The Management of Emotionally Disturbing Interventions: Emotional Triage as a Framework for Acute Emotional Support

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In the following text we will first look at the impact(s) of emotionally disturbing interventions – the so-called traumatic interventions or critical incidents – and the way in which victims of traumatogenic events can be supported in the acute stage. We will shed light on the way in which social sharing and open expression, can help the traumatized victims in recontructing their experiential world after being struck by traumatogenic events. Although, for some victims, early re-exposure to what they have been exposed to, can be harmful. Therefor, we will introduce the concept of emotional triage which can help mental health professionals manage their activities aiming at prevention, care and after-care of the psychotraumatic sequelae of trauma victims. Using a psychosocial matrix, emotional triage will lead to the categorization of victims in different groups: primary, secondary and tertiary victims. The management of emotionally disturbing and traumatogenic events will be expressed in terms of primary, secondary and tertiary prevention. Troughout this article, the Switel hotel fire (New Years Eve 1994-1995) in Antwerp, which lead to thirteen fatalities, will be used to illustrate the trauma experience of different categories of victims.

One of the secondary purposes of this article is to introduce a new terminology with respect to stress and trauma, introducing the French concept of effroi (psychological terror) as a central feature of the traumatogenic event. In terms of trauma interventions, this article will introduce the new concept of immediate recuperation session as a stepping stone to further emotional and psychological uncoupling from a shocking and/or traumatizing event.

Keywords: trauma, traumatogenic event, emotional triage, immediate recuperation session.

INTRODUCTION

In this article, we will try to put some clarity in the variety of effects of emotionally disturbing and potentially traumatic events. We will start by putting aside the widespreaded and overgeneralised concepts of *traumatic event* and *traumatic stress*, thus trying to reserve these terms for events which are really traumatising, and to watch over the restricted use of these terms. The traumatising character of an emotionally disturbing event is always the result of a subjective interpretation of this event by the individual struck by it and not merely dependent from objective cues in the given event. Both in the literature and the spoken language there is a too widespread use of the term *trauma*: these days, everything seems to become a trauma, and the result is then that the stricken victims develop a subsequent trauma after surviving one. As such, the causalilty between events and effects is very often unclear.

This conceptual lack of clarity influences the practice of psychosocial crisis intervention and early intervention. The best illustration being the whole psychological debriefing controversy and whether or not the CISM-techniques are effective. While the techniques of psychological defusing and debriefing (Raphael, 1986; Mitchell & Everly, 1993) were originally developed to support professional (or professionally trained) caregivers – such as firefighters, rescue workers and the personnel of police or emergency medical services – they have also been widely used (and researched upon) to support all kinds of victims of critical events. The problem being that the definition of a critical incident has always been very vague and that these CISM-techniques have rapidly conquered the whole trauma field, supposed to help the direct trauma victims, their significant others and all the other involved categories of stricken people. Both CISD – being an integral part of CISM – and the latter concept of early intervention became a container concept of various kinds of interventions for various kinds of

victims. In the meanwhile, a whole disaster business (Deahl, 2000; Shepherd, 2001) has been developed, and professional caregivers or high-risk organisations (e.g. banks, petrochemical industry, rescue services, army, police) were urged or legally forced to "do something" to support their personnel exposed to various kinds of emotionally disturbing and potentially traumatising events. In De Clercq & Lebigot (2001), and De Soir & Vermeiren (2002), European trauma specialists offer an alternative view on stress theories and psychological trauma, introducing other another terminology than the common Anglosaxon concepts such as traumatic stress, acute stress disorder and posttraumatic stress disorder.

ACUTE REACTIONS AFTER POTENTIALLY TRAUMATIC EVENTS: DIRECT VICTIMS AND SIGNIFICANT OTHERS

In the following text, we qualify an event to be *emotionally disturbing*, when this event is abrupt and shocking, and involves disturbing feelings of anxiety and/or depression, followed by guilt and/or shame and/or sadness and/or rage. By it's sudden impact, the event temporarily (and more or less severely) disrupts the emotional and/or physical and/or cognitive equilibrium of the individual and their significant others, being struck by the secondary impacts of the event. Examples of this kind of events are the painful or sudden death of a friend or a relative, seeing severly injured or dead people and other important losses. We argue that these events are shocking, instead of being directly traumatising, if they did not lead to a subjective and/or objective confrontation with death in the mind of the stricken individuals or if they did not involve a fight to survive during which the stricken individual(s) was (were) confronted with a state of psychological terror, frozen fright and unspeakable experiences which are impossible to symbolise nor verbalise, or in which there was a complete disruption between *signified* and *signifier* (cf. Infra).

In Antwerp (Belgium) there has been a very sudden and severe hotel fire at New Year's Eve in which more than 10 people lost their lives and 150 people were injured (approx. 30 people were severely burned and remained in burn treatment centre for months). The surrounding people, living in the same neighborhood could also have been traumatised, but I tend to consider this event rather as being emotionally disturbing – provoking a temporarily disruptive impact – than traumatising for the involved surrounding caregivers, firefighters, police personnel and emergency medical services.

If the secondary or tertiary stricken victims (respectively significant others and involved professional caregivers or policemen) did not get personally involved during the forementioned hotelfire or if they did not go through a mental process in which they identified themselves with the stricken victims, I do not consider this event to be potentially traumatising for this category of victims. Although, traumatisation can appear due to a process of identification with victims or through the on-scene contact with friends or relatives (or victims looking like friends or relatives) and especially children, always considered to be the ultimate victims. In other cases, such an event can also trigger ¹ earlier trauma and thus

¹ The principle of *triggering* is one of the central problems in the working-through process of trauma victims. A psychological trauma is always characterized of a combination of several symptoms clusters, normally; 1) the original potentially traumatising event being a more or less direct contact with a life-threatening situation; 2) a cluster of symptoms in which the original event is re-experienced; 3) a cluster of symptoms in which the original event is denied or avoided; 4) a cluster of symptoms characterized by hyperarousal; and, 5) a social dysfunctioning of the stricken individual. When trauma victims are confronted by various stimuli which make them remember or think about the original traumatising event, these stimuli can TRIGGER the same reactions (event dissociative responses) as the original event itself. The human brain does not seem to make a difference between the original event and the re-experienced events with a *neuro-biological storm* as a consequence.

lead (again) to posttraumatic sequelae, aggravating the already damaged mental structure of the stricken individual.

