Where's my Hoverboard?

Taking cutting-edge Relational Frame Theory (RFT) for a 'ROEM' around the skatepark of human language and cognition.

Chapter 1. Yearning for a hoverboard
Chapter 2. Building a hoverboard
Chapter 3. Riding a hoverboard
Chapter 4. Steering a hoverboard
Chapter 5. We all need a hoverboard

Tim McLauchlan (Clinical Psychologist, Peer-reviewed ACT trainer)
www.spacehead.com.au

3

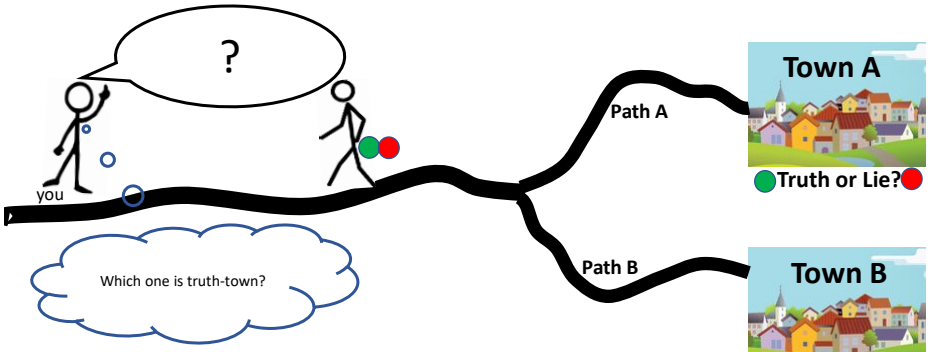
Warm up riddle

Ages 7 -12

The last time I talked about RFT, I fell and sprained my hippocampus!

Finding TRUTH-town

4



There are two towns.
In one they ALWAYS tell the truth.
In one they ALWAYS tell lies.

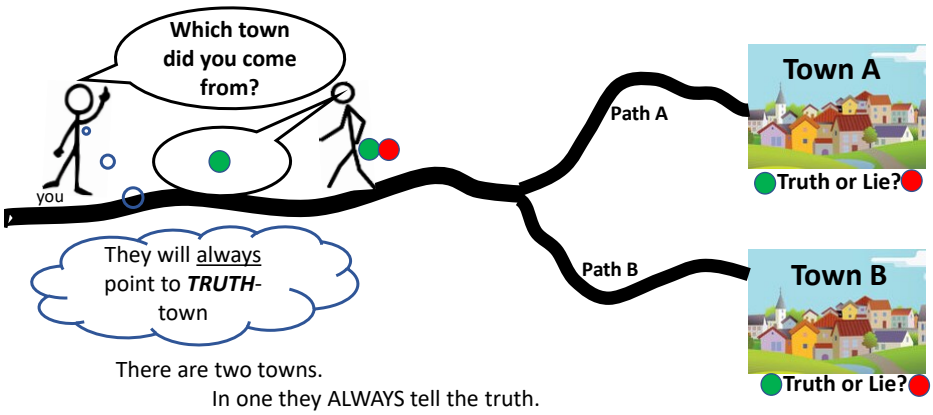
You want to go to **TRUTH-town**!

You are walking along the road, and you see someone from one of the towns (you don't know which).

What ONE simple question can you ask to work out which town is TRUTH-town?

Start

5



There are two towns.
In one they ALWAYS tell the truth.
In one they ALWAYS tell lies.

You want to go to **TRUTH-town**!

You are walking along the road, and you see someone from one of the towns (you don't know which).

What ONE simple question can you ask to work out which town is TRUTH-town?

6

Chapter 1.
Yearning for a hoverboard

7

Dear Science,

8

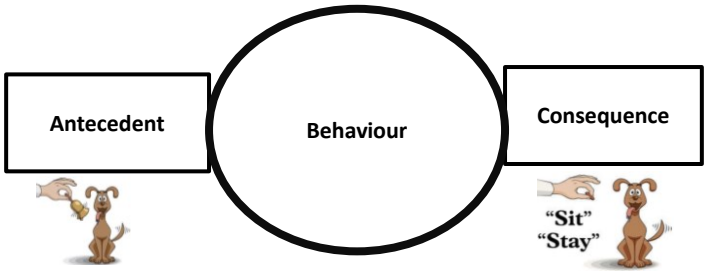
What if yearning for "a science more adequate to the challenges of the human condition" (Hayes et al., 2012)

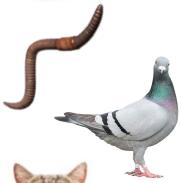
is like having a skateboard, but needing **hoverboard**?

