

HeartLight  
Center

IN PARTNERSHIP  
WITH  
**HORAN & McCONATY**  
Cremation • Burial • Pre-Planning  
Compassionate • Professional

**Baue**  
Funerals • Crematory • Cemetery  
Helping you honor life  
since 1935

The Neurobiology  
of Grief and Loss



Presented by Ruby Jo Walker, LCSW

Visit [www.heartlightcenter.org](http://www.heartlightcenter.org) or email [info@heartlightcenter.org](mailto:info@heartlightcenter.org)

## Understanding our Neurobiology After Loss

April 13, 2021

RUBY JO WALKER, LCSW

SPONSORED BY HEARTLIGHT CENTER



Understanding neurobiology can bring some comfort— “I am not crazy” as it explains what is going on in our nervous system, underlining that biology is creating the response, not coping or strength.

## Stress, Trauma and Grief all Affect Nervous System Functioning

**Stress** is physical, chemical and/or emotional factor that causes strain and tension. It is the body's response to anything that requires attention and/or action.

**Trauma** is the response of a deeply distressing event that overwhelms the capacity to cope, causing feelings of helplessness, diminishes sense of self and the ability to feel the full range of emotions.

**Grief** a strong, natural reaction, caused by loss or significant change.

Grief is a natural response to loss. Not all losses create full-on trauma symptoms but they generally disrupt physiology.

copyright 2021

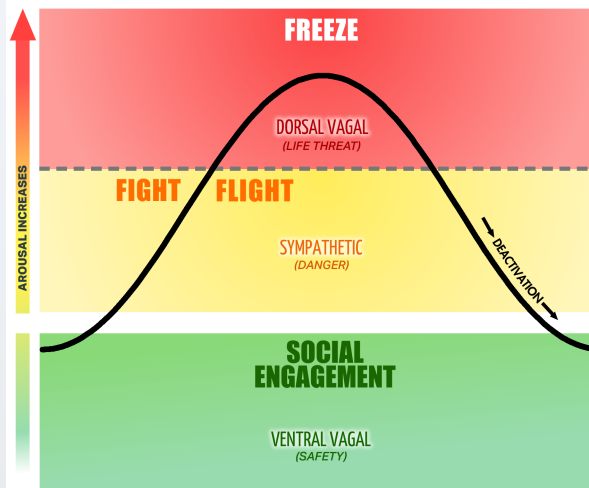
rubyjowalker.com

Our biology responds in certain ways when it assesses threat. Losing a loved one is a threat to our nervous system.

copyright 2021

rubyjowalker.com

How our biology assesses threat—either as **danger** or **life threat**—will determine the state in our body that includes emotions, behaviors and states of physiology. THEY WILL LIMIT OUR BEHAVIORAL REPERTOIRE.



© 2018 Ruby Jo Walker, All rights reserved

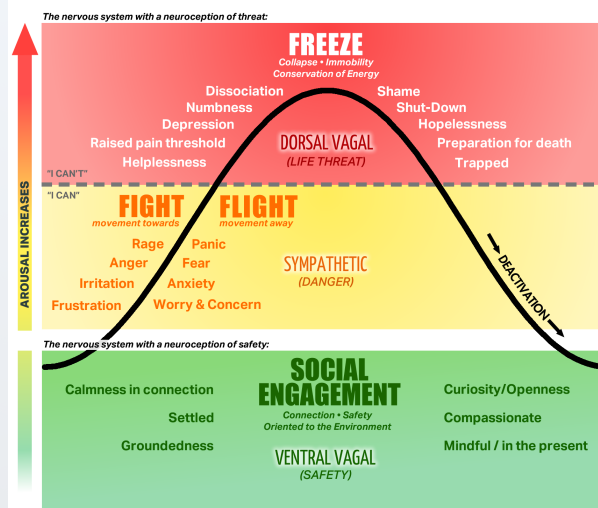
Adapted by Ruby Jo Walker from: Cheryl Sanders, Anthony "Twig" Wheeler, and Steven Porges.