We would like to qualify an emotionally disturbing event as traumatic if this event also satisfies the next criteria: (1) the event is sudden, abrupt and unexpected; (2) involves feelings of extreme powerlessness, horror and/or terror, disruption, anguish, and/or shock; (3) implicates vehement emotions of anxiety and fear of death, due to; (4) the subjective (feelings) or objective (real, direct) confrontation with death (i.e. the real or felt severe threat to one's physical and/or psychologolical integrity or the integrity of a significant other). What we consider to be central in this definition is the confrontation with death: the traumatic event confronts with a world which is unknown, a world of cruelty and horror, the world of the death in which certainties, norms and values does not (seem to) exist anymore. The world of the death which is the world of the unspoken horror – le néant (the nothing) as the French call it – in which everything becomes senseless, which is impossible to describe or to put into words, since the human kind has no words or concepts to describe the real characteristics of death. This is the world in which the survivors of terrible (industrial) accidents, wars, fires, explosions, earthquakes and floods, macro- or microsocial interpersonal terrorism or severe threat, in which overwhelming forces annihilate human values, norms and/or life, impressive amounts of violence and power reducing human being to dust, eliminating each form of life, leaving the survivors in the sometimes extremely short but impressive silence of emptiness, complete abandonment and loneliness, typical to the immediate aftermath of trauma, in which victims awake again and try to get in contact again with the spoken world of the living.

In the above description, the illusionary state of predictability and security, respect for the human being (or life) and its norms and values, and/or its basic assumptions and certainties about the world we are living in, makes place for a situation characterized by deep physical and/or psychological injury, irreversible damage, humiliation and destruction beyond repair.

The overwhelming impact of this close encouter with death involves a typical situation of frozen fright and psychological terror which can be resumed in the French concept *effroi de la mort* as decribed by Lebigot (2000, 2001) and compared to the old Greek myth of Perseus by Crocq (2000; 2001).

In summary, Lebigot (2000) states that: "The traumatic neurosis confronts the subject to the effects of dread in the psyche, that worsen everytime the syndrome of repetition displays. First of them is the embedment into the psychic apparatus of a one-self as dead picture, and the loss of "the immortality illusion". The traumatic moment is an exclusion moment too in which the language disappeared, an unspeakable moment of dereliction creating feelings of shame and abandonment. At this transient confrontation to nothingness under cover of dread realizes a transgression that the subject will bear as a fault. The various psychopathological manifestations of the traumatic neurosis originate from these phenomena, that enable a first understanding level for the expressed suffering. They also give useful indications about the ways of psychotherapeutic interventions according to the evolution of the disease (...)".

In Le Retour des Enfers et son Message (Coming back from hell and its message), Crocq (2000) uses the next description as a summary of his ideas with respect to trauma and its origins: "Hell is spontaneously evocated in the speech of the traumatised. In examinating the myths and legends about the coming back from hell and the texts of writers who were victims,

witnesses or dreamers of a trauma, we bring out what the coming back from hell and its message are. On the one hand Gilgamesh, Sisyphe, Orpheus, Er, Patrocle and Dante, on the other hand Agrippa d'Aubigné, the sergeant Bourgogne, the colonel Chabert, Doïstoievski, Dorgelès, Genevoix and Semprun show how the coming back from hell can perpetuate the remembrance of horro and misfortune as well as induce the subject to assume his destiny in a relation of transparence with others and to think about this new knowledge of the origins into which the confrontation with the real of death and nothingness has initiated him (...)".

We will describe the deep emotional and psychological consequences of this close encouter with death in the next testimonies of trauma survivors of the Switel hotel fire – due to a backdraft in the ballroom of the Switel hotel at during the New Year's Eve party in 1994/1995:

"I was playing trumpet on the podium when suddenly a fireball appeared in the rear of the ballroom. In just a few seconds the fireball rolled through the whole ballroom. The lights switched off, I heard the loud sounds of explosions and I heard the people screaming and running in search of rescue. Then it seemed as if I heard nothing anymore. The only sensation I still remember is the enormous pulse I felt in my chest and the overwhelming black smoke which made it nearly impossible to breathe. The new year's party suddenly became like hell: smoke, screaming and the smell of burnt meat. Herds of people running to find an escape which seemed impossible to find. These sensations would later be the gist of my nightmares. I don't know why, but I was running in the opposite direction to all the other people. I would never know why. The heat in the ballroom seemed to become unbearable. The only thing I wanted, was to survive. And I kept saying to myself: "you will survive". On pure intuition, I ran through a door and arrived in a small kitchen in the rear of the ballroom. On hands and knees, I tried to find a way out. It seemed hopeless. Completely exhausted and in total desperation, I decided not to fight any longer against fate and prepared myself to die. But, sitting down against a wall, I suddenly felt a last rush of energy which made me jump up and run, like being out of myself, hitting a wall, then a door, and ... there I stood, outside the building, in the pouring rain. At first, it seemed as if everything around me happened in slow motion, and like a movie just playing in front of my eyes. Then, reality and sound came back to me and I realised that I just escaped from death. In these first moments, I didn't realise that I was hurt, but after a few moments I started to feel the pain from my burn injuries. My hair was gone and my skin was hanging down from head and hands. It felt as if thousands of needles were penetrating my body. I was severely burned and started to feel more and more pain as the time went by. At that moment, I did not realise that this would be the start of a recovering and rehabilitation period stealing several years of my life (...)"

- De Soir, 1995 - Unpublished report on the Support Activities for the Switel Victims.

