do not recognise the rights of the dead and the post-mortem privacy jurisprudence finds its origin mainly in freedom-of-information acts and case law. The *post-mortem relational privacy concept* recognises that, although a person has died, information about him or her continues to exist and has posthumous value to the decedent's surviving relatives.¹⁴ It is here that we can ask the question: how should we balance the deceased's right to shape their image and protect their dignity, with the rights of freedom of expression, societal interests and the privacy interests of the deceased's families?

Relational privacy has its foundation in two premises. Individuals maintain their relational status with relatives even after those family members die. Secondly, although the dead no longer have a privacy interest in personal information about themselves, their surviving relatives who wish to cherish their memories of the deceased, may well do.¹⁵ Autopsy photos, death scene images, pictures of the deceased in coffins, and tapes and transcripts of phone calls or black boxes that contain the last words of the deceased are frequently at the forefront of post-mortem privacy controversies.¹⁶ The interest in this topic is heightened by a number of high profile cases, mainly in the USA, and an array of jurisprudence on the subject is available.¹⁷ One such case is that of Nicole Catsouras, an 18-year old girl, who died following a car crash and close-up photos of Nikki's disfigured body were subsequently leaked by an investigator before going viral on the Internet, while the most graphic images were also emailed to her parents and sent to cell-phones belonging to Nikki's sister and cousin.¹⁸

Invasion of post-mortem relational privacy mainly relates to images of the deceased, although cases of other intrusions have been reported such as hacking of mobile phone messages of 7/7 bombing victim's families¹⁹ and 'trolling' of relatives²⁰.

¹³ K Smolensky, "Rights of the Dead" (2009) 37 *Hofstra Law Review* 763–64, at 763

¹⁴ A Hering, *Post-mortem Relational Privacy: Expanding the Sphere of Personal Information Protected by Privacy Law* (University of Florida, Unpublished thesis, 2009)

¹⁵ *Ibid*, 14.

¹⁶ C Calvert, "The Privacy of Death: an Emergent Jurisprudence and Legal Rebuke to Media Exploitation and a Voyeuristic Culture" (2005) 26 *Loy L.A. Ent L. Rev* 133-169.

¹⁷ See for a number of high profile cases: C Emery, "Relational Privacy—a Right to Grieve in the Information Age: Halting the Digital Dissemination of Death-scene Images" (2011) 42 *Rutgers Law Journal* 765-818; C Calvert, "Support Our [Dead] Troops: Sacrificing Political Expression Rights for Familial Control over Names and Likenesses" (2008) 16 *William & Mary Bill of Rights Journal* 1169; C Calvert, "Salvaging privacy & tranquillity from the wreckage: images of death, emotions of distress & remedies of tort in the age of the Internet" (2010) 2010 *Michigan State Law Review* 311-340; A Hering, *Post-mortem Relational Privacy: Expanding the Sphere of Personal Information Protected by Privacy Law* (University of Florida, Unpublished thesis, 2009)

¹⁸ C Emery, "Relational Privacy—a Right to Grieve in the Information Age: Halting the Digital Dissemination of Death-scene Images" (2011) 42 *Rutgers Law Journal* 765-818

¹⁹ The Guardian. "Phone Hacking: Families of 7/7 Victims 'were Targets'" (2011) Available at <http://www.guardian.co.uk/media/2011/jul/06/phone-hacking-families-7-7-targets> (accessed 4 August 2012)

2.2 *Privacy and Publication of Visual Material of Disaster Victims*

Photos are an excellent medium to promote strong feelings to the general public, however they may also intrude in to the post-mortem relational privacy of surviving relatives who have to cope with the sudden loss of a relative. Those relatives, who may still be waiting for news on the fate of their loved one(s), may be confronted with graphic images or shown a loved one's photo because of some development unknown to them.²¹ We have to distinguish here between publications of visual material by professional bodies such as the press and those shared online by individuals, e.g. on social media, for sensationalist reasons or financial gain.

2.2.1 *Visual material and the media*

Internet and mobile technologies have been particularly effective in linking disaster events to written accounts, photographs and web blogs, connecting to a larger audience that can vicariously participate in the developing news item.²² Recent disasters such as the DANA air crash in Nigeria are an example, most notably the images of the burned body of the deceased being removed from the scene. In the Sukhoi Superjet 100 plane crash in Indonesia, images of bodies supposedly of victims of this plane crash were uploaded, which later turned out to be from another air crash.²³ It is also not uncommon to see photos of bodies stacked in the morgue with grieving family members desperately attempting to find their missing relative, or photos of grieving parents embracing their deceased children.²⁴ An interesting observation was made by Li and Rajaratman who noted, that in their experience, religious beliefs regarding death will be brought up in the media and exploited.²⁵ Li and Rajaratman's article refers to the 2004 South-East Asia Tsunami in particular. Buddhists believe that cleansing rituals must be performed on the dead to calm the 'wandering spirits' of those who met a violent death. The authors cited a news article that implied that the 'wandering spirits' were roaming the Buddhist temples (temporary morgues) to look for their bodies, while appearances of ghosts were also reported. Journalists were allegedly asked not to report on those 'ghostly' sightings as it could potentially affect the tourist industry. Another question which arises is: what is the impact of such stories for locals who are too frightened to travel to the temple in

²⁰ Mail Online, "Internet Troll Banned from Social Networking Sites for Posting Fake Pictures of Gunshot Victim with Bullet Wounds in her Head" (16 March 2012) available at <http://www.dailymail.co.uk/news/article-2116048/Internet-troll-banned-social-networking-sites-posting-fake-pictures-gunshot-victim-bullet-wounds-head.html> (accessed 1 August 2012).

²¹ See note 3 above.

²² M Laituri and K Kodrich, "On Line Disaster Response Community: People as Sensors of High Magnitude Disasters Using Internet GIS" (2008) 8 *Sensors* 3037-3055.

²³ The Jakarta Globe, "Student Apologizes After Spreading Fake Pictures of Sukhoi Victims" (17 May 2012) available at <http://www.thejakartaglobe.com/home/student-apologizes-after-spreading-fake-pictures-of-sukhoi-victims/518394> (accessed 38 December 2012).