rubyjowalker.com

Neuroception is our nervous system's assessment of threat and safety. It will determine the state of our physiology—and emotions and behaviors.

copyright 2021

rubyjowalker.com



copyright 2021

© 2017 Ruby Jo Walker. All rights reserved

Adapted by Ruby Jo Walker from: Cheryl Sanders, Anthony "Twig" Wheeler, and Steven Porges.

rubyjowalker.com

Grief and loss dysregulate our nervous system and this is a normal and human response.

copyright 2021

rubyjowalker.com

## Traumatic loss:

- untimely or unexpected
- violence occurred—or the loss survivor witnessed violence
- part of the loss was perpetration and intent to harm
- believing the loved one suffered or that the death was preventable
- multiple deaths
- one's own life was threatened

copyright 2021

rubyjowalker.com

## Fight or Flight Behaviors—Yellow Zone

- More anxious or frustrated most of the time
- Overreacting to situations
- Getting angry and irritated easily
- Not feeling like one can rest
- More judgmental towards self and others
- Feeling like one wants to just get away
- Having more addictive behavior

copyright 2021

rubyjowalker.com



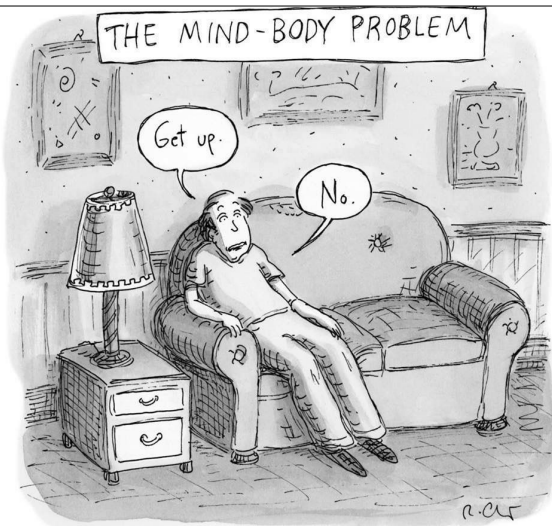
"Watch yourself - he's feeling especially defensive today."

## Freeze Behaviors—Red Zone

- More on the depressed side
- Lethargy and tiredness—less active
- Hard to feel motivated/procrastination
- Having a “resigned” reaction to situations
- Hard to interact with others as it is too exhausting
- More memory issues
- Overwhelmed regularly

copyright 2021

rubyjowalker.com



Most people have some freeze (red zone) in the early adaptation of grief— as we cannot integrate the experience. Sometimes people see this as denial—it is simply too much to take in the loss.

copyright 2021

rubyjowalker.com



This means that as people work through more grief, their symptoms may look worse as they move from freeze to fight/flight.