Another Switel-survivor expressed her feelings in the following way:

"We were sitting at a very pleasant table and having a great time. Suddenly somebody shouted: "My God, look what a flame". That same flame would soon become a real fireball leaving no time and space for escape. I saw everything happen in just a few seconds and thought that it was an illusion. It just could NOT happen during such a fantastic evening. Not here. Not now. But it soon became very serious. Somebody grasped me by the arm and pulled me away from the table. From then on, I acted like an animal. I was running without seeing in the black ballroom, and without even knowing where I was running to. While running, I felt the desperate attempts of people lying on the floor and desperately trying to get

up. I really did not fully realise that I was actually running on top of other people. After a while, I passed out, I lost consciousness. I was wearing a nylon dress that evening; a very short dress with open shoulders. That is why I was severely burned. When I came back to consciousness, I did not feel the pain. I did not realise that I was wounded. I remember that we were evacuated with military helicopters to a military hospital. I thought that I was in the middle of a war. Or that there had been a terrorist attack. Or that there had been an explosion in our hotel. The whole military context justified these impressions. It would have made sense. Once in the hospital, the nurses started to undress me and to cut my long hair. I was very angry because it took years to have my hair so long and the hairdressing had cost me a small fortune. But, they told me that I was severely burned and that they would have to put me to sleep for at least a couple of weeks. Three weeks later, I woke up with a tube in my throat, which would stay there another two weeks. Impossible to express what you feel during such moments. A psychologist was sitting on my bed when I woke up. Immediately I wanted to know how my husband had survived the hotel fire, but the psychologist took my hand, looked me right in the eyes and said: "I'm sorry, both your mother and your husband died". My whole world collapsed. It would even become worse when I heard from the doctors that my left hand, ears and nose, burned to the third degree, had been amputated and that I would have to go through a lot of other surgical operations. As a young, successfull and beautiful woman I went to the Switel hotel to celebrate New Year's Eve, but several weeks later, I would wake up as a monster, mutilated for life.

- DE SOIR, 1995 - Unpublished report on the Support Activities for the Switel Victims.

Traumatic events like the above experiences of the survivors of the Switel hotelfire shake the very foundations of the human being: you cannot expect anybody to cope with this kind of events without suffering long term psychological damage. Beside the feelings of extreme powerlessness and helplessness, and the overwhelming impression of deep penetration into one's own physical and psychological integrity, trauma survivors will have to cope with the potentially ego-destructive emotions of permanent uncertainty, (survivor) guilt, anxiety, shame and loss of control. The more there has been severe physical injury, the longer the recovery and *working-through process* will last, and the more we can be pessimistic about the prognosis in the long term.

There is also the loss of *connectedness* with the surrounding significant others and the life environment in general. As Lebigot (2001) states, trauma survivors have seen the *reality of death* (*le réel de la mort*) and lost the connection with the world of the living.

Without going into the details, we will discuss the various aspects of a model we use to understand *the life-threat and emotional-shock-processing* in a chronological way. Looking back at the stories of the Switel survivors, this interpretation – which finds its inspiration in the animal world (cf. the way animals act in a *predator-prey* context) - will be easy to understand. It is important to carefully think about the different possibilities for immediate trauma-support during these different stages of traumatisation.

During the *traumatogenic* (potentially traumatic) event – in what we will call the *peritraumatic stage* – the direct victims act in a way which is very significant for their survival and very comparable to what we find back in animals while they are threatened by a predator, as expressed in the work of Nijenhuis (1999), who uses the animal trauma model to explain the succesive trauma stages in trauma survivors (mainly in a context of sexual abuse). In most trauma accounts we can easily find back the next successive stages: 1) *immobility* – in

nature this kind of immobility (cf. concepts as animal hypnosis, tonic immobility, frozen fright) sometimes means "survival" and "escape from death" - and total inhibition; apparently, this freezing happens in a state apprehension of danger and attempt to find the right or most adequate survival response); 2) flight, if there is enough time and space for escape, otherwise numbness and freezing might return, or even the opposite reaction pattern, panic and senseless activation; 3) fight, for as long as the fight to survive has a sense and offers a chance to survive in the stage of the traumatisation process; 4) total submission – the moment on which the stricken victims experience overwhelming power and violence, of the predator, the perpetrator, technology or simply nature; it seems as if they understand that fighting death has no more sense; it is at that moment that dissociative behaviour – alienation, depersonalisation, anaesthesia, analgesia, narrowing of attention, tunnelvision, out-of-body experiences, derealisation, etc (cf. Infra) - sets in, as if this would allow the victims to die without feeling pain or without even knowing consciously that they are on the way to die; and finally, the last stage in this traumatisation sequence, if the danger or death threat disappears; 5) recovery, recuperation and return of pain sensitivity, partial consciousness of what happened, widening of attention, e.a. behaviours that are typical for a return to reality. But, as expressed by Crocq (1999, 2000, 2002) and Lebigot (2001, 2002), this reality will never be the same again if one has seen 'death' right into the eyes and has been confronted with the unknown, wordless and unspeakable world of the death. For a further analysis of this animal model of traumatisation and an in-depth discussion of trauma and dissociation, and the disintegrating effects trauma can have on the psyche and personality of victims, I would like to suggest the reading of the recent work of Van der Hart (2003), and Van der Hart, Nijenhuis & Steele (2001).

After the return from death, as described by the Switel-victims and numerous other trauma victims (who lived through wars, motor vehicle accidents, rape, assault, fires, hostage taking, etc.), the fragmentary and wordless trauma sensations and experiences will have to be put into words in order to recover from the trauma. The world will never become the same again. Trauma survivors will have to go back into the *trauma labyrinth*, in search for a way to **express** what they lived through, in search for a story and a meaning which could **reconnect** them again to **the world of the living** – *the world of those who speak*, allowing them to **reframe their world**, **reconstruct** their basic assumptions and beliefs, and become one biopsycho-social whole again.