²⁴ See for example: WhatsOnTianjin, "3,373 Dead in Japan Quake, Tsunami, Body Bags and Coffins Running Short" (16 March 2011) available at <http://www.whatsontianjin.com/news-154-3-373-dead-in-japan-quake-tsunami-body-bags-and-coffins-running-short.html> (accessed 14 September 2012).

²⁵ M Li and D Rajaratnam, "Waves of Destruction: A Portrayal of Natural Disasters by Mass Media" (2006) 22 *Malaysian Journal of Communication* 97-115.

a bid to identify the bodies for fear of the ‘spirits’; is their right to identify their loved one denied by publication of such stories?

Furthermore, not only are photos of the dead which are published by the media significant *‘but equally prominent, and far more poignant, are photographs of personal belonging with great sentimental value such as family photo albums that managed to survive the catastrophe (...) we recognise its value in this context is pronounced as a central marker of time and identity, of where “we” have been and who “we” are, as well as a family relic to be passed down from one generation to the next’*.²⁶ Indeed, such personal items act as *“important symbols of a common humanity that invites us to activate a powerful stranger relationality”* and enforce a sense of personal connectedness to this unknown victim of the tragedy, whether he/she has survived or perished in the disaster. Scanlon refers to this as “humanisation”,²⁷ a focus of the media to show the victims as individuals. It can however also be argued that this is merely a voyeuristic approach to view *en masse* an individual’s intimate moments and earthly belongings in the aftermath of personal tragedy.

Best practices guidelines for organisations involved in mass emergency response increasingly recognise how sensitive information of the deceased, injured, non-injured or missing persons, should be communicated.²⁸ Although the media has addressed this issue as well, there is still uncertainty as to what constitutes ‘sensitive’ in this respect. The Society of Professional Journalists (SPJ) states in its code of ethics that journalists should *“be sensitive when seeking or using interviews or photographs of those affected by tragedy or grief”* while *“showing good taste. Avoid pandering to lurid curiosity.”*²⁹ Concerns about victims of the 2004 Asian tsunami and their grieving relatives were raised by medical professionals who urged that *‘the public’s right to information should not outweigh the right of victims of natural disasters to privacy, confidentiality and dignity.’*³⁰ It is interesting to note the Katrina disaster in New Orleans in this respect. The Federal Emergency Management Agency (FEMA) had requested that photos of dead bodies would not be shown by news agencies in their coverage of Hurricane Katrina. This was met with an angered response, with some claiming that *“newsrooms can’t tell the truth of this story if they don’t show some bodies”* or *“sometimes a dead body IS the story.”*³¹ Cohen-Almagor made a fitting observation: *“The right to free expression and free media, supplemented and*

²⁶ ‘Lucaites, “No Caption Needed” (2011) available at <http://www.nocaptionneeded.com/2011/03/the-family-of-man/> (accessed 13 September 2012).

²⁷ See note 7 above.

²⁸ G Seynaeve, *Psycho-Social Support in Situations of Mass Emergency. A European Policy Paper Concerning Different Aspects of Psychological Support and Social Accompaniment for People Involved in Major Accidents and Disasters* (Ministry of Public Health, Brussels, Belgium, 2001), at 16.

²⁹ The Society of Professional Journalists (SPJ), “SPJ Code of Ethics” Available at <http://www.spi.org/ethicscode.asp> (accessed 3 January 2013).

³⁰ A Bhan, “Should Health Professionals Allow Reporters inside Hospitals and Clinics at Times of Natural Disasters?” (2005) 2 *PLoS Medicine* e177.

³¹ Poynter, “FEMA: Photo Request “Not a Directive” (8 September 2005) available at <http://www.poynter.org/archived/covering-hurricanes/71054/fema-photo-request-not-a-directive/> (accessed 17 September 2012).

strengthened by the concept of the public's right to know, does not entail the freedom to invade individual privacy without ample justification"³².

In large-scale disasters, complete control of the media is very difficult.³³ Indeed we must also consider local cultural values and how death is perceived in societies around the world. In certain countries, it is accepted to publish images of a disaster scene in newspapers, occasionally showing bodies still *in situ* or removed during the recovery operation, such as the Yak-24 plane crash in Yaroslavl involving the Russian Lokomotiv hockey team.³⁴ It is also not uncommon for bystanders to film the remains of disaster victims on their mobile phones and upload those images or movie captures on the Internet for everyone to see. In Thailand for example, it is common for first responders to pose with a body as this is seen as sign of pride and as a way of showing that one has helped take care of the deceased.³⁵ While such practices may cause outrage in other societies, it is an accepted practice of local media which can further be explained by cultural differences, lax regulation and a desensitised approach to death. This practice may be particularly harmful for relatives who have lost someone in another country and are confronted with harrowing images on the Internet. Indeed, Taylor³⁶ argues that the local press is more likely to print images of deceased non-nationals, compared to imagery of bodies of nationals when they may be recognised by the local community. However, this does not mean that next-of-kin cannot access those images from a different geographical area, particularly if they search for relevant (news) articles in a bid to establish the facts of what happened.

Nonetheless, media intrusion is not always unwelcome; in some cases next-of-kin may actively want to seek coverage to publically vent their frustration and anger in relation to the identification process or inform the public of possible lawsuits or investigative developments.³⁷ This is often a response to delays in the identification process or lack of communication thereof from authorities dealing with the incident, as for example in the aftermath of the 7/7 terrorist bombings in London.³⁸ Reports of misidentifications are also commonly reported by the media, for example the case of Dmitry Ivanyuta, who was initially listed among the dead after an ATR 72-200 plane

³² See note 2 above.

³³ See note 3 above.

³⁴ A prominent (close-up) photo of rescuers lifting a stretcher with the body of a victim out of the river were published in several media (e.g. see The Hindu, "43 Killed in Russian Plane Crash" (7 September 2011) available at <http://www.thehindu.com/news/international/article2432951.ece> (accessed 18 August 2012).

³⁵ This posing is also referred to as a "trophy shot" See: NineMSN, "Thai 'Trophy Shots' Shock Mourners" (12 November 2012) available at <http://news.ninemsn.com.au/world/2012/11/12/15/45/why-thai-ambulance-workers-take-trophy-shots> (accessed 2 December 2012).

³⁶ Cited in: W van Riet and S Roberts, "Seeing Dead People: Exploring Visuals of Dead Bodies in the Media" (2008) available at <http://www.mediamonitoringafrica.org/images/uploads/20080910deadbodies.pdf> (accessed 4 December 2012).

