

About Survival Reactions - in Relational Trauma Therapy

The first edition of this article was written by Merete Holm Brantbjerg and Steen Jørgensen in February 2010

This second edition (2014) written by MHB contains updated sections from the original article and a new section on sources of inspiration. Kolbjørn Vårdal has been part of developing the material.

Translated to English by Merete Holm Brantbjerg and Barbara Picton May 2015

The focus of this article is to understand survival reactions and to reference the sources of inspiration and processes behind the list of survival reactions we use in Relational Trauma Therapy.

This list contains both commonly known survival reactions and our contribution.

Why produce a list of survival reactions?

By naming the reactions and states they are invited into language, thus making it possible to communicate openly about them. It then becomes possible to normalize these phenomena – including them as something to be expected.

Survival reactions which are not released or regulated often stay dissociated or hidden because these states are perceived as unwelcome, unacceptable, shameful. They are hidden in isolation – consciously or sub-consciously. Naming survival reactions can therefore be a support for breaking out of patterns of isolation.

Another aspect is how trauma patterns oftentimes are a combination of several survival reactions. For example, dissociation and hyper-arousal reactions can be at play at the same time.

In threatening situations we may have automated preferences between which survival reactions we act on and in which order.

We can impose values on different survival reactions some being easily valued higher than others. Some may be pushed out of the realm of consciousness entirely because they pose too big a threat to our self-image.

A list of survival reactions creates an opportunity for an open-minded examination of how we may perceive each of them and how the dynamic between them shows up in our trauma patterns. This in turn may lead to discovering new facets of the trauma patterns.

The autonomic nervous system – balance between sympathetic and parasympathetic innervation

In physiology text books the autonomic nervous system is often described with sympathetic and parasympathetic branches having opposite effects while the body seeks to sustain homeostasis – a balance between these opposing systems. However, while a person with a primarily strong sympathetic innervation is impacted by both the sympathetic innervation and the associated hormonal activation, it does not mean that parasympathetic innervation does not exist – and vice versa.

These interactions between the sympathetic and the parasympathetic systems are sometimes described as parallel to the way antagonists work in our muscular-skeletal system. For example, when bending the elbow the biceps muscle is activated and contracts while the opposing triceps muscle also contracts, but in such a way that it lengthens, paying out slowly to ensure a smooth, controlled movement.

Strong sympathetic activation in connection to fight/flight system is normal – as is a dominant parasympathetic period of restitution once the threat subsides. However, it is more accurate to talk about dominant sympathetic or parasympathetic activity since neither of these systems function entirely at 100%. Levine (1988) described this interaction between sympathetic and parasympathetic activation along the same lines, when in the 1980's he communicated his perception of physiology in connection to stress.

This implies that when we, in daily language, talk about “sympathetic innervation”, we in fact should talk about “a primarily sympathetic innervation balanced by far lesser parasympathetic innervation” and vice versa. It is therefore our understanding that there is an oscillation between activity in the sympathetic (hyper-arousal) and the parasympathetic (hypo-arousal) nervous system in all survival reactions – but that one of the poles dominates to a greater or lesser degree in each of the reactions.

Survival reactions

Survival reactions can be triggered in all situations that imply an actual life threat and/or a threat to our integrity.

A simple division into types of trauma differentiates between impersonal trauma, interpersonal trauma and attachment trauma. (Wennerberg 2011)

Relational trauma typically happens within the same species, which makes it meaningful to differentiate between the following two entirely or partially different contexts, where survival reactions can be triggered:

1. The classic situation between predator and prey, which clearly involves patterns and sequences of sympathetic as well as parasympathetic innervation and hormonal activation.
2. Confrontation within the same species concerning territory, food, male/female, positioning in hierarchy, values and perception of reality. Traditionally this is described in terms of aggression, dominance and submission. There are clearly different forms of these, with lesser or greater degree of activation - and ultimately the same degree of activation as in classic trauma, when these confrontations imply actual threat against survival or the integrity of Self.