In the first stage - which we will call the acute (or immediate) trauma stage - in the immediate aftermath of trauma, right after living through the destructive and potentially traumatic impact, trauma survivors are confronted with a confusing mix of feelings of disbelief, denial, relief and despair. These moments of disbelief and denial - during which survivors yearn for rest, recuperation and safety – will be quickly disturbed and/or alternated by sudden and intrusive recollections and re-experiences of the traumatogenic event, during which the victim acts as if the event itself was reoccuring and the death threat was there again. The brain does not seem to make a difference between the original event and these intrusive recollections. The trauma survivors keep asking the same questions: What happened? How did this happen? Who else is injured (or dead)? Why did this happen (to me, or to us)? Why now? How will I (we) ever recover from this? They are in a desperate need of information. Still shaking from the event which just struck them, feeling the sequelae of the hyperarousal they needed in order to survive, still a bit disoriented and heavily impressed by the close encounter with death. During this stage, trauma survivors have predominantly pure material and practical needs. They keep asking themselves: How will I eat? Where will I sleep? Who will pay for this? How can I tell to my relatives what just happened to me? How do I get home? What about my old sick mother and how will she react? Will I ever find the energy and courage to go back to work after this. Etc.

These are all problems for which they need a quick solution. Normally, this stage will take at least from a couple of hours to a few days during which the physical recuperation from the event and the *neuro-biological storm* it provoked inside the body might be more important than the psychological recovery which will take months or years.

This initial stage will be followed by a *trauma working through stage* – which I will call the *post-immediate* or *post-acute stage* - during which the trauma survivors will have to: 1) accept what happened to them; 2) confront the negative emotions which are associated with this kind of events; 3) reach a daily life-equilibrium again, or try to return to normal life activities; 4) work through their experiences; 5) search a way to express and put into words their trauma experience; and, 6) find a meaning and a story, in order to integrate what happened in their personal life story. Numerous models are offered in the current trauma litterature, but we think that most of them take more or less these different stages into account.

Most trauma survivors will have an urgent need to really understand what happened to them, how it happened – a.o. this should be achieved through a detailed collective reconstruction of the event, taking all possible sources of information into account (television reports, newspaper articles, individual accounts and stories, etc.) – and they will search for explication, understanding, compassion, recognition and meaning. The longer they stay alone with these needs, the longer the will be haunted by vivid, intrusive and/or weird reexperiences of the event, as if their minds look for understanding and completion of the event.

The intrusive recollections and reexperiences, while the survivors return to the hyperaroused states coupled to the repetitious reminders of the original event – and which are so typical for the *fight to survive* - alternated by moments (or periods) of denial and avoidance, potentially leading to social disruption and isolation, are the signature of what is described in the literature as *post-traumatic stress disorder* (and *acute stress disorder* if the symptoms last between two days and four weeks, and dissociative symptoms are added to this clinical image) in the *Diagnostic and Statistical Manual for Mental Disorders-IV* (American Psychiatric Association, 1994).

We prefer the phenomenological side of trauma reactions and post-trauma sequalae instead of the typical Western (Northern-American) trauma concepts which have been a good start for the renewed (essentially descriptive and statistical) study of trauma, but which are – especially in non-Western cultures - not sufficient to fully understand the different needs of trauma survivors and does not provide enough explication about trauma-related dissociative disorders (still described as a distinct nosographic category in DSM-IV).

Finally, we would like to mention a third stage on the time-axis of *trauma processing*, *assimilation* and *accomodation* – which we will call the *trauma fixation* or *chronification stage*; trauma survivors can get stuck in this stage, after several months during which they tried to cope with their experiences but which lead them to a stage in which their initial fears and complaints got even worse, omnipresent and intense, forcing them to invest nearly their complete quantum of daily energy in avoiding the trauma-related symptoms or trying to cope with the vivid, threatening reexperience attacks shutting down their ability to readapt to normal life again.

For one reason or another (e.g. previous trauma, concurrent life experiences, personality characteristics, extremety of the event), the *salutogenic* (i.e. *recovering, health promoting and rehabilitating*) physical, emotional and cognitive working-through of the trauma stopped and urges for professional trauma care and therapy.

We think that adequate early trauma intervention and support can lessen the suffering over trauma survivors, but will never prevent them from developing long term sequelae or chronic posttraumatic stress disorder. Once the traumatisation has taken place – read: there has been this overwhelming objective or subjective contact with death, the damage is done and nothing can revert this. As we will describe in what follows, we think that at least in some cases, there is a possibility for on-scene (peritraumatic) primary prevention of posttraumatic sequelae, but these chances are rare and often unexploited.

ACUTE REACTIONS AFTER POTENTIALLY TRAUMATIC EVENTS: INDIRECT VICTIMS AND SIGNIFICANT OTHERS

An explorative field research² into the experience of emotional distress by police, firefighting and emergency medical personnel, brought an enormous amount of anecdotical data on how professional emergency responders – mostly to be considered as tertiary victims of traumatogenic events - manage stressful events in practice. These course-and-discussion sessions demonstrated in the first place that firefighters and crisis responders are *doers rather than thinkers and talkers*. But once they start talking ...

During the scores of exercises with fire fighting and emergency medical personnel it became increasingly clear that it is essential to know the world of fire fighting through and through, or, ideally, to be part of it to understand the way in which they react to traumatogenic events.

The firefighter/paramedic does not tolerate busybodies and does not want to feel a victim. He realizes that the borderline between success and failure, between saving and not being able to save, and therefor between being a hero or a "victim" is very thin indeed.

In the group the following emotions usually surface: often overpowering impotence, a hated feeling of helplessness, a paralyzing grief about the human (and very recognizable) suffering of the victims, the intense guilt of not having been able to more and the anger generated by all this. This is not what they joined the fire brigade or the ambulance service for, whatever the average person may think about it. The emotionally disturbing intervention has to be considered as a difficult puzzle, from which the pieces have to be put back together again, to allow the stricken firefighters and paramedics to fully understand the context in which the intervention took place.