³⁷ See note 3 above.

³⁸ S Laville, "Mother's Fury at 'Slaughter of the Innocents'" (12 July 2005) available at <http://www.guardian.co.uk/uk/2005/jul/12/july7.uksecurity5> (accessed 10 December 2012).

crashed near the western Siberian city of Tyumen in April 2012.³⁹ Those reports are frequently initiated by the relatives themselves in order to express their frustrations with formal investigations being carried out. In such scenarios, relatives effectively waive their right to privacy.

2.2.2 *Images of the Dead and Identification*

In large-scale disasters such as the 2004 South-East Asia tsunami and the 2011 Japan tsunami, it was not uncommon to see galleries with hundreds of images of decomposed bodies in a bid for relatives to identify their missing family members⁴⁰. Several sites were created in the aftermath of the 2004 Tsunami with images of bodies taken in hospitals including many foreigners. Recently, in the 2011 Sendong flooding in the Philippines, photos of decomposed bodies, washed-up on shore, were uploaded on a Facebook profile in an album called ‘GAPNOD with DEAD BODIES’.⁴¹ While this is not an accepted practice according to Western values, we should not see those practices only in light of different cultural values but perhaps also as well-meant initiatives to assist in the identification of those deceased.⁴² Indeed, in many countries and jurisdictions, visual identification is still legally admissible as proof of identification.⁴³ This may lead to an interesting paradigm of post-mortem relational privacy when we look at this issue in light of the identification of missing persons. From the perspective of a relative, the main question to be asked here is: does the need of the families to know the fate of a missing relative override the fact that post-mortem photos of their deceased relative – perhaps in a state of decomposition - are displayed publically? Or what if a body is ‘recognised’ from a photo, while in fact this may have been someone else? Or what if a body is shown live on the news and this is the moment relatives first learn about the death of a family member or friend?

Of further note, is that the media is not the only source which may exploit images of the deceased. Shortly after the 2004 Tsunami, Photos and DVD’s began to appear on local markets showing scores of bodies of tsunami victims, mostly tourists.⁴⁴ This material, selling for up to 80 baht per picture, was mostly sold to European tourists,

³⁹ RT, “Social Network Miracle: Siberian Plane Crash Victim Found Alive a Week Later” (9 April 2012) available at <http://www.rt.com/news/tyumen-misidentified-victim-alive-550/> (accessed 7 September 2012).

⁴⁰ J Beauthier, P Lefevre and E De Valck, “Autopsy and Identification Techniques” in: N Mörner (ed.) *The Tsunami Threat - Research and Technology: INTECH* (2011) available on: <http://www.intechopen.com/articles/show/title/autopsy-and-identification-techniques>. at 692.

⁴¹ Facebook, “GAPNOD with DEAD BODIES” (2011) available at <http://www.facebook.com/media/set/?set=a.217176351695285.54549.125208300892091&type=1> (accessed 2 December 2012)

⁴² We note that similarities can be drawn with for example publically accessible unidentified bodies databases set-up by police organisations and Coroners in the USA. Information surrounding the case, circumstances of recovery, identifying features and images of the body, sometimes of decomposed facial features and tattoos, can be searched in a final attempt to identify the deceased with help of the public. One such initiative is the National Missing and Unidentified Persons System (NAMUS) - <https://identifyus.org/en> (accessed 17 September 2012).

⁴³ R Ruwanpura et al, “Identification of Severely Burnt Bodies Due to Post Collision Fire: Bus – Truck Collision at Induruwa, Southern Sri Lanka” (2012) 3 *Journal of Forensic Research* 143.

⁴⁴ C Merli, “Religious Interpretations of Tsunami in Satun Province, Southern Thailand: Reflections on Ethnographic and Visual Materials” (2009) 14 *Svensk Religionshistorisk Rsskrift* 154-181.

with one of them explaining that “*a lot of people want them. A lot of people want to see these*”.⁴⁵ Although opinions are divided on whether such pictures should be publically sold, it has been said that “*as long as there is a market people will supply it.*”⁴⁶ Not only did the sale of this material provide the locals with a source of income, it was also used as a means of religious propaganda to condemn the faith of sinners to local communities and demonstrate the need to fully focus on their religion in order to prevent such punishment. In this scenario, intrusion of privacy is not only limited to commercial exploitation of images of the deceased but also as an ‘educational’ tool to remonstrate the faith of sinners. Indeed, the fact that many bodies of tourists were found naked or with a limited amount of clothes was interpreted as a sign of punishment and resultant violation of bodies of sinners for visiting hard-hit tourist resorts like Khao Lak and Phuket – as it was suggested that many people merely visited such places for the purpose of satisfying their sexual lust and committing sins - rather than contributed to the natural forces of the Tsunami waves.⁴⁷ Those intrusions may be seen as a deviation from Western values but may represent culturally accepted and unregulated practices in other parts of the world and in the chaotic aftermath of natural disaster, such practices are hard to control.

2.3 Disclosure of Personal Information

Another point to consider is the release of ‘personal data’ in disasters by authorities to aid the emergency response and identification process of those injured and deceased. This information may include data of a sensitive nature such as medical records. The precise definition of personal data varies across the EU due to the slightly different ways in which the Data Protection Directives are implemented in law, but, fundamentally, personal data “*is any information that relates to an identified or identifiable living individual*” (known as a “data subject”) and an identifiable person is “*one who can be identified, directly or indirectly, in particular by reference to an identification number or to one or more factors specific to his physical, physiological, mental, economic, cultural or social identity.*”⁴⁸ This definition suggest that the EU directive is applicable to *living* subjects and not the deceased.

In the UK, the release of health records for the purposes of identification of the deceased and investigation of certain person’s deaths will usually fall under the jurisdiction of the Coroner. However, there is no statute law that requires provision of confidential information to the police or to courts, even where the matter in issue is a serious crime. Medical records remain confidential after death but may be made available to the deceased’s personal representatives or any person who may have a claim arising out of the deceased’s death, subject to some restrictions, under the terms of the Access to Health Records Act 1990.⁴⁹ Coroners are entitled to obtain copies of medical information that are relevant and necessary to their inquiries. For example, in

⁴⁵ The Guardian, “Phuket Traders Sell Tsunami Souvenirs” (28 March 2005) Available at <http://www.guardian.co.uk/world/2005/mar/28/tsunami2004.thailand> (accessed 27 December 2012).