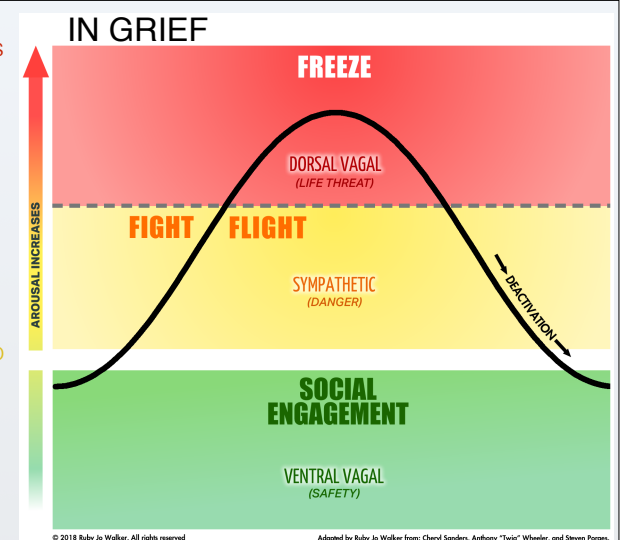
copyright 2021

rubyjowalker.com

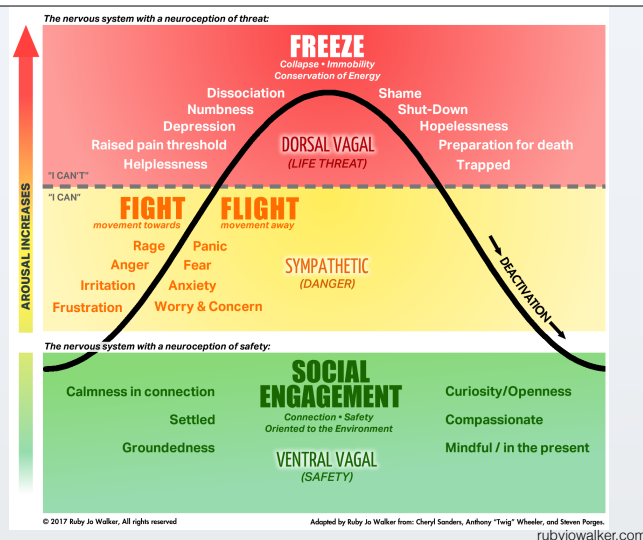
Paralyzed, shut down, disengaged, depressed, "it is no big deal," ruminating, rationalizing, only thinking positively/spiritually, going through the motions—but actually disembodied. All of this is disconnection of experience—shut down.

Avoiding funeral, memories, talking about the loss, avoiding connection, trying to get away, anger at systems/people, staying busy, mainly angry or anxious, everything feels edgy. This is the body mobilized.

copyright 2021



Early childhood loss and trauma will generally affect the state of the nervous system. New loss will generally bring up any past unworked through losses.



copyright 2021

Life stressors are accumulative in our biology. This means that being in grief means we will often cope less skillfully if we hit new stressors while in our grief process.

copyright 2021

rubyjowalker.com

Each person's grief process is very individual. It is important to honor this, while also being aware if we are getting stuck.

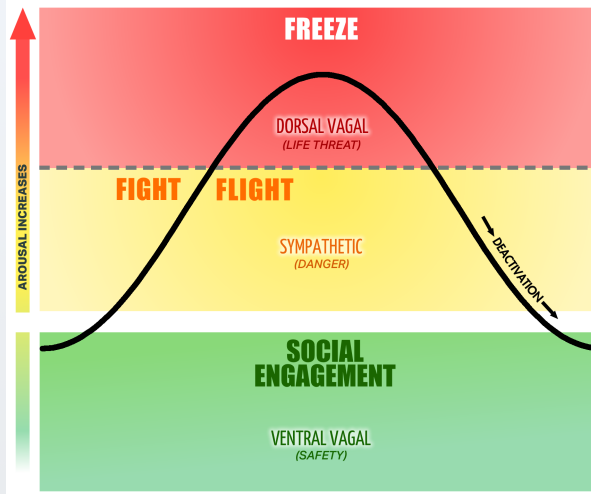
*"Our soul and our psyche  
know how to do grief. We  
don't need to learn it. It is not  
a technique. What we need  
to learn is not to avoid it."*

—David Kessler

There is generally going to be a heaviness, a hollowness, and an emptiness when we have loss—and feeling sadness. It is part of the the grief process—as there is a void created by loss. This is part of being present to loss.



We are supported best during loss if we can receive support to move in the green zone, even for moments at a time. It is in our biological wiring to utilize support .



© 2018 Ruby Jo Walker, All rights reserved

Adapted by Ruby Jo Walker from: Cheryl Sanders, Anthony "Twig" Wheeler, and Steven Porges. rubyjowalker.com

copyright 2021

We are wired to need others when we have trauma and loss. Learning to lean on others is part of the grief process. This is not being needy—it is being human.

copyright 2021

rubyjowalker.com

“Humans need another appropriate mammal to regulate with”...to have their nervous system function best.