The acute psychological experience of an emotionally, potentially traumatizing, disturbing event is one of extreme powerlessness and loss of control. The victim loses his mouth as it were, it is as if his willpower is eliminated. At the same time the emotionally disturbing event causes a sudden and unexpected dislocation of the work and/or living conditions. Nothing will

² This anecdotical evidence was generated by travelling through Belgium, Holland, France, Australia, New Zealand, and former Eastern European countries, as co-ordinator and trainer of the *Firefighter & Emergency Medical Stress Teams*. General exercises (a minimum of three hours) on the management of emotionally disturbing (potentially traumatizing) interventions in the fire fighting and rescuing practice were held in more than two hundred fire brigades, ambulance services and emergency medical departments. They consisted of three parts: an experience-oriented analysis of traumatic interventions, a practice-oriented discussion of real-life situations and a theoretic (psycho-educative) placement of the mechanisms and phenomena under discussion.

ever be the same. There is always the threat of death or serious damage to psychological and physical integrity of the self or the other, involved in the traumatic event. Through accidents with children and/or acquaintances the illusion of invulnerability —"accidents only happen to careless or unknown people" — is seriously compromised and during and certainly after the event there occur intense feelings of guilt, shame, fear, anger, etc.

The stricken caregiver can, in many instances, no longer maintain his image of the world. The basic assumptions and expectations about life are no longer valid. Everything, even in the practice of fire fighting, becomes dishonest, unjust, unpredictable and dangerous. There is danger behind every corner. Training no longer stands for controllability. Every intervention means "danger". Partners become afraid with every call up. Etc.

As a matter of fact, it becomes increasingly difficult for the modern firefighters or paramedics to recognize and understand each other with the special highly technological and protective clothing they are wearing. Participation in any intervention becomes more anonymous. For the firefighter, it is even difficult to hear or recognize his colleagues. A modern firefighter's gear protects him from mechanical impacts, deafening noise and radiation or contact heat. In reality this makes a firefighter more or less sensorially deprived or *contact-dead*. Specifically older and more experienced firefighters have problems with this situation. They used to "feel" their work, the fire, like a living thing. They were lead by warmth and hearing. Now the firefighter is partly isolated. This does not only affect operational sensitivities, like "feeling" or "smelling" this risk for a backdraft or correctly evaluating the chances for a flash-over during a fire. As a socially involved person, and as he learned in fire school, he has to rely strongly on direct contact with his colleagues and on teamwork. This is very difficult under these circumstances! Our hypothesis with regard to this problem is that this nearly-workalone-in-group situation will considerably increase the intervention stress and affect the coping skills of firefighters. Because these facts make the firefighters concerned very insecure. Specifically in the initial phase of the intervention and if he anticipates that the psychological burden of the intervention will be beyond his means, physical arousal is considerable. It will be in large part due to this arousal that the firefighter, nurse, emergency doctor or policeman will only be able to recollect part of the events. The same heightened arousal will cause them to make more errors, to think incoherently and sometimes to make the wrong decisions. While this physical arousal is necessary to become operational and alert, too much of it during traumatic interventions may cause diminished attention and increased human failure. This phenomenon also seems to enhance possible dissociative reactions in firefighters or emergency responders during shocking, potentially traumatic and/or dangerous rescue operations. Nevertheless, firefighters or emergency responders refuse to accept this because it is against their code of honor!

The phenomenon of narrowed attention is known in literature as the Easterbrook-claim (Easterbrook, 1959). According to the Easterbrook-claim the physiological arousal of emotionally disturbing events leads to a narrowing of attention. This narrowing of attention leads to a diminished capacity to take cues or information-elements from the environment in which an event takes place (Bruner, Matter & Papaner, 1955; Easterbrook, 1959; Eysenck, 1982; Mandler, 1975). It is therefor very difficult for the caregiver in question to come to a meaningful reconstruction of the whole event. To him it is like a giant puzzle from which he only holds a limited number of pieces. This makes it very difficult for him to come to a global image of the intervention. Yet this is indispensable to work through the event in a healthy way. If we couple the insight that information from emotionally disturbing or shocking events is usually badly encoded to the individual opinions after the facts, we have reached the very

core of the problem: the fantasy around emotionally disturbing and/or traumatic events and the lack of true event-based information are often worse than the reality. This is true for victims – for example MVA-victims – and even for their caregivers. This is one of the (theoretically based) reasons that direct trauma victims and their caregivers can mean a lot to each other when it comes to the working through process which follows traumatic events.

But there is a problem: on the one hand scientists claim that the high emotional content of events can undermine the memories of them (Kassin, Ellisworth & Smith, 1989; Yarmey & Jones, 1983), and that on the other hand some researchers ascertain the opposite: the high emotional content of events would make the memories more exact and detailed (Christianson & Loftus, 1990a). For example the studies on *weapon focusing* (a.o. Cutler, Penrod & Martens, 1987; Kramer, Buckhout & Eugenio, 1990; Loftus, Loftus & Messo, 1987; Maas & Kohnken, 1989) have determined that certain stress inducing objects such as fire-arms or knives used in crime may focus the attention op people and thus improve the accuracy of the memories of the one, to the detriment of the other details in the given situation. Given these scientific insights, it appears as if direct victims' reactions are different of the reactions of their caregivers. Mutual contacts on these differences in reactions and behavior patterns can be very useful in both directions. It is also a very human way of counseling: caregivers meeting the victims they (tried to) rescue(d), and both, going back to the original emotionally distressing event, and talking through it to support each other and search for meaning.

But there are also a lot of similarities. Indeed it often happens during psychological debriefings with caregivers or psychological first aid activities with victims, that the traumatic event in itself is described as something out of a movie or a video-clip, unreal and riddled with signs of denial.

The injured baby, for example, is first seen as a doll in the backseat, the face of the acquaintance is only recognized much later once the intervention is over and the painful job is done etc. Here we find again the intervention of the shock mechanism – sometimes referred to as tunnelvision, narrowing of attention a.o. – that must protect the victims or the caregiver from (emotional) collapse during the traumatic event. The human organism does not give in to "total loss" so easily. But is remains unclear what could be the difference between the dissociative trauma response in trauma victims, on the one hand, and the apparent functional mechanisms which allow rescuers to do their work in a potentially traumatic environment.

The caregiver in question calls it "working on automatic pilot". In this way most of the actions during the first instances of a traumatic intervention happen "on automatic pilot", by instinct, trained, without speaking, to the point and ... unreal. Children are often dolls under such conditions. Acquaintances "anonymous", injured or dead victims partly "dehumanized" through black humor to keep distance etc.