In Relational Trauma Therapy we use the following list of survival reactions, noting whether activation of the parasympathetic (PN) or the sympathetic (SN) nervous system is dominant in the reaction. Our goal is to define a list describing the phenomena we meet when working with processing trauma patterns with clients and students. The impulse to expand the list thus stems from the encounter with phenomena we did not find described. We have experimented with seeking out meaningful terms to describe reactions and we have sought references that support the existence and the naming of the reactions in question.

1st, 2nd and 3rd degrees of stress refers to Flemming Kæreby's model, inspired by Pat Ogden and Stephen Porges (see also manual to Training in Trauma Therapy 1), and to our expansion of the term *3rd degree stress*.

Startle reflex (Freeze alert) - 1st degree stress	SN dominant, briefly PN dominant
Orientation reflex - 1st degree stress	SN dominant
Flight reflex - 2nd degree stress	SN dominant
Fight reflex - 2nd degree stress	SN dominant
Protection reflex - 2nd degree stress	SN dominant
Attachment cry - 2nd degree stress	SN dominant
Revulsion reflex - 2nd degree stress (or 3rd degree?*)	PN dominant
Dominant behavior related to survival - 2nd degree stress	SN dominant
Submissive behavior related to survival - 2nd degree stress	PN dominant
Separation scream - between 2nd and 3rd degree stress	SN dominant
Freeze (Freeze-fright) - between 2nd and 3rd degree stress	PN dominant over powerful activation in SN
Collapse/hypo-arousal - preparing to die - 3rd degree stress	PN dominant
Disorganizing - extrovert chaotic - 3rd degree stress	SN dominant
Disorganizing - introvert chaotic - 3rd degree stress	PN dominant

*At this time we do not yet have the knowledge or experience to make a hypothesis about the degree of stress in the revulsion reflex. The uncertainty may relate to the nature of disgust being a homeostatic feeling as described by Jaak Pansepp (1998, 2012).

In the following section we describe our list of survival reactions and include our sources of inspiration gained from attending workshops and lectures, reading books and talking with colleagues. Our focus is on reactions which are less commonly known and which we have added over the course of some years.

Startle reflex, orientation reflex, flight, fight and freeze are all described by Peter Levine from the 1980s onwards (Levine 1998). These survival reactions in humans are perceived (by Levine) as a parallel to the reactions found in prey under attack - predator/prey reactions.

Especially the last three, flight, fight and freeze, comprise the most commonly known list of survival reactions described by many trauma researchers and therapists. (See for instance Rothschild 2000) When asking trainees about what first comes to mind when hearing the term survival reactions, the answer is typically "flight, fight and freeze".

Levine has described **freeze** as a survival reaction simultaneously containing strong activation of SN and PN. (Odgen et al 2006; Niejenhuis & den Boer 2007; Baldwin 2013, all support this description). Levine also describes encountering another version of freeze in the shape of a limp, resigned body tone, a prelude to discerning between freeze and collapse. (Levine 2010)

The survival reaction **collapse/hypo-arousal** is elaborated by Stephen Porges, discerning between two PN reactions influenced by the ventral and dorsal branch of the vagus nerve, triggering either "social engagement", landing in social involvement (ventral branch) - or deep withdrawal and collapse (dorsal branch). (Porges 2011; Hart & Kæreby 2009)

Inspired by Porges, Flemming Kæreby discerns between **three degrees of stress** with different heartbeats.

- Under 1st degree stress there is a brief drop in heartbeat to about 30 per minute (corresponding with collapse) followed by an acceleration to 90-120, at the onset of the orientation reflex.
- Under 2nd degree stress the heartbeat accelerates to 150-180 per minute, while sympathetically controlled survival reactions fight and/or flight are dominant.