⁴⁶ *Ibid*, 45.

⁴⁷ See note 44 above.

⁴⁸ EU Directive 95/46/EC - The Data Protection Directive, available at <https://www.dataprotection.ie/viewdoc.asp?DocID=92> (accessed 12 January 2013).

⁴⁹ The Data Protection Act 1998 is applicable to *identifiable, living subjects*.

response to the destructive earthquake that struck Christchurch on 22 February 2011, the Privacy Commissioner issued a code permitting agencies to collect, use and disclose personal information of victims of the earthquake for the purpose of assisting in dealing with the disaster. The so-called ‘Christchurch Earthquake Code 2011’ acted as a temporary amendment to the Australian Privacy Act in response to difficulties encountered in Australia and Canada with the data protection laws which inhibited the disaster relief and identification of victims and survivors of the Boxing Day tsunamis.

A point to consider here is the negative impact the release of personal (and confidential) data may have. If close relatives are unaware of certain elements of the deceased’s personal life, access to this private information after death may not only have a negative impact on the grieving process but may also interfere with the post-mortem privacy of the deceased. For example evidence of an affair, financial debts or preparations for a divorce procedure may be exposed. In addition, DNA identification may further expose previously unknown information. Cases have been reported in which the purported genetic relationship was inconsistent with the genetic data, for example when it is discovered that the unsuspecting father cannot be the biological father of one of his children or when a surviving child is informed that he/she is adopted. Such issues should be treated with great care as they may cause significant distress to the surviving relatives. A further problem that exists in this context is that a person who is presumed killed in a disaster may in fact still be alive, for example a Person Unable to Self-Identify (PUI). In theory, the living person has to provide informed consent to release their personal information including medical and dental records. Particularly in large-scale natural disasters, this may cause considerable problems.

The release of post-mortem information relating to the deceased has been given vast attention in the legal jurisprudence. This not only includes autopsy reports, but may further include scene photos, autopsy photos of the deceased and cause and manner of death. In aviation disasters, transcripts retrieved from the voice recorders are made public during inquiries and/or published in accident investigation reports. In many occasions, voice recordings are made public. While this is not common practice, hearing the last words of those killed in the disaster may cause distress to the surviving next-of-kin and may be seen as an intrusion of privacy. Legal proceedings to prevent the publications of voice recordings in those circumstances are not uncommon. Most notably, legal court proceedings were filed to prevent the release of the voice recordings of the Challenger disaster on 28th January 1986 in which the spacecraft Challenger exploded seventy-three seconds after lift-off, and all seven astronauts aboard were killed. Legal arguments brought up in the court proceedings in such cases are particularly centered around national Privacy Act legislation and the definitions and interpretations of ‘personal information’⁵⁰ and ‘identifiable individual’. In the Court of Appeal proceedings, NASA asserted that release of the tape would encroach upon the personal privacy of the astronauts’ families by subjecting them to a replay of the voices of their loved ones, “*an intrusion on their grief which certainly would exacerbate feelings of hurt and loss*”.⁵¹ Legal arguments

⁵⁰ This term is used interchangeably with the legal term ‘Personal Data’.

⁵¹ United States Court of Appeals District of Columbia Circuit, “NEW YORK TIMES COMPANY v. NATIONAL AERONAUTICS AND SPACE ADMINISTRATION No 87-5244 (1987) 271 U.S.App.D.C. 304, 57 USLW 2087, 15 Media L. Rep. 2012. Available at <https://bulk.resource.org/courts.gov/c/F2/852/852.F2d.602.87-5244.html> (accessed 2 January 2013).

in this case focussed on the ‘personal information’ contained in a voice. It was argued that because the voice “*does not contain personal information - information somehow related to an individual's life.*” *What, then, does the court consider to be “personal” information? Where is the distinction between the non-personal voice and the personal citizenship, date of birth, and place of birth?*.”⁵² These legal issues require a complex balance between the privacy rights of the dead and the needs of the next-of-kin.

A disaster in another country involving foreign nationals may pose an additional problem in terms of privacy of ante-mortem personal information. The ‘host’ country in which the disaster took place has the legal jurisdiction to handle the disaster in accordance with its national legislation. The host country may request a country where the missing persons reside to provide ante-mortem identification information to identify the deceased. The provision of a missing person’s ante-mortem personal information will be subject to the national privacy and data protection laws in the host country, which may be less stringent than other countries. As the host country takes possession of the personal information of those killed in a disaster, further questions may arise. For example, what procedures does the host country have in place to protect the personal data of foreign nationals after the identification process is completed? Does the national law have any provisions to prevent that personal information of foreign nationals will not be used for publications or research?

3. Privacy and On-line Tracing of Missing Persons in Disasters

In the immediate aftermath of a disaster, next-of-kin unaware of the whereabouts of their relative(s) will use various media in a bid to trace missing persons. Such initiatives may include on-line applications and social media or circulation of leaflets with missing person information. By providing this information to the public, privacy issues invariably come to light.

3.1 Circulation of Missing Persons Information

One method of tracing missing persons following a disaster is circulation of printed leaflets with information about the missing persons. The information contained on those leaflets invariably consists of; a recent photograph of the missing person; name, age, sex, hair style and colour; a description of clothes or jewellery the person was wearing at the time of disappearance; location where the person was last seen; other physical characteristics such as tattoos or scars; and contact details of next-of-kin. Few guidelines exist as to how the media should deal with the reporting of missing persons, and when this would infringe the privacy of surviving relatives. Leaflets are publically displayed on noticeboards, lamp posts, manually distributed to members of the public or posted online on dedicated websites for tracing missing persons in a particular disaster. Unfortunately, those well-meant initiatives also attract opportunists who may use the provided information and contact details for news stories or personal gain. In the immediate aftermath of the 9/11 terrorist attacks, the New York Times reacted to the missing-persons fliers by assigning a half-dozen reporters to call the phone numbers on them and, if they got permission, to write profiles on those who

⁵² *Ibid*, 51.

appeared on the fliers.⁵³ In this respect, the BBC's editorial policy on privacy and missing persons state that the editor(s) should consider "at what point the right of the missing person to privacy outweighs the public interest in identifying them, or the desire of family and friends to trace them".⁵⁴ The right of the missing person to privacy is a balanced consideration based on criteria "in relation to their age, their legal status, their state of health and the circumstances of their disappearance."⁵⁵

3.2 On-line Tracing Initiatives

Following the 2004 Tsunami, various on-line initiatives were launched to aid in tracing missing persons in disasters. While initially created by individuals, corporate organisations followed quickly, launching various dedicated applications in the aftermath of a disaster. Most notably, they included Google Person Finder,⁵⁶ Social Networking Services and micro-blogging sites. Google Person Finder is a web application that provides a registry and message board for survivors, family, and loved ones affected by a natural disaster, to post and search for information about each other's status and whereabouts. The Google Person Finder has been activated for a number of disasters, including the 2011 Christchurch Earthquake, the Haiti and Chile earthquakes in 2010, as well as the floods in Pakistan last year Brazil in 2012.