But the moment comes when the automatic pilot is promptly switched off. After the intervention, we know this phenomenon as the *emotional post-fact collapse*. During long interventions one precise stimulus may suffice to stop the automatic pilot. The impression the victim resembles a relative, a teddy bear or child's doll, or other stimuli that pierce the harness or armor of the caregiver. And from that moment onwards he starts to function mainly as vulnerable individual. And he cannot keep this up for long. Once the intense experience is over and the danger averted, the caregiver in question gets an insight – albeit partly – into what has really happened and how is acted. From that moment on the *trauma-video-merry-go-round* begins. Because of the fragmented experience during the intervention every caregiver

starts to reconsider – read "ruminate on" – the events wondering if he and his colleagues should or could not have done more. The more holes there are in the experience of the event, the longer the questioning process takes and the longer the mind ruminates on the experience.

This causes the person concerned to end up in the dialectics of a psychological trauma: continuous and intrusive reliving, alternated by periods of negation/avoidance, with as a consequence that the complaints of heightened arousal remain unchanged. And if arousal, during the moments of intrusive reexperience, gets too high, integration of the traumatising experience will not take place. He can become mired in either intrusive reexperience or avoidance/denial, which leads to increasing social dysfunctioning. From this moment on and if the necessary DSM-criteria are met, Anglo-Saxon literature speaks of posttraumatic stress disorder.

Emergency responders should already start on the site of the accident with their first psychological support for the dazed and shocked trauma victims. They will be supported themselves, on-scene, by their own well-trained peers. And in many cases, after the intervention, when suffering their own post-fact collapse, they could make contact again with the stricken victims (or the victims' families), invite them in the emergency department or fire brigade, to talk about their experiences and to work through the event together. We will not go into further details with respect to the benefits of bringing emergency responders and caregivers together with the stricken victims in the aftermath of a catastrophic event.

Another unexplained phenomenon is that sooner or later, caregivers and rescuers, firefighters, paramedics and emergency medical nurses will definitely pay the emotional price for their work. This often occurs at the moment on which they are confronted with personal losses in their life, just as in the next example. What remains unclear is that the dissociative phenomena, which allow rescuers and caregivers out on the field to do their work in a potentially traumatic environment, seem to create a problem on the long term.

Peter had been involved in the rescue operations for the Switelfire from the first moments. He had helped dozens of shocked and burnt victims e.g.. by sprinkling them with water till the evacuation from the disaster scene. Peter was a very experienced firefighter of about fifty years of age. After the rescue operations, he was convinced of his good work. He did not feel the need to tell about his experiences nor to participate in the post-intervention debriefing sessions. He did not want to dwell on this one big intervention and just wanted to let everything rest. A few years later he was confronted with a series of emotional disturbing experiences in his own private life, all this happening in just a three month period: he lost his mother and father, his wife was diagnosed with breast cancer and his oldest daughter attempted suicide. Peter was not able to cope with both the regular disturbing experiences from his fire practice, and his personal experiences. He asked for help by e-mail, telling that he started to have nightmares, and that in each nightmare he saw his own family sitting at a table in the Switel hotel fire and being suddenly burned by the fire. While his relatives were screaming for help he was looking for them with his full fire equipment and oxygen mask being completely lost and disoriented by the heat and the smoke.

This example clearly demonstrates that potentially traumatic events which have not been worked through nor integrated, and which have been blunted in the post-immediate stage, can accumulate in the psyche and cause trouble in a much later life stage and this at a very unexpected moment.

In the next part of this text, we will shed light on the psychosocial matrix as a framework for emotional triage of trauma victims. This emotional triage could be the starting point for the development of a series of support activities, from *psychological first aid* to *emotional and psychological uncoupling* (closely related to *psychological debriefing*) and working through, for the different victims' categories of a certain potentially traumatic event. In a next chapter, it will become clear that the type of support has to vary as a function of the type of (potentially traumatic) impact or victims.

THE PSYCHOSOCIAL MATRIX FOR CRISISPSYCHOLOGICAL SUPPORT

The psychosocial matrix for crisis psychological support is a 3 x 3 matrix in which we find respectively in the rows and the columns: 1) the *primary, secondary* and *tertiary victims*, belonging to one of these three categories depending of the type of potentially traumatising impact the suffered; and, 2) the *primary, secondary* and *tertiary prevention*, depending the time on which the trauma support takes place. The concrete realisation of the complete framework for psychosocial and crisis psychological support consists, one the one hand, of a kind of **emotional triage** to sort out the different kinds of victims, dividing them in three different categories, and on the other hand, the selection of the right support technique, at the right moment and carried out by the right people, thus trying to realise an optimal fit between victims and the kind of support they get.

At first, the model might seem too simplistic, being too much a reduction of a very complex reality, but field experiences with this model, which has been tried out for the management of several large-scale accidents and disasters, seem to indicate that this hands-on model leads to much better results than the one-size-fits-all approach of most critical incident stress management protocols.

The *primary victims* in this model are the directly stricken victims of the calamity or disaster, which means those who have to be rescued and/or medically saved, and those who have been directly confronted with the life-threatening potentially traumatic stimuli. The people who were celebrating New Year's Eve in the ballroom of Switel hotel, which was destroyed by fire in some 30 sec, and who escaped, needed to be rescued or received medical treatment belong to the category of primary victims.

The *secondary victims* are the significant others, closely related to the primary victims or playing a significant role as bystanders, in the first rescue attempts (before the emergency services arrive) or providing the first assistance to the primary victims and their families. The *social tissue* of significant others – relatives, family members, friends, colleagues, etc. – creates a victims dendrite of people who can be considered to be secondary victims. A quick calculation in numbers leads to the insight that for each primary victim we have approximately 10 to 15 secondary victims.

The *tertiary victims* are the professionally involved people, caregivers or law order personnel – fire & rescue personnel, police, emergency medical services, etc. – who have been in direct contact with the primary and/or secondary victims.