- If the active survival reactions are not sufficient to remove us from danger, the body may kick into 3rd degree stress with an immediate drop to 30 heartbeats per minute. The body collapses and immobilizes; we prepare to die.

David Baldwin (2013) includes the same five survival reactions, but names them a little differently:

- Freeze-alert (stillness) - corresponding with startle reflex
- Flight (active)
- Fight (active)
- Freeze-fright (immobile) - corresponding with freeze
- Collapse (immobile)

Baldwin stresses the importance of differentiating between the 3 passive reactions - Freeze-alert, Freeze-fright and Collapse, because they cover very different states in the autonomic nervous system and therefore demand different therapeutic approaches.

A Focus on collapse/hypo-arousal is a key component of Relational Trauma Therapy. Hence Porges, Kæreby and Baldwin are significant sources of theoretical inspiration supporting our practical experiences and learnings in developing our approach. We make a clear distinction between interventions appropriate for freeze-fright with its strong activation of both PN and SN and collapse/hypo-arousal with entirely dominant PN.

We use the terms hyper- and hypo-arousal to describe the difference between active outgoing and passive withdrawing survival reactions. Hypo-arousal is also named "collapse - preparing to die".

Attachment cry is on Pat Ogden's list of survival reactions that occurs in dissociated EP's (Emotional Personalities) containing dissociated reactions. (Jørgensen, 2009; Ogden et al, 2006)

Ogden's full list, based on Nijenhuis, looks like this:

- Fight
- Flight
- Attachment cry
- Freeze
- Submission

The inspiration leading us to add attachment cry to the list of survival reactions thus stems from Pat Ogden, but just as much from Jaak Panksepp (1998, 2012). Panksepp describes seven basic emotional systems - SEEKING, RAGE, FEAR, PLEASURE, CARING, PANIC and PLAY. He names them with capital letters to differentiate them from conscious layers of emotional states.

An important inspiration for us in understanding survival reactions lies in Panksepp's differentiation between two types of anxiety - the FEAR system, which is about reacting to danger, and the PANIC system, which is about reacting to loss of contact. With this differentiation and including the CARING system, reactions about attachment and loss of attachment are brought to the foreground.

The original list, focusing on fight, flight and freeze, does not include these aspects, probably because most trauma research has been based on the predator/prey frame - and the bulk of stress and trauma research has focused on men, war veterans and the like.¹

Separation scream expresses the unbearable pain of loss and is thus placed higher on the arousal scale - most likely in the transition between 2nd and 3rd degree stress; the transition between an organized survival reaction and dis-organization. In attachment cry you cry your way into contact and in separation scream you scream your way out into dis-organization.

Protection reflex - or the impulse to rescue others - was described in Bodydynamic shock trauma therapy in the 1990's. (Jørgensen ed. 1993) In working with releasing the flight impulse it became evident that the impulse to escape was not always available. In some situations humans put the survival of others above their own. This particularly holds true for parents, who in threatening situations often react with attempting to rescue or protect their children instead of seeking safety themselves. There are examples of people succeeding or dying in the attempt of rescuing others - strangers, friends, next of kin, etc. This reaction can also be triggered in relation to animals, and to possessions such as home, car, etc. Panksepp's naming of the CARING system as a basic emotional system parallel to FEAR and RAGE supports including the protection reflex as an equal survival reaction, which, like flight and fight, is controlled primarily by SN. Protection is an active outgoing survival reaction.

Revulsion reflex - is new on the list of survival reactions but has been on the list of instincts for a long time. In the 1990's the Bodydynamic system put together a model of instincts, basic emotions and feelings. Disgust was named as an instinctual reaction parallel to the emotion disgust. (Brantbjerg & Stepath 2007)

We are adding it to the list of survival reactions now based on Kolbjørn Vårdal's and my experiences including working with disgust and revulsion reflex as an equally important part of trauma work as working with, for instance, fight reflex/rage. The inspiration for this heightened attention to disgust stems from Kolbjørn Vårdal's thesis work (Vårdal 2013).

Our experience thus far, indicates that owning disgust and revulsion reflex supports the re-establishing of boundaries and personal integrity in a significantly different way than working with other survival reactions. Disgust has a powerful PN component. Panksepp defines it as a homeostatic feeling, which is involved in sustaining intrinsic natural balances in the body such as thirst, regulation of temperature, and also disgust, which he links to intake of poisonous substance, which the body must reject.

We have categorized the revulsion reflex as a 2nd degree stress reaction on the same level as other linear, outgoing, organized reactions - flight, fight, protection, attachment cry. Continued exploration and evaluation of the processes that are activated in working with disgust will reveal whether this hypothesis holds up. Experience indicates that releasing an impulse to get rid of what the body perceives as poisonous - physically or emotionally - leads to a powerful regulation in the autonomic nervous system towards profound calm. It might be more accurate to describe disgust and revulsion reflex as reactions in the transition between 2nd and 3rd degree stress – possibly like separation scream?

¹ It has been an assumption that brain function and physiology is the same for both genders. Today it is widely accepted that this is not the case. Research is made on gender specific medicine, paving the way for a clearer differentiation between what each gender needs to remedy stress, depression, abuse and the like (Legato 2007)

Dominant and submissive behaviors related to survival - are on our list of survival reaction, as they have been since 2009. Several sources of inspiration lie behind this choice.

Dosing is a core principle in ROST - Resource Oriented Skill Training (Brantbjerg 2007, 2008). The dosing process teaches clients/participants to find direction from within - find inner authority, as an alternative to getting caught up in compliance or defiance in relation to instructions from a teacher or a therapist. Creating the term dosing came from years of frustration in my practice about locked group dynamics occurring in teaching psychomotor skill training - the groups very easily wound up in one-up/one-down roles with the teacher as well as with each other. The term dosing opens a way to negotiate these locked roles and build new paths around direction and authority.

Systems Centered Therapy - SCT - has offered me valuable inspiration in working with authority - both theoretically and methodically. SCT focuses on working with authority as the initial developmental phase in a group (and in all other "systems"). You work with acknowledging frustration, natural retaliation impulse, openly addressing anger towards the leader, addressing locked role behavior, and both dominant and submissive behavior. You work with "Functional subgrouping", which systematically trains a group in communicating from equal positions and in sharing any type of experience and state in sub groups - and embracing differences within the group. (Agazarian 2006) Over the last years we have adapted subgrouping as a method to our trauma therapeutic context and today use it as a very valuable element of breaking isolation patterns and of training the group in mutual arousal regulation.

Around 2009 Steen Jørgensen, Kolbjørn Vårdal and I started to combine knowledge of dominance/submission/authority and trauma. A valuable inspiration came from ethology - differentiating between dynamics triggered between predator and prey with a threat of being killed, and dynamics within a species, where the threat to a larger extent is about loss of integrity, perception of reality and inclusion into to the pack (Jørgensen 2010). We saw that there is a clear difference between the locked trauma patterns created in each of these contexts, or in a combination of these - and different methodology is needed to reach into these patterns. Dominant and submissive behavior potentially exists at all levels of arousal. You don't have to be in 2nd degree stress for these dynamics to show as they are part of our defensive personality patterns.

Dominant and submissive behavior may also be activated as survival reactions during traumatic stress, especially in relational trauma and attachment trauma. We can "solve" a traumatic situation by either submitting, as in "joining" the abuser, or by going dominant.

Dominance and submission is part of our biology - we cannot escape that. Even if we escape an imminent danger and bring ourselves to safety, it is still a challenge how to negotiate the risk of interacting with others in one-down or one-up position. Heard & Lake (1997) write about attachment theory in an extended version. They describe that we, as human beings, contain two relational systems, dominant/submissive and supportive/companionable.

These terms are meaningful in the work with skill training, which supports building inner authority and the ability to participate in mutual regulation of arousal as an alternative to locked dominance-submission dynamics. As humans we are constantly faced with choices - conscious or subconscious - between dominant/submissive behavior or supportive/ companionable behavior. Our best option is to make these choices conscious, so they are not solely governed by automatic patterns.

As mentioned earlier, Pat Ogden includes "submission" as a survival reaction, which can lie dormant in an EP. It is interesting that submit is on her list, but dominate is not. This - to me - points to the bias that is still very much a part of the trauma therapeutic research and practice field, which emphasizes the role of victim and how to heal it.

A parallel to this is found with Hart & Kæreby (2009), who use the words collapse, immobilization and submission synonymously. But do not deal with dominance.

In Relational Trauma Therapy we use the terms dominance and submission, one-up and one-down behavior and stuck roles. We relate to Heard & Lake's naming of the two relational systems.

We also relate to further development of the "drama triangle", which was first developed by Stephen Karpman within Transaction Analysis from 1968 onwards. Karpman named the locked roles: Victim, Attacker and Rescuer, and described the typical locked dynamics between them.

Eric Woltersdorff (2012) added the bystander role as a fourth position.

These stuck roles may be active before a traumatic situation occurs, they can play out in the event, and they can play out in an interaction between care-seeker and care-giver following a trauma. They can even play out internally in the personality's relationship to a traumatic event, trauma patterns, arousal states, etc.

"Dominant and submissive behavior related to survival" which is on the list of survival reactions, name the dominance and submission dynamics that can be triggered in a traumatic situation, supporting survival or supporting the preservation of an intact Self, which is avoiding or coping with dis-organization.

The last survival reactions on the list are called **Dis-organization - outgoing chaotic and Dis-organization - ingoing chaotic**. Both are categorized as 3rd degree stress reactions.

The term 3rd degree stress comes from Flemming Kæreby. In his work the term only covers Hypo-arousal/collapse - which is the shift from active SN governed survival reactions to a powerful PN reaction stimulated by the dorsal branch of the vagus nerve.

While we worked intensively on developing methods to support meeting and mutually regulating hypo-arousal states, suddenly an outgoing version showed up. One participant started screaming out of contact, was stopped and guided back into the present contact field where the arousal state could be lowered. What was this phenomenon? We couldn't name, to a satisfying degree, what we had experienced from the list of survival reactions we had at the time.

We formed the hypothesis that there is also an SN governed 3rd degree reaction, which is outgoing, and the common denominator for the two kinds of 3rd degree stress is that they contain a sense of disintegration of Self and disintegration of perception of reality. We also differentiated between two kinds of PN governed 3rd degree stress: Collapse, preparing to die, and extreme submissive behavior leading to disorganization.

Since then we have based our work on these hypotheses, witnessing how effective it is when phenomena are included in a theory and in a list of survival reactions. The reaction becomes normalized and becomes part of the collective potential of being human. It is possible to acknowledge the presence of the phenomenon, put it into words, share it and thereby break the isolation patterns, which are very typical with these extreme reactions.

Initially we named the two new 3rd degree stress states as "states of madness". We have since changed this to "disorganized states" - a term more appropriate in communicating the mechanism of the states

and more neutrally descriptive.

The inspiration for this came from attachment theory's division between organized and dis-organized attachment patterns. (Wennergren 2011). Disorganized patterns are created when the impulse to seek out help and the impulse to flee or protect oneself is triggered in relation to one and the same person. This happens to children if an attachment figure simultaneously attacks or harms the child. It may also happen during a later trauma where you need to both escape an abuser and yet maintain contact because that is what you can hold on to in a disrupted reality.

It is meaningful for us to use the term "disorganized" about the states, which may typically be triggered in relational trauma and attachment trauma, when you cannot escape while exposed to an unbearable level of stress. A disorganized state is characterized by something "falling apart" inside, which probably equals that the Self disintegrates. The structure holding our integrity together disintegrates. These states are completely without boundaries, chaotic, and without direction other than dispersing outwards or inwards.

Differentiation between organized and disorganized survival reactions continues to be very poignant to our development of methodology.

2nd degree stress survival reactions are organized - they have a clear objective, be it escape, winning over an assailant, calling for help, rescuing somebody, getting rid of something poisonous. Hence there are clear motor impulses related to the reactions which can be opened up and released bodily.

Disorganized states do not hold any clear motor impulses. If there are impulses, they are chaotic, without direction, without linear objective. Hence attempts to "release" or "express" them will be in vain, or run the risk of worsening the state, or that dissociation of the experience is the only viable solution.

What can we do about disorganized states, when they cannot be released in the body? We find it functional to work with externalizing the states mentally - move them outside the body to be able to explore together, acknowledge their existence, find a language for them, establish a boundary to them, witness them.

Dis-organization cannot be released. We can train ourselves to see, accept and thus integrate the existence of these states. The body is part of this process. Bodily presence is needed to be able to establish a boundary to disorganized states and to sustain contact with those you explore the states with.

Dissociation

Dissociation is not on the list of survival reactions in spite of our key goal with Relational Trauma Therapy being: Building a holding environment where states which have been held in dissociation can become mutually regulated.

When does dissociation happen? Does the split happen in the trauma situation? If yes, the word belongs on the list of survival reactions.

Or is dissociation a mechanism which kicks in to cope with the states triggered in the trauma and which there isn't capacity to meet and regulate in the person herself, or in the system surrounding the trauma survivor?

Ruth Lanius (2010) describes the difference between a non-dissociative and a dissociative form of PTSD. The non-dissociative form is characterized by flooding, flashbacks, nightmares and the dissociative by over-regulation of affect.

Dissociation and over-regulation ensures that you do not feel anything; that memory, emotion and arousal states linked to a trauma are kept separate from consciousness.

In the non-dissociative under-regulated form you are overwhelmed by non-regulated states linked to the trauma. The common perception of PTSD - as it is described in diagnosis lists such as DSM5 - does not include the dissociative sub-type of PTSD, but solely the non-dissociative, under-regulated type.

Non Dissociative PTSD	Dissociative PTSD
<ul style="list-style-type: none"> • Under regulation of affect • Re-living, flashbacks, nightmares • you are overwhelmed by non-regulated states linked to the trauma. • This type is included in diagnostic lists such as DSM5 	<ul style="list-style-type: none"> • over-regulation of affect • ensures you do not feel anything - memory, emotion and arousal states linked to a trauma are kept separate from consciousness • not included in diagnostic lists such as DSM5

Bruce Perry (1995) follows a similar path, presenting two continuums of survival reactions:

"The Hyperarousal Continuum: Defensive and "Fight or Flight".

The reactions in this continuum are named:

- Vigilance (crying)
- Resistance (freeze)
- Defiance (Posturing)
- Aggression

The hyperarousal continuum is described as most common among boys.

"The Dissociative Continuum: The Freeze or Surrender Responses".

The reactions in this continuum are named:

- Avoidance (crying)
- Compliance (Freeze)
- Dissociation (Numbing)
- Fainting (Mini-psychosis)

The dissociative continuum is described as most common among girls.

Both Lanius and Perry point to dissociation as a pivotal response to trauma and both identify two overall sub-types of trauma-reactions - one characterized by hyper-arousal and one characterized by dissociation. Both also identify a gender aspect; that more women/girls react with dissociation, and more men/boys react with hyper-arousal.

The difference between the two is that Lanius sees both hyper-arousal and dissociation as sub-types of PTSD (as after-reactions to trauma), while Perry describe both hyper-arousal and dissociation as states on a continuum from lower to higher arousal, starting in personality patterns, transitioning into survival reactions.

The dissociation continuum describes states synonymous with hypo-arousal states. Degrees of hyper-arousal states are already described in both 1st, 2nd and 3rd degree stress.

Perry's standpoint introduces the concept that hypo-arousal also occurs at lower arousal levels - that initial states of resignation may be observed in both 1st and 2nd degree stress, before the violent shift into collapse in 3rd degree. This perspective is supported by the concept of muscle hypo-response. Even if the nervous system may predominantly be in hyper-arousal, parts of the body may be in initial states of resignation, pulling away.

We find it interesting that Perry, in his description of the hyper-arousal and the dissociation continuum, is using terms related to dominance/submission: Defiance and Compliance. We link this to the type of clients he works with: Traumatized children who are more often threatened by other human beings (adults, perhaps family members - same species) than by "predators".

How do we use the term dissociation in Relational Trauma Therapy?

Is dissociation the same as hypo-arousal, as Perry proposes? Or are they overlapping states?

Experience tells me that hypo-arousal often, perhaps always, triggers dissociation - so sometimes they are identical or so closely linked that you cannot tell them apart. At the same time experience tells me that all survival reactions, both 2nd and 3rd degree, may lie hidden in dissociation. So what determines what we dissociate?

Based on a wide experience we perceive dissociation as a defense mechanism, which we as humans use in dealing with memory, feelings, emotions, arousal states, etc., which feel unbearable, and where no mutual regulation is accessible.

The phenomena are split off thus protecting the personality against exposure to what cannot be processed.

We relate to Nijenhuis' theory about dissociation clarifying that dissociative symptoms may appear both in the mind (psycho-form symptoms) and in the body (somato-form symptoms) and that these symptoms may be characterized by either too much of something (arousal, physical pain, nightmares, etc.) or too little of something (amnesia, numbness, etc.). (Jørgensen 2009)

We see dissociation as a systemic solution. The states and pieces of memory that are dissociated pose a severe challenge, not only to the person himself, but to us all - and especially those in contact with the trauma survivor. Dissociation "solves" the problem arising when there is a collectively limited capacity to meet, accept and integrate powerful states and factual memories. If the surrounding context has the capacity the trauma survivor is given a freer choice (subconsciously) in how she or he relates to the trauma states and the memories. If the surrounding context does not hold the capacity, dissociation is often the only way to be able to adapt and move on with life. Hence working with dissociative trauma patterns is a collective project. It is not just about opening the individual pattern. It is about building a holding environment, in a group or dyad, which collectively may help access, meet and regulate what was being held in dissociation. It is our experience that working in groups is very helpful in this process. The more people come together in meeting and regulating the demanding states, the more resources are available.

Thus far dissociation is not on our list of survival reactions, but is regarded as a meta mechanism with the ability to impact access to all survival reactions.

References:

Agazarian, Yvonne M. (2006): *Systems Centered Practice. Selected Papers on Group Psychotherapy*. London, Karnac.

Baldwin, David (2013): Primitive mechanisms of traumareponse: An evolutionary perspective on trauma-related disorders. I *Neuroscience and Biobehavioral Reviews* 37 (2013), p. 1549-1566
<http://dx.doi.org/10.1016/j.neubiorev.2013.06.004>

Brantbjerg, M.H. & Stepath S. (2007): The Body as Container of Instincts, Emotions and Feelings. 35 page article. Copenhagen, own publication

Brantbjerg, Merete Holm (2007): Resource Oriented Skill Training as a Psychotherapeutic Method. 50 page article. Copenhagen, own publication

Brantbjerg, Merete Holm (2008): The Relational Aspect of Resource Oriented Skill Training. 30 page article. Copenhagen, own publication

Fisher, Janina (2009): Powerpoint from workshop in Oslo, May 2009

Hart, S. & Kæreby, F. (2009): Dialogen med det autonome nervesystem i den psykoterapeutiske proces (The dialogue with the autonomic nervous system in psychotherapeutic process). In *Matrix*, 2009, 3, p. 292-315

Heard, D. & Lake, B. (1997). *The challenge of attachment for caregiving*. London: Routledge.

Jørgensen, Steen (1993) Bearbejdning af choktraumer/posttraumatisk stress i Bodydynamic Analyse (Working with chocktrauma/posttraumatic stress in Bodydynamic Analysis). In Jørgensen, Steen (red.) (1993) *Forløsning af choktraumer. (Releasing shock-trauma)*. Copenhagen, Forlaget Kreativ.

Jørgensen, Steen (2010): Ideas, theories and models of dissociation. Teaching-material

Jørgensen, Steen: (2013): Agression, dominance and submission. Teaching-material

Karpman, Stephen: Dramatriangle

http://en.wikipedia.org/wiki/Karpman_drama_triangle

Kæreby, Flemming: Hvad er psykofysiologisk Traumeterapi? (What is psychophysiological Trauma Therapy?) [http://seforeningen.dk/under litteratur/artikler](http://seforeningen.dk/under_litteratur/artikler)

Kæreby, Flemming (2009): *Model over 1., 2. og 3. grads stres. Revideret 2. udgave*.

Lanius, R.A. et al (2010): Emotion Modulation in PTSD: Clinical and Neurobiological Evidence for a Dissociative Subtype. I *American Journal of Psychiatry* 167:6 p. 640-647, June 2010
<http://ajp.psychiatryonline.org/article.aspx?articleID=102318&resultClick=1>

Legato, Marianne J. (2007) "*Hvorfor mænd intet husker og kvinder intet glemmer.*" ("Why men don't remember anything and women don't forget anything") Ekstra Bladets Forlag

Levine, Peter (1988): Communicated verbally + unpublished notes from seminar.

Levine, Peter (2010): *In an Unspoken Voice. How the Body Releases Trauma and Restores Goodness*. North Atlantic Books

- Nijenhuis, E.R.S. & den Boer, J.A. (2007): Psychobiology of traumatization and trauma-related structural dissociation of the personality. In: Vermetten, Dorathy, Spiegel, editors. *Traumatic Dissociation, Neurobiology and Treatment*. Washington D.C.: American Psychiatric Publishing Inc.
- Ogden, Pat, Minton, K. & Pain, C. (2006): *Trauma and the Body. A Sensorimotor Approach to Psychotherapy*. W.W Norton & Company. New York.
- Panksepp, Jaak (1998): *Affective Neuroscience. The Foundations of Human and Animal Emotions*. Oxford University Press.
- Panksepp, J. & Biven, L. (2012): *The Archeology of Mind. Neuroevolutionary Origins of Human Emotions*. W.W.Norton & Company, New York & London.
- Perry, Bruce (1995): Childhood Trauma, the Neurobiology of Adaptation and "Use dependent" Development of the Brain: How "States" becomes "Traits". *Infant Mental Health Journal* Vol.16 No.4 Winter 1995. http://www.childtrauma.org/ctamaterials/states_traits.asp
- Porges, Stephen (2011). *The polyvagal theory*. New York, NY: WW Norton.
- Rothschild, Babette (2000): *The Body Remembers. The Psychophysiology of Trauma and Trauma Treatment*. W.W.Norton & Company, New York
- Vårdal, Kolbjørn (2013): Påvirker avsky våre moralske dommer om seksualitet? (Does disgust impact our moral judgments about sexuality?)
- Wennerberg, Tor (2011): *Vi er vores relationer. Om tilknytning, traumer og dissociation. (We are our relationships. On attachment, trauma and dissociation)*. Dansk Psykologisk Forlag.
- Wolterstorff, Eric & Grassmann, Herbert (2013): The Scene of the Crime. Traumatic Transference and Repetition as Seen Through Alfred Hitchcock's Marnie. *International Body Psychotherapy Journal* Vol 13, no 2