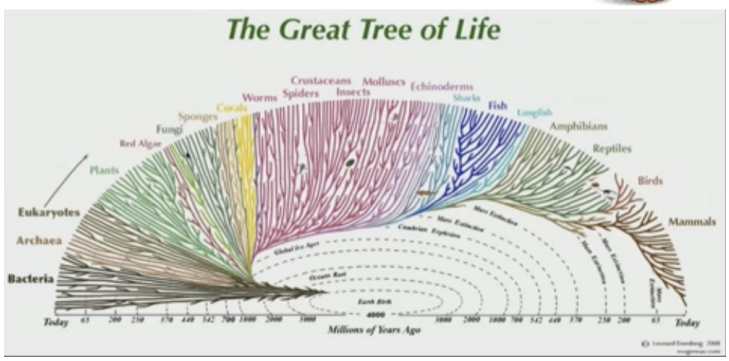
(Back to the Future, 1985)

9

Behavioural science made an excellent skateboard.



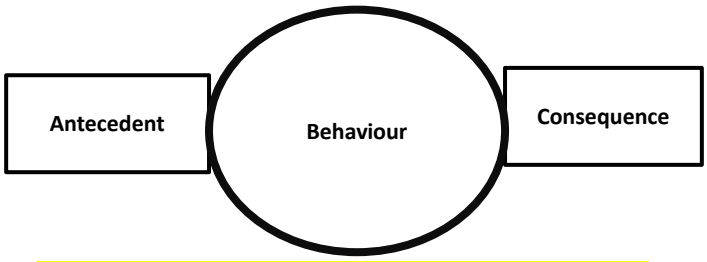




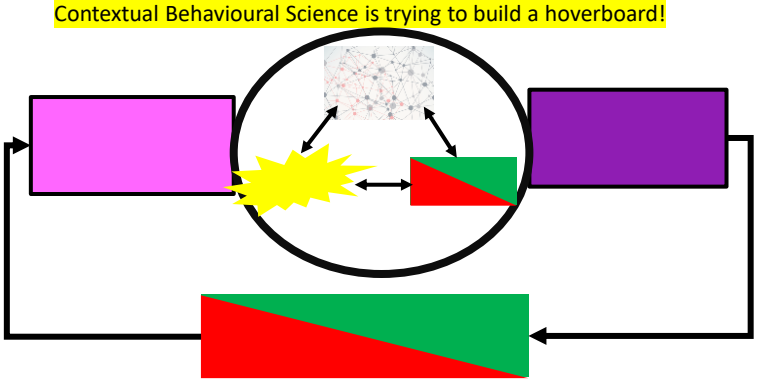
Human language and cognition?

10

"where we're going, we don't need wheels!"



Contextual Behavioural Science is trying to build a hoverboard!



Human language and cognition!

11

Hoverboard = RFT

Relational Frame Theory

A psychological theory of **human language and cognition**.

Navigate and alleviate human psychological suffering:

- predict and influence behaviour with precision, scope, and depth.

12

Seth Sentry - Dear Science (Official Video) - YouTube

Yeah science is amazing!
But not to me though cause I am sick of waiting

Where's my hoverboard?
("a science adequate to the human condition")

No hoverboards just seems a bit piss weak…

13

When I was a kid I nearly threw a fit
*I got a skateboard, (sh*t) I was furious*

What the hell am I supposed to do with this?

Man, science'll sort it out hopefully
I don't wanna roll around the ground like a nobody
I wanna soar upon a board made of pure science

14

The other day I drew a little rough design on a serviette
*So now all you have to do is make it work and sh*t*

*I know I'm rambling but f#*king hell science*
I just want a hoverboard before I'm too old to ride it!

15

Disclosures

- Tim McLauchlan
  - I have not received any commercial support related to this presentation.
  - I get paid to provide training and supervision in ACT.
  - I'm a blister.

16

I'm a blister story!

17

Work hard to **avoid** these contexts. The behaviours that are most likely to be evoked may be…

- running
- fighting
- hiding

Work hard to **approach** these contexts. The behaviours that are most likely to be evoked may include…

- connection
- play
- exploration
- perspective taking
- meaning making
- choosing
- noticing beauty
- flexibly attending to things
- etc….