With respect to the prevention, we could also use this trifurcated subdivision, making the difference between primary, secondary and tertiary prevention.

While strictly spoken, *primary prevention* would have to be everything which is done to prevent the traumatogenic impact itself, we like to use a broader and maybe less conventional definition of primary prevention, taking the whole series of activities of trauma education and preparation, training, and the creation of intervention models and structures, even considering the on-scene support along with the peritraumatic first psychological support (cf. example of the tactics for victims aid by firefighters during the extrication and rescue of MVA-victims) to be a kind of primary trauma prevention. Thus, I personally consider all the support activities aiming at lowering the level of posttraumatic sequelae, to be primary prevention. Again, this has to be proven in the empirical section of this thesis.

If potentially traumatic or life-threatening events lead to hyperarousal states in which the stricken victims have to fight for their lives and mobilise all possible animal-like survival mechanisms, sometimes going into dissociative behaviour, and – as the recent literature suggests – these acute reactions are considered to be predictive of later chronic trauma, everything which can prevent these states of hyperarousal (i.e. every support lowering arousal in trauma victims, calming down, nurturing, etc.) and possibly avoid peritraumatic dissociation, keeping the victims on-scene grounded, could be considered as primary prevention of long term psychological trauma. This is one of the hypotheses, which will be tested in the field research with MVA survivors.

Even if a precise delimitation of interventions in the time is very difficult, we propose in this model that primary prevention ends on the moment on which: 1) the fire, rescue & emergency medical services are demobilised; and, 2) the primary and secondary victims, after the initial support and assistance offered to them on the scene of the accident or the disaster, are administered in the hospital or rejoined there own social system or life environment.

The immediate support, both on the scene of the accident or in temporary support centres on the field, carried out by the caregivers of fire & rescue, or ambulance services, or even provided by volunteers from civil defence, Red Cross or others services, is also considered to be primary prevention. The *on-scene buddy aid* or *peer support – the help for colleagues and from colleagues* on the scene of the accident – then the *initial emotional and physical recuperative talk sessions* (sometimes described as *defusing*) are also considered to be *primary prevention of posttraumatic sequelae in tertiary victims*. These primary preventive support activities could be carried out by non-professional caregivers or peers.

The *secondary prevention*, in the post-immediate stage, essentially consists of: 1) a quick an adequate detection of posttraumatic sequelae and psychosocial problems; 2) a rapid and adequate intervention, with the right interventions, carried out by the right people and all this on the right moment. Secondary prevention aims at the early detection of problematic responses or coping styles in victims, and an adequately intervention tailored to the needs of the victims, in order to prevent that these problems exacerbate and become chronic on the long term. We consider most *early intervention protocols* to be a kind of *secondary prevention (for tertiary victims)*.

These secondary preventive support activities could, in some cases, also be carried out by non-professional caregivers, as long as they work under permanent supervision of well-trained and professional mental health specialists.

Without wanting to go into the full details, we are convinced that the currently known models of *critical incident stress debriefing* or *psychological debriefing* have been designed as a

secondary prevention for tertiary victims, which should not be used to support or debrief primary or secondary victims. We think that the negative publicity on these intervention techniques is not due to these protocols but to the incorrect use of support techniques with people who should not be re-exposed to their trauma again so short after the impact or after an insufficient physical, emotional and psychological recovery period.

The *tertiary prevention*, finally, aims at the full professional curative trauma care, which can become necessary for the different categories of victims after several months during which these victims tried to cope with their experiences without any professional help. In this case, trauma victims can suffer from what is called in the DSM-IV (APA, 1994) Post-Traumatic Stress Disorder (PTSD), or even Complex PTSD.

Tertiary prevention could mean psychotherapeutical action from different perspectives, as there are (non-exhaustively): 1) (Brief) Cognitive-Behavioral Therapy; 2) Psychoanalytically Inspired Trauma Therapy; 3) (Brief) Eclectic Therapy; 4) Sensori-Motor Trauma Therapy; 5) Creative and/or Arts Therapy; 6) Experiential (and/or Existential) Trauma Therapy; and, 7) Integrative Trauma Therapy. In nearly all trauma models, the first stage of the therapy will aim at reduction and stabilisation of the current trauma symptoms and complaints, followed by a stage in which there will be a regociation of the trauma-related material, mostly using narrative exploration and cognitive reframing techniques, and finally, in the last stage working towards integration of the (loss and) trauma in the personal life story of the survivor.

Primary prevention of psychological trauma in primary and secondary victims of traumatogenic events

As mentioned above, in most cases the acute (peritraumatic) stage for the victims of a traumatogenic event could be just a matter of seconds or maximum a few hours. This has certainly been the case for most of the victims of the Switel hotelfire. In many cases the stricken victims will even need between 24 to 48 hours to wake up again from their trauma trance (dissociative state) or tunnel (cf. the forementioned dissociative responses in the different animal defense-like survival stages). When leaving these functional dissociative states (cf. narrowing of attention and functional tunnel experiences) the primary victims start to slowly realise what they went through or how lucky they were to survive. They are still afraid that the threat will return and in a repetitious way they will be aspirated back into their "traumatic tunnel" when the surrounding reality is still too cruel, extreme and/or overwhelming. The need to escape the surrounding reality is still there. The primary trauma victims will only return back to reality very gradually and only when they perceive again a sense of safety, security and stability in the surrounding environment.

In this thesis, we will try to demonstrate that it is very important for the on-scene rescue workers and caregivers to know how to guide and support the primary victims on their way back to reality, trying to calm these victims down, helping them to ground during and immediately after the rescue operations, and assisting them in their first reorientation attempts after the traumatic impact. Especially the trauma survivors who showed dissociative responses need to be grounded on-site in order to prevent them from staying overwhelmed by the life-threatening, and potentially traumatic, stimuli. In this way, the on-scene support of rescue workers, firefighters and paramedics could be seen as real primary prevention with respect of chronification of psychological trauma.

The first signs of post-impact recovery appear when the stricken victims start again to search for information (about what happened) in the surrounding environment. This yearning for information in the immediate post-impact stage makes the primary victims very fragile and suggestible with respect to the first rumours about what happened.