Another player in the on-line field of tracing initiatives is social media. The concept of online social networking dates back to the 1960's,⁵⁷ but its use has been massively expanded since the introduction of the Internet. Facebook allows people to share common interests, connect with friends, participate in discussion forums and express themselves through a personalised blog.⁵⁸ The revelation behaviour and apparent openness to reveal personal information to vast networks of loosely defined acquaintances and strangers is a phenomenon associated with on-line social networking.⁵⁹ Personal information such as contact information (including email addresses and phone numbers), educational history, hobbies and interests, sexuality, drink and drug-related activities, visited locations and intimate photos of friends and families may be obtained. Users however appear largely unconcerned about privacy risks⁶⁰ and in the event of a disaster, personal information can easily be retrieved. In the aftermath of the Virginia Tech shooting, information dissemination activities arose where people who were geographically distributed, 'discovered' the names of the shooting victims by using on-line sites as points of gathering and collaboration

⁵³ N Mills, "Images of Terror: Enduring the Scars of 9/11" (2009) 56 *Dissent* 75-80.

⁵⁴ BBC, "Editorial Policy Guidance Note: Privacy and Missing Persons" (n.d.) Available at <http://downloads.bbc.co.uk/guidelines/editorialguidelines/pdfs/missing-people.pdf> (accessed 2 January 2013).

⁵⁵ *Ibid*, 54.

⁵⁶ See <http://google.org/personfinder/global/home.html> (accessed 7 September 2012).

⁵⁷ R Gross and A Acquisti (2005) "Information Revelation and Privacy in Online Social Networks" (2005) Proceedings of WPES'05, Alexandria, VA: ACM, at 71-80.

⁵⁸ J Kim and K Ahn, "Social Networking Service: Motivation, Pleasure and Behavioural Intention to use" (2011). 54 *Journal of Computer Information Systems*, 92-101.

⁵⁹ See note 57 above.

⁶⁰ See note 57 above.

well in advance of official news releases.⁶¹ This may cause much distress when the names are released before close relatives have been informed officially. In this respect, the release of names of victims to the media by the responding authorities should also be given particular attention.

Facebook is another important social networking initiative not only for tracing missing persons but also as a means of commemoration, particularly after solidarity-producing events such as natural disasters and mass tragedies.⁶² In the aftermath of the 2010 Haiti Earthquake, a dedicated Facebook profile was created for tracing those believed to be missing in Hotel Montana, Port-au-Prince in Haiti.⁶³ Details and photos of those missing, including personal effects, physical characteristics and room numbers where they were staying, were uploaded by relatives in a bid to find their loved ones. A link to the personal Facebook profile of the missing person was frequently included. When a missing person was identified and announced on the Facebook page, condolences and messages of support were uploaded on the page by Facebook members unknown to the relatives of the missing person.

Other initiatives used for tracing missing persons in disasters include Twitter⁶⁴, the Youtube Missing Person Finder Channel, 'Familylinks'⁶⁵ and Skype.⁶⁶ In large-scale disasters such as the 2011 Tsunami and Earthquake in Japan, much of the infrastructure may be destroyed due to the destructive forces or power outages, including fixed Internet access points on personal computers, television and phone landlines. Web-enabled devices such as mobile phones and smartphones are primary sources of media access in those situations⁶⁷ and may further aid in re-unification of family members.

While the aforementioned initiatives are intended to aid the relatives of those missing, uploading personal details of those missing in a bid to trace them have also lead to abuses of this publically available data. Identity theft and life insurance fraud are realities in the wake of large disasters.⁶⁸ Publication of the victim list or posted missing person information has seen a variety of scams that propagate through email

⁶¹ L Palen, "Online Social Media in Crisis Events" (2008) 3 *Educause Quarterly* 76-78.

⁶² J Hawdon and J Ryan, "Social Relations that Generate and Sustain Solidarity after a Mass Tragedy" (2011) 89 *Social Forces* 1363–1384.

⁶³ See for example: Facebook, "Haiti Earthquake Hotel Montana" (2010) available at: <http://www.facebook.com/pages/Haiti-Earthquake-Hotel-Montana/245595172631> (accessed 1 December 2012).

⁶⁴ M Kaigo, "Social Media Usage during Disaster and Social Capital: Twitter and the Great East Japan earthquake" (2012) 34 *Keio Communication Review* 19-35.

⁶⁵ Created by the International Committee of the Red Cross (ICRC). Families can search for missing persons or survivors can register their status – <http://www.familylinks.icrc.org> (accessed 14 August 2012)

⁶⁶ K Yoshinaga, "The Role of Social Media in Japan During Natural Disasters" (2011) Available at <http://yaleisp.org/wp-content/uploads/2011/04/Talk-SocialMediaKY201104201.pdf> (accessed 3 January 2013)

⁶⁷ A Acar and Y Muraki "Twitter for Crisis Communication: Lessons learned from Japan's Tsunami Disaster" (2011) 7 *International Journal of Web Based Communities* 392 – 402.