—Dr. Steven Porges

copyright 2021

rubyjowalker.com



In grief, we are trying to integrate life after loss—  
and who we are without  
who or whatever we have  
lost. This is integration.

copyright 2021

rubyjowalker.com

Integration means we are able to  
be regulated and connected to  
others and ourselves. Our loss  
can be part of who we are in  
integration—it is the new sense  
self with the loss as part of us.

copyright 2021

rubyjowalker.com

## TRAUMA/GRIEF STATE

chaos-rigidity  
dysregulation

**Trauma Vortex**

- same thoughts, emotions, sensations
- constriction and limits in our experience
- struggle with being present
- neutral and positive experiences are not integrated

**Lack of Integration—  
loss is not in the  
sense of who we are  
and how we want to  
live our life.**

This gets reinforced by the negativity bias.

© 2018 Ruby Jo Walker • rubyjowalker.com  
Adapted from Peter Levine, Steve Hoskinson, and Dan Siegel

## DEVELOPING CAPACITY MEANS STRENGTHENING RESILIENCE TO MOVE INTO MORE INTEGRATION OF THE LOSS

chaos-rigidity  
dysregulation

**Trauma Vortex**

**Resiliency Vortex**  
integration  
regulation

### CAPACITY-BUILDING

- SUPPORT FROM OTHERS
- TAKING IN THE GOOD
- WORKING WITH BELIEFS
- SELF-COMPASSION

© 2018 Ruby Jo Walker • rubyjowalker.com  
Adapted from Peter Levine, Steve Hoskinson, and Dan Siegel



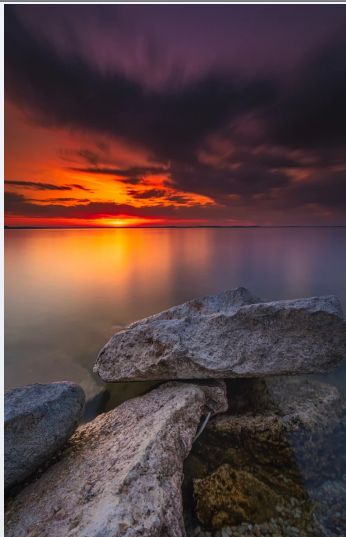


Capacity-building and resiliency and practices do not minimize grief, as there are no short-cuts with a grief process. But they can make the grief process feel more supported as we strengthen our capacity.

copyright 2021

[rubyjowalker.com](http://rubyjowalker.com)

Building capacity during grief often needs to be intentional and deliberate.



copyright 2021

[rubyjowalker.com](http://rubyjowalker.com)

We know that learning to have support assists in the grief process and supports building capacity.

Feeling this sense of support in the body also deepens our ability to integrate support.



copyright 2021

[rubyjowalker.com](http://rubyjowalker.com)

When we feel someone is “not with us” we move to threat states. Statements like *“time will take care of this pain”* or *“it is God’s will,”* it just elicits more threat activation in our nervous system —we do not feel that person is with us.

copyright 2021

rubyjowalker.com

*“Feeling safe, satisfied and connected supports resilience.”*

—Rick Hanson

This supports strengthening our capacity.

copyright 2021

rubyjowalker.com



Grief feeling stuck often means we have a faulty belief that got “turned on” in us from early childhood. This impedes integration.

copyright 2021

rubyjowalker.com



## Beliefs that Impede Integration:

- *"It is my fault and I am not a good person because this happened"...or a good parent, spouse, child...*
- *"I could have done more...said more."*
- *"If I would have...then, maybe he/she/they would be alive."*
- *"I deserved this and I must have done something wrong or this would not have happened."*
- *"I do not deserve to have a good life because of this loss."*
- *"I can never recover."*

These can mean getting professional help might be useful.

copyright 2021

[rubyjowalker.com](http://rubyjowalker.com)



We all need to learn to “take in the good” for our own capacity-building.