The mental reconstruction of what really happened is very difficult for the involved victims since they all suffered more or less from a narrowing of their field of consciousness, focusing on peritraumatic details which were relevant for their own survival or rescue. Lots of traumarelated, essentially preverbal sensations about speechless terror (cf. the "effroi"-concept), have been registered but need much more elaboration before they can be transformed into senseful traumatic memories. Thus, it seems as if each kind of support in that stage has to aim physical recovery and cooling down but not so much verbal expression since it is much too early for the narrative expression of what happened.

The on-scene support for primary, secondary and tertiary victims could be executed along the same principles. The first psychological help in the peritraumatic and immediate post-impact stage should absolutely aim the reduction of the level of arousal and the re-creation of basic security and safety around the traumatised victim. One could assume that the natural support a mother provides to a child in a state of anxiety, in trying to secure and to calm down, is the right kind of support a traumatised victim needs.

Primary prevention of psychological trauma in tertiary victims of traumatogenic events: from first assistance over immediate physical recuperation to emotional uncoupling

In what follows, the discussion of emotionally disturbing, shocking or traumatising interventions, in group and according to procedure, will be called **Emotional Uncoupling** (EU) in what follows. EU is in fact an individual or group oriented intervention – based on the commonly known **Psychological Debriefing** (PD) process – in which the most important elements of a past emotionally disturbing experience, are treated shortly after the events. Lately psychological debriefing – mostly based on the elementary protocol of *Critical Incident Stress Debriefing* (Mitchell, 1983) - has been generally advised as the best stressmanagement technique for high-risk professions like the people providing aid in disasters, fire-fighters, military personnel, police personnel, etc. (Dunning & Silva, 1980; Wagner, 1979; Raphael, 1986; Mitchell, 1981; Bergmann & Queen, 1986; Griffin, 1987; Jones, 1985). At this moment, a number of variants of the original Mitchell-protocol of psychological debriefing are widely used in psychological crisis intervention services. The problem is that in many cases outcome-expectances of psychological debriefing were too high and that more recently specialists started arguing on the effects of psychological debriefing (Van Emmerik et. al., 2002).

Firstly, we do not like the term "debriefing" because many of its users do not even fully understand the meaning of it - can you debrief people who were not briefed in advance? - or think they can very easily carry these debriefings out (because the term "debriefing" is very familiar to them from the point of view of "operational debriefing". Secondly, we think that the outcome criterion - i.e. the prevention of post-traumatic stress disorder (a concept in which we do not believe that much) - may be the wrong one.

Without wanting to go back on the way in which psychological debriefing is applied in all its variants and without entering the further discussion of its utility, we could say that the guided reconstruction of an emotionally disturbing and/or traumatic event appears to be of primary

importance³. As the most important purpose of EU is the lessening of the (often intense) psychological suffering caused by an emotionally disturbing or traumatic event, it is clear that accurate memories of this event are of primary importance. This in itself poses a problem for large-scale interventions in which different teams of emergency medical personnel, fire-fighters or even larger groups of caregivers took part. These individuals often have trouble realising the larger context of the intervention in which they took part as a small but often important link. In the case of large-scale interventions such as traffic accidents, fires, caveins, explosions, i.e. disasters, it is clear that a correct reconstruction is impossible if only your proper corps is debriefed. It is impossible to get enough information about a multidisciplinary intervention and to measure to which it was succesful, if you limit yourself to this.

The following practical example will illustrate this:

Following a very heavy traffic accident in which four people died, a fireman had to watch from a distance of only a few metres how his colleagues and the emergency medical personnel applied first aid and even attempted to reanimate a victim that was severely trapped in one of the cars. He was there, ready to intervene at the slightest spark with the high pressure lance. Yet, after the event he felt superfluous and useless. To him this was the worst thing that have ever happened. Having to watch how his colleagues struggled to try and save four people with fatal injuries. During the Emotional Uncoupling Procedure at which his colleagues, the emergency medical personnel, the police, the tow service and a few other caregivers were present, this fireman exploded in anger and afterwards started to cry. Until the moment that a nurse said that she would not have taken such risks – there was gas dripping from the car on the other side – if he had not been there, ready to intervene. The eye contact she had kept going with him during the intervention, and which he had read as a reproach, had on the contrary meant a lot to her. In fact she was grateful to this fireman for his presence. She also said something else which was very important, she told him that even while they were driving to the scene of the accident, she had heard over the intercom which fire brigade would assist them. It had given her a feeling of "if it's those guys, everything is going to be all right".

This intervention by people from the medical staff meant more to the fireman (and his colleagues) than any therapeutic intervention could have. In general, this kind of remarks by "outsiders" – witnesses, medical staff, police – all mean a lot to fire-fighters; it makes them feel useful in their job which sometimes appears to be very passive and frustrating. We always use this example when a colleague tells us he thinks that psychological debriefing – what we call Emotional Uncoupling in this text – should only take place in small groups and within the proper corps only.

In some cases even the testimonies of witness or direct victims can be essential in this reconstruction process. In the further text, we will not go into the details of the various goals of Emotional Uncoupling like *ventilating tensions and frustrations* (in many cases based upon the behavior of the press and "disaster tourists"), *normalisation*, *comprehension* and *legitimisation of occurring reactions and feelings*, *creating a cognitive restructuration* (we hope to replace negative cognitions by positive ones in the course of the discussion), *creating*

³ Why continue to argue on the outcome of Psychological Debriefing (PD) during every scientific congress when nearly all participants (trained and supervized caregivers' peers belonging to the Fire-Fighter & Medical Emergency Stress Teams already lead more than 200 Emotional Uncoupling Procedures) express themselves as "being glad to have participated", "grateful for the recognition and help provided", etc. One should simple not expect to "Prevent PTSD" in administrating PD to "trauma-victims" or "traumatized fire-fighters a.o."!

a – almost mythical - bond among fellow caregivers and the identification of those participants who may be supposed to run a high risk of problematic assimilation.

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