aversive

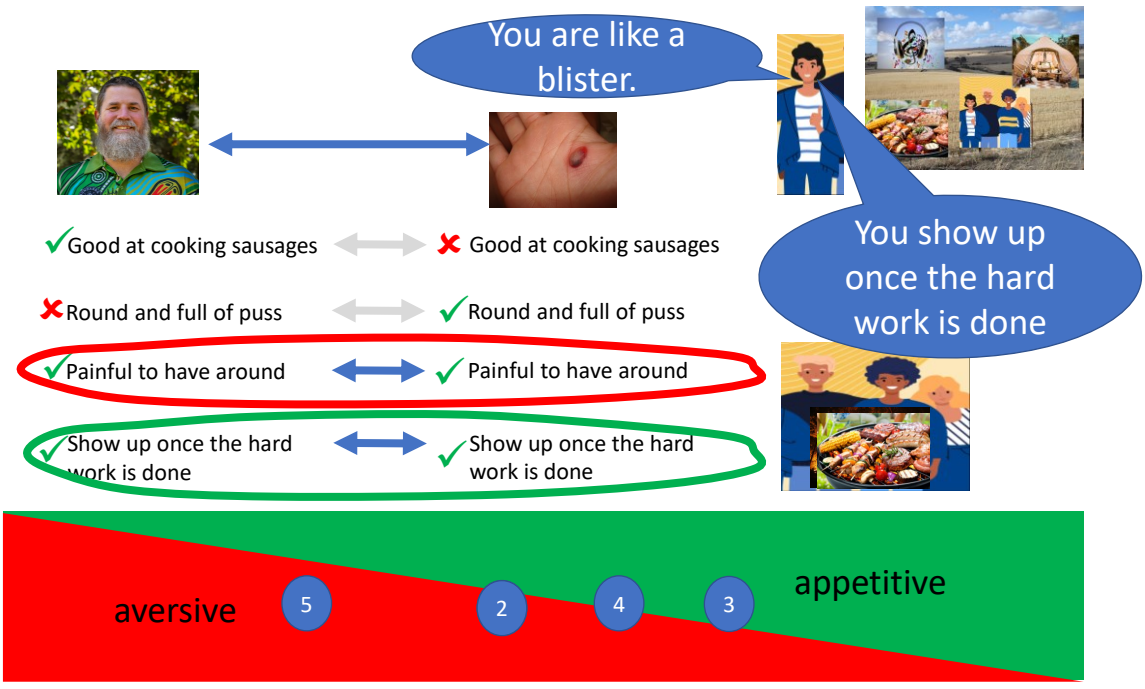
appetitive

18

This is not a story about bushfires!

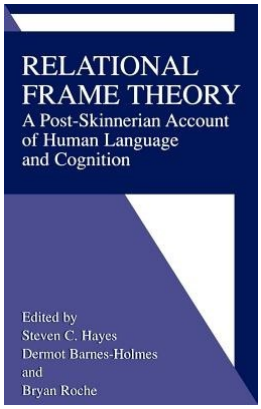
Party in the paddock!

19

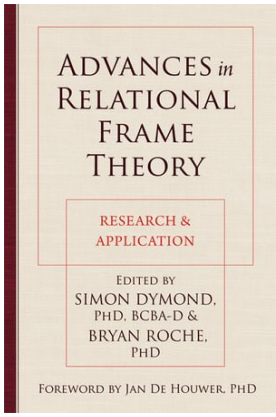


20

I show up once the hard **RFT** work is done



2001



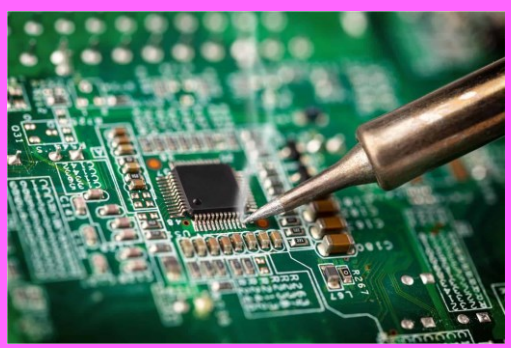
2013

Yvonne Barnes-Holmes
Dermot Barnes-Holmes

The Odysseus research project
2015 - 2020

21

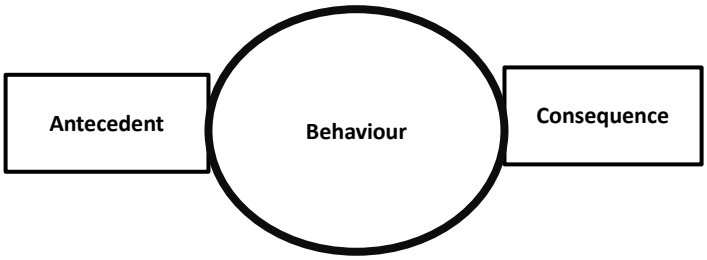
Chapter 2.
Building a hoverboard

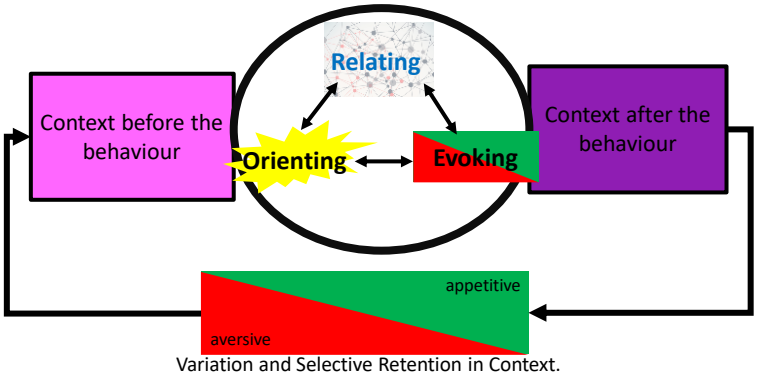


22

From ABC to RFT

23