⁶⁸ People, "Tsunami nations offer US Advice" (6 September 2005) available at http://english.peopledaily.com.cn/200509/06/eng20050906_206823.html (accessed 17 September 2012).

or social networks in a number of disasters, such as the 2004 South-East Asia Tsunami, the Concorde plane crash in 2000 and the 9/11 terrorist attacks. Names of missing persons are also easily available from social networking sites, for example Facebook pages set-up for tracing missing relatives. Often links to the personal pages of the missing person are provided along with contact details such as email addresses and phone numbers of next-of-kin. Scammers may troll for this information to exploit in their email scams.⁶⁹ Another case of abuse of on-line technology was reported in the 2010 Japan Earthquake in which relatives uploaded information on the Google Person Finder in the hope of finding their missing family member. Someone subsequently placed false information on the website that the missing person was deceased, resulting in much grief to the family.⁷⁰ The missing person later contacted the family and informed them that he was indeed alive.⁷¹ Subsequently, warnings on the reliability of information, specifically death notices, have been released.⁷²

Similar occurrences were reported by Kendra and Wachtendorf after the 2001 World Trade Center Attacks, where websites falsely stated that people who were reported missing had been found.⁷³ Hoax emails were sent to the families and friends of people missing in the Asian tsunami disaster, falsely confirming their deaths.⁷⁴ After the 2011 tsunami in Japan, 1.7 million fraudulent websites and fake domains were created by cybercriminals asking for donations,⁷⁵ sometimes contacting family and friends via Facebook. One of the 'trolls' modus operandi is to "*scan for pages of the deceased, steal the pictures, doctor them, and post them onto social media sites such as Facebook*" with one of them claiming *'I ruin family, friends and grief tourists' view of a dead person.*⁷⁶

⁶⁹ M Dyrud, "I brought you a good news": An analysis of Nigerian 419 letters (2005) In: Proceedings of the Association for Business Communication Annual Convention, 2005. Available at <http://69.195.100.212/wp-content/uploads/2011/04/07ABC05.pdf> (accessed 3 January 2013).

⁷⁰ Metro, "'Sick' Messages on Google People Finder leave Japan Earthquake Families Distraught" (14 March 2011) available at <http://www.metro.co.uk/news/858045-sick-messages-on-google-people-finder-leave-japan-earthquake-families-distraught> (accessed 17 September 2012).

⁷¹ Guardian, "Earthquake Rescue Teams arrive from around the World" (14 March 2011) available at <http://www.guardian.co.uk/world/2011/mar/14/earthquake-rescue-teams-japan-tsunami> (accessed 17 September 2012).

⁷² JapanProbe, "Warning: Do Not Trust Death Reports on Google Person Finder" (14 March 2011) available at <http://www.japanprobe.com/2011/03/14/warning-do-not-trust-death-reports-on-google-person-finder/> (accessed 17 September 2012).

⁷³ J Kendra and T Wachtendorf, "Reconsidering Convergence and Converger: Legitimacy in Response to the World Trade Center Disaster, Terrorism and Disaster: New Threats, New Ideas" (2003) 11 *Research in Social Problems and Public Policy* 97-122.

⁷⁴ The hoaxer's alleged motivation for his actions was an image of a dead child tsunami victim which affected him so much that "he somehow saw that by sending these emails he was providing some sort of closure to ... families". See: The Guardian. *Tsunami Email Hoaxer Jailed*. <http://www.guardian.co.uk/technology/2005/jan/25/indianoceansunamidecember2004.uknews?INTCMP=ILCNETTXT3487> (accessed 19 September 2012).

⁷⁵ U. S. Postal Service, "Chief FOIA Officer Report" (2012) available at <http://about.usps.com/who-we-are/foia/chief-foia-officer-report-fy2012.pdf> (accessed 2 January 2013), at 30.

⁷⁶ Mail Online, "'Help me, mummy. It's hot here in hell': A Special Investigation into the Distress of Grieving Families caused by the Sick Internet Craze of 'Trolling'" (24 September 2011) Available at <http://www.dailymail.co.uk/news/article-2041193/Internet-trolling-Investigation-distress-grieving-families-caused-trolls.html> (accessed 2 January 2013)

This disturbing on-line behaviour will undoubtedly raise questions as to whether social networking providers should do more to curb such malicious attacks on grieving relatives. The unpoliced nature of these vast streams of data has made clear that not all information can be trusted, and may also add substantial grief to the families of those missing. Furthermore, questions may arise as to how the personal data provided to Internet Service Providers may be used or protected. Indeed, terms and conditions for use of those services do not provide information for how long the data will be stored or if any data will be deleted if a missing person is found alive. Moreover, a maximum term for the retention of personal data in disasters is hard to define: the identification process may take many years as seen in the 9/11 World Trade Centre terrorist attacks or the 2004 South-East Asia tsunami for example.

4. Disasters and On-line Memorialisation and Grief

It is recognised that a support system of family members, friends, relatives, and others in the individual's social network may serve to moderate the traumatic impact of a disaster on survivors, e.g. the sudden loss of a relative⁷⁷. The perception of survivors, relatives and friends of missing persons, that they are being supported and that they belong to a valued social group and community is beneficial in helping them cope with the after effects of a disaster⁷⁸. Social Networking Services can facilitate such support systems.⁷⁹

Social Networks Services such as Facebook have led to new ways of remembering the deceased in a more public way than ever before. The deceased's online social identity can be represented in the network or community through continued online interactions with the deceased or the memorialising of online profiles to aid grief recovery.⁸⁰ Upon notification by relatives, an individual's Facebook profile page can be 'memorialised', which allows confirmed friends to view the profile and leave posts in remembrance, although access details will not be provided and content cannot be altered. Facebook's death policy requires 'proof of death' such as an obituary or news article.⁸¹ However, what if the missing person is never found? A year after the devastating Earthquake

⁷⁷ J Cook and L Bickman, "Social Support and Psychological Symptomatology following a Natural Disaster" (1990) 3 *Journal of Traumatic Stress* 541-556.

⁷⁸ K Kaniasty, "Predicting Social Psychological Well-being following Trauma: The role of Post-disaster Social Support" (2012) 4 *Psychological Trauma: Theory, Research, Practice, and Policy* 22-33.

⁷⁹ A Vicary and R Fraley, "Student Reactions to the Shootings at Virginia Tech and Northern Illinois University: Does Sharing Grief and Support Over the Internet Affect Recovery?" (2010) 36 *Personality and Social Psychology Bulletin* 1555-1563; M Dutta-Bergman, "Community participation and Internet use after September 11: Complementarity in channel consumption" (2006) 11 *Journal of Computer-Mediated Communication*, article 4. Available at <http://jcmc.indiana.edu/vol11/issue2/dutta-bergman.html> (accessed 7 August 2012).

⁸⁰ J Brubaker and J Vertesi, "Death and the Social Network" (2010) Presented at CHI 2010 Workshop on HCI at the End of Life: Understanding Death, Dying, and the Digital. Atlanta, GA, USA. Available at <http://www.dgp.toronto.edu/~mikem/hcieol/subs/brubaker.pdf> (accessed 11 July 2012).

⁸¹ Facebook, "Memorialization Request" (n.d.) available at <http://www.facebook.com/help/contact/?id=305593649477238> (accessed 16 July 2012).

and Tsunami in Japan, over 3200 people are still listed as missing.⁸² In large open disasters, such as the 2004 Tsunami in South-East Asia or the 2011 Earthquake and Tsunami in Japan, it is inevitable that a missing person may remain unidentified for a considerable time, or perhaps may not be found at all. Should special provisions be made in policies for those missing, presumed dead? Since content can be posted but not altered on a memorialised page, questions can also be asked about how the page will be moderated e.g. in case of cyber-bullying.

Commemoration is not restricted to the deceased user's profile alone. Collective group pages may also be created by a user to commemorate an event. In the case of the Hotel Montana Facebook page,⁸³ relatives of the deceased from all over the world and unknown to each other can commemorate their loved ones and grieve together as a group, something that would not have been possible a decade ago. At the anniversary of the event, relatives post 'virtual' candles or other messages on the page to commemorate and remember all those who lost their lives. A study by Brubaker and Vertesi of content posted on MySpace identified that users return to the deceased profiles over extended periods of time posting comments as they process their grief and share their reflections of the person.⁸⁴ Facebook hosts many memorial pages dedicated to various disasters, some of which have occurred decades ago even before Facebook was created in 2004. They may have been created to keep the memory alive of those who have perished, but also as a means to find justice for the victims, for example "Justice for the 96 Hillsborough Victims"⁸⁵ or the profile page "Bhopal Gas Tragedy - World's Worst Industrial Disaster awaits Justice"⁸⁶

'Virtual' worlds are another phenomenon introduced in the past decade and present a new means of remembering those killed in a disaster. The most well-known is Second Life, a 'virtual' world in which people can create their own virtual identities and 'worlds' where random users can interact with each other. Most notably, virtual monuments and grave stones were created in second-life to remember each of the victims of the Virginia High Tech Shooting in 2007⁸⁷ and the 9/11 terrorist attacks.⁸⁸

⁸² The Telegraph, "Japan Earthquake and Tsunami: 478 Bodies Remain Unidentified one Year on" (9 March 2012) Available at <http://www.telegraph.co.uk/news/worldnews/asia/japan/9132634/Japan-earthquake-and-tsunami-478-bodies-remain-unidentified-one-year-on.html> (accessed 8 August 2012).

⁸³ See note 63 above.

⁸⁴ See note 80 above.

⁸⁵ Facebook, "Justice For the 96 Hillsborough Victims" (2009) available at <http://www.facebook.com/pages/Justice-For-the-96-hillsborough-victims/89338592084> (accessed 16 July 2012).

⁸⁶ Facebook, "Bhopal Gas Tragedy - World's Worst Industrial Disaster awaits Justice" (2010) available at <http://www.facebook.com/bhopalgastragedy> (accessed 16 July 2012).

⁸⁷ A Hughes, "Site-Seeing" in Disaster: An Examination of On-Line Social Convergence. In: F Fiedrich and V van de Walle, "*Proceedings of the 5th International ISCRAM Conference*" (Washington, DC, USA, May 2008) available at <http://www.cs.colorado.edu/~palen/Papers/iscram08/OnlineConvergenceISCRAM08.pdf> (accessed 12 August 2013).

⁸⁸ B Trezise, "Touching Virtual Trauma: Performative Empathics in Second Life" (2012) 5 *Memory Studies* 392-409.

Moderation of online memorials is often ungoverned⁸⁹ or the creation unsanctioned.⁹⁰ Violations of terms and conditions or privacy intrusions for example by posting harmful content are therefore left to the users or members of a group to monitor and report.

5. Discussion and Conclusion

A disaster is often an unexpected event resulting in a sudden loss of a relative which may have long-lasting effects on a community and survivors themselves. Not only do surviving relatives have to cope with the sudden loss of a relative, their personal lives and that of the deceased are also propelled in to the limelight of the media; a phenomenon that is facilitated by the rise of Social Networking Services and increasingly advanced search engines. With the advances in the digital age, more and more of our personal lives is stored on-line or on digital media. This creates complexities not only for the relatives who wish to identify their loved one, but may also add an additional burden in terms of determining ownership of digital data, commemoration of the deceased and their 'digital legacy'. The need for death policies and thano-sensitive designs is now gaining recognition by ISPs, mainly due to adverse media attention and pressure from relatives.

In the event of death, a paradigm of post-mortem legacy becomes apparent; while the families may want to access personal 'on-line' accounts of the deceased as a means of coping with the death, there may also be a danger that 'unwanted' information is exposed contrary to the deceased's wishes – an invasion of the deceased post-mortem relational privacy.

As Calvert rightly acknowledges, privacy-of-death controversies has revolved around balancing the legal right of the public to information about the dead and the immediate relative's privacy rights, respect and dignity.⁹¹ In this article, attention to intrusions of privacy in disasters by the press, social media and its users and parties involved in the identification process were raised. Professional press bodies have 'codes of conduct' in place to govern the behaviour of journalists. The recent *Leveson inquiry*⁹² in the United Kingdom to examine the culture, practices and ethics of the press, resulted in further recommendations. The definition of personal data varies across the EU due to the slightly different ways in which the Data Protection Directives are implemented in law, however, the Directives is only applicable to living subjects and therefore not applicable to post-mortem privacy issues. Calvert recognises that post-mortem privacy jurisprudence arises from both common law, derived from legal jurisprudence, and freedom-of-information laws⁹³

⁸⁹ W Moncur and A Waller, "Digital Inheritance" (2010) available at <http://www.computing.dundee.ac.uk/staff/wmoncur/publications/2010-rcuk-digitalFutures.pdf> (accessed 15 August 2012).

⁹⁰ See note 88 above.

⁹¹ C Calvert, "The Privacy of Death: an Emergent Jurisprudence and Legal Rebuke to Media Exploitation and a Voyeuristic Culture" (2005) 26 *Loy L.A. Ent L. Rev* 133-169

⁹² The report and recommendations can be found at <http://www.levesoninquiry.org.uk/about/the-report/> (accessed 1 April 2013)

⁹³ *Ibid*, 91.

The availability of handheld mobile technology and on-line access has led to a situation where everyone can be a budding journalist and contribute to a news story. Un-moderated content such as graphic images of the deceased may be uploaded and spread over the Internet via web blogs, social profiles or micro-blogging sites. The rise of Social Networking Services and search engines has further resulted in loss of anonymity and personal information of victims and that of family members can easily be retrieved on-line. Cyber-bullies and Internet trolls increasingly target those affected by tragedy, fuelled in part by the degree of anonymity that the Internet provides.⁹⁴ The increasing use of web-based services has led to new forms of intrusions of post-mortem privacy in the event of death, and on-line providers and media should accept their social responsibility in drafting clear policies to minimise the distress for those surviving relatives after their loved one's sudden demise.

A distinction should be made between personal data that is *willingly shared* and *unwillingly shared*. Intrusions of privacy by individuals are difficult to control. Once information is posted it becomes increasingly difficult to remove particularly with the speed information is shared among internet users. While regulations are in place to protect the privacy of individuals and press control, prevention of on-line intrusions by individuals is often left to users, webhosting companies and Internet Service Providers. Social media providers are trying to curb those practices of publishing allegedly graphic and harmful material. For example, Facebook's terms and conditions state that "*(the user, sic) will not post content that: is hate speech, threatening, or pornographic; incites violence; or contains nudity or graphic or gratuitous violence.*"⁹⁵ The user's Facebook account may be suspended after violation of the terms and conditions. Furthermore, Facebook offers a 'report' button which allows users to report content which is deemed offensive.

Personal data of the deceased may also be willingly shared by relatives to trace missing persons. By submitting information to services such as Google Person Finder, the user agrees to the terms and conditions of the provider that data can be used in accordance with their privacy policies. Additionally, more than often Internet Service Providers will state that the submission of content is the sole responsibility of the entity that makes it available and thus any implications of violations in using the services, or liability of the company thereof, are less specifically defined.⁹⁶ Swire's metaphor of '*elephants and mice*'⁹⁷ concerning the legal regulation of the internet must be mentioned in this respect. In this principle, Swire explains that legal regulation can work against large companies subject to jurisdictional regulations ('*elephants*'), however due to their multi-national nature may cause legal issues concerning the jurisdictional choice of law and which sovereign's rules should apply

⁹⁴ See note 18 above.

⁹⁵ Facebook, "Statement of Rights and Responsibilities" (n.d.) available at <http://www.facebook.com/legal/terms> (accessed 30 March 2013).

⁹⁶ For example, Google's terms and conditions state that "*We may review content to determine whether it is illegal or violates our policies, and we may remove or refuse to display content that we reasonably believe violates our policies or the law. But that does not necessarily mean that we review content, so please do not assume that we do*". Google, "Google Terms of Service" (2012) available at <http://www.google.com/intl/en-GB/policies/terms/> (accessed 31 March 2013)

⁹⁷ P Swire, "*Of Elephants, Mice, and Privacy: International Choice of Law and the Internet*" (1998) Available at SSRN: <http://dx.doi.org/10.2139/ssrn.121277> (accessed 31 March 2013)

for a particular case. For this reason legal regulation is focussed on the mobile, individual users or small ISP's ('mice') but which are difficult to catch and are likely to try and avoid legal jurisdictions.

National legislation and legal jurisdiction is another important element with regards to privacy issues in disasters involving foreign nationals. The country in which the disaster takes place has legal jurisdiction over the handling of the disaster according to their national legislation and values. This will undoubtedly raise questions as to how personal information about the deceased is protected. After the identification process is completed or has ceased, it is often unclear where the personal data of the missing and the deceased will be kept, who will take responsibility for the data, who will have access to it or how long it will be stored. The Interpol DVI standards, *recommended* for use by Interpol's 190 member countries in disasters involving foreign nationals, provide limited guidance on those issues other than stating that "every DVI operation is subject to the laws of the country in which the disaster in question occurs".⁹⁸ Surprisingly, the terms 'privacy' or 'data protection' are not mentioned in the DVI guidance document. Secondly, the guidance document states that "(..) the first step in this process is to formulate agreements regarding the requirements applicable to the collection and transmission of AM data". Indeed, this statement excludes not only the handling of PM data but also any issues related to storage, protection or maintenance of identification data. Memoranda of understanding, mutual working agreements and standard operating procedures between parties involved in the disaster victim identification process may describe those procedures, however they are not legally binding.

To conclude, this article raised awareness of issues of post-mortem privacy in disasters. In the aftermath of a disaster, attention is more than often focussed on the deceased and their living relatives who –frequently- unwittingly find themselves in the spotlight of the (social) media. Information about those involved and images taken by individuals may be shared on social media before the authorities can respond to the disaster itself. The speed in which information is shared globally, in combination with a potentially large number of different legal jurisdictions where websites may operate, make it inherently difficult to counter intrusions of post-mortem privacy. The most appropriate solution to counteract any unwanted privacy intrusions is to have procedures in place to prevent images from being taken in the first place in the immediate aftermath of the disaster, including measures for crowd control, scene management and professional 'code of conducts' for local respondents to the disaster, such as emergency responders and law enforcement. In (natural) disasters this will, however, be almost impossible. Nor will it be entirely possible to exclude cultural attitudes surrounding death and its uses of visual material of the deceased from the equation. Additional recommendations, e.g. in the form of a resolution or guidance document, may be issued by Interpol to its member countries in terms of data protection, privacy issues, access to the personal data or any other issues concerning transmission, storage, access or release of personal data that may arise in the course of the identification process. Disasters involving foreign nationals will involve many cross-border agencies each of which may be governed by their own codes of conduct and local legislation, and the complexities involved in the disaster victim

⁹⁸ Interpol, "DVI guide" (2009) available at <http://www.interpol.int/INTERPOL-expertise/Forensics/DVI-Pages/DVI-guide> (accessed 31 March 2013)

identification process should be thoroughly examined in the future to prevent any additional distress to the relatives of the deceased.