“Taking in the good” is a Rick Hanson term.

copyright 2021

[rubyjowalker.com](http://rubyjowalker.com)

## Ratios of Positive Emotions to Negative Emotions

- Flourishing—must be 3,4,5 to 1
- Feeling stuck—is 2 to 1
- Depressed—less than 1 to 1

copyright 2021

[rubyjowalker.com](http://rubyjowalker.com)

We have a biological tendency towards the negativity bias. This affects what we “take in” and even what we notice in life.

copyright 2021

[rubyjowalker.com](http://rubyjowalker.com)

## “Taking in the good”

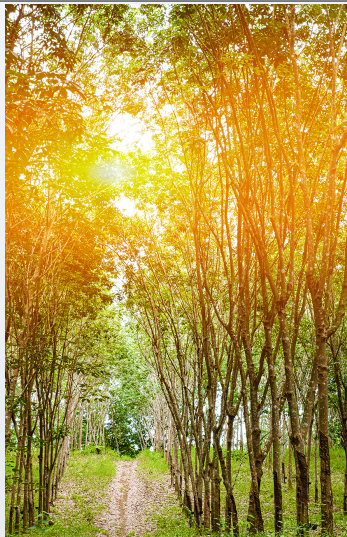
(a Rick Hanson term)

- Awe and beauty of life
- Support from others
- Small gestures and kindnesses—looking for what is right, rather than what is wrong.
- Gratitude
- Staying aware that the depth of our grief is sometimes connected to the depth of our love.

copyright 2021

[rubyjowalker.com](http://rubyjowalker.com)

Breath dysregulation is part of both threat states.  
Working with breath can help build more capacity.



copyright 2021

[rubyjowalker.com](http://rubyjowalker.com)



Regret, and even shame and guilt are often part of grief—and they are mediated by self-compassion.

#### Internal Threat to Self-concept

##### Freeze:

Rumination

##### Fight:

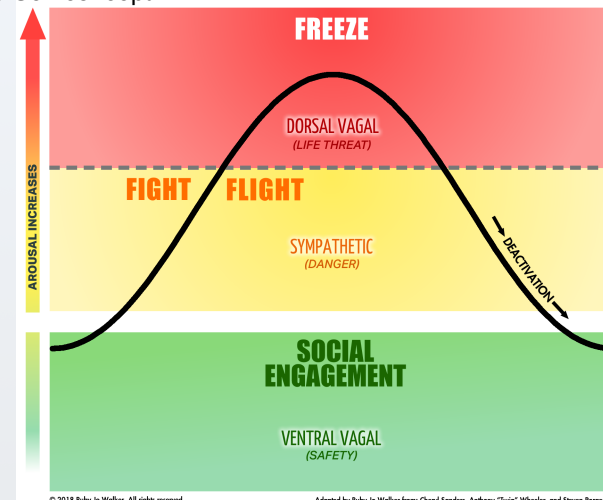
Self-judgement

##### Flight:

Isolation and mindless activities

##### Self-

compassion  
deactivates  
threat to safety.



#### What is self-compassion?

It is extending compassion to oneself in instances of perceived inadequacy, failure or general suffering.



Self-compassion includes mindfulness—noticing with awareness and without judgment, what is happening with us.



Self-Compassion reduces anxiety and depression—and it is linked to increased capacity and resilience. It moves us out of fight/flight state.



copyright 2021

rubyjowalker.com

If your compassion does not include yourself, it is incomplete.  
~Jack Canfield

Lack of forgiveness causes almost all of our self-sabotaging behavior.  
~Mark Victor Hansen



copyright 2019

rubyjowalker.com

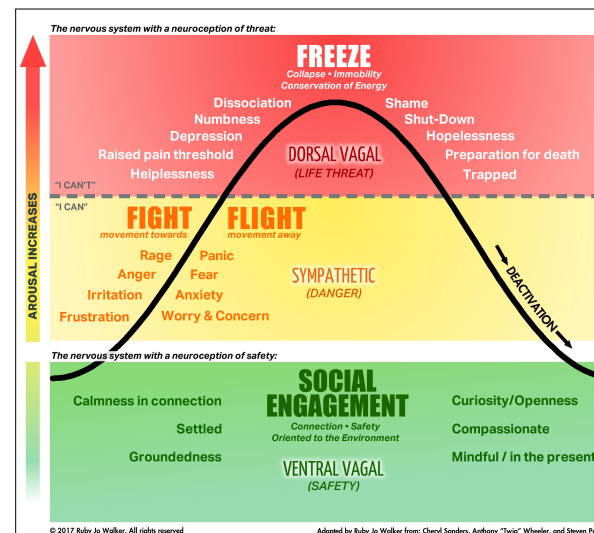
## Self-Compassion Resources:

- Dr. Kristen Neff—[selfcompassion.org](http://selfcompassion.org)
- Dr. Chris Germer—[chrisgermer.com](http://chrisgermer.com)
- Dr. Rick Hanson—[rickhanson.net](http://rickhanson.net)
- Tara Brach—Radical Acceptance
- Insight Timer—Free app with self-compassion meditation



rubyjowalker.com

copyright 2019



Small resiliency practices are critical—20 seconds 10 x per day. Drop whatever does not serve you—people, activities, social media, information, etc

Doing self-care of mindfulness, eating right, exercising, boundary setting. Resiliency practices daily are needed and awareness of needs.

Paying close attention to your state is important here to stay mindful of how you are doing.

copyright 2021

rubyjowalker.com

## Practices for Supporting Capacity

- Regulated Breath
- Connectedness with Caring Others
- Taking in the good
- Mindfulness
- Self-compassion

copyright 2021

rubyjowalker.com



## Summary

- Our responses to loss that range including anxiety, rage, and depression are biological—and not a measure of strength or ability to cope. THEY ARE NORMAL RESPONSES.
- There is no short cut to processing grief, but we can build capacity to support the grief process.
- Increased capacity is supported by taking in any goodness in life, taking in support from others and offering ourselves self-compassion.
- It is also important to work with any faulty beliefs related to the loss.

copyright 2021

rubyjowalker.com

Thank you for attending our program.

For more information about HeartLight Center please visit [www.heartlightcenter.org](http://www.heartlightcenter.org)

To request a Certificate of Completion please email us at [info@heartlightcenter.org](mailto:info@heartlightcenter.org)

HeartLight  
Center

The Neurobiology  
of Grief and Loss



HORAN & McCONATY  
Cremation • Burial • Pre Planning  
Compassionate • Professional

**Baue**  
Funerals • Crematory • Cemetery  
Helping you honor life  
since 1935

Visit [www.heartlightcenter.org](http://www.heartlightcenter.org) or email [info@heartlightcenter.org](mailto:info@heartlightcenter.org)

## BIBLIOGRAPHY

Foundations of Well-Being Program, Dr. Rick Hanson

Mindsight Institute, Dr. Dan Siegel, MD

Hakomi Training Institute, Ron Kurtz, Founder

National Institute for the Clinical Application of Behavioral Medicine Programs

Polyvagal Theory Resources, Dr. Steve Porges, PhD

Organic Intelligence Training, Steve Hoskinson

Somatic Experiencing Training, Dr. Peter Levine, PhD

The Trauma Spectrum, Dr. Robert Scaer, MD

[rubyjowalker.com](http://rubyjowalker.com)

## BIBLIOGRAPHY CONTINUED:

The Body Holds the Score, Dr. Bessel Van der Kolk, MD

The Telomere Effect, Dr. Elizabeth Blackburn, & Dr. Elissa Epel

Twig Wheeler, [liberationispossible.com](http://liberationispossible.com)

The Neuroscience of Human Relationships, Dr. Louis Cozolino

Attachment-based Yoga and Meditation for Trauma and Recovery, Deirdre Fay

Being in my Body, Toni Rahman

Dr. Allan Shore, PhD [allanshore.com](http://allanshore.com)

[rubyjowalker.com](http://rubyjowalker.com)

## BIBLIOGRAPHY CONTINUED:

Bouncing Back, Linda Graham

The Developing Mind, Dan Siegel

Resilience, Rick Hanson

Nurturing Resiliency, Kathy Kain and Steven Terrel

[dianepooleheller.com](http://dianepooleheller.com)

[rickhanson.net](http://rickhanson.net)

[re-embodylife.com](http://re-embodylife.com)—AST Model of Shame by Caryn Scotto d'Luzia

The Mindful Self-Compassion, Workbook by Kristin Neff and Chris Germer

[rubyjowalker.com](http://rubyjowalker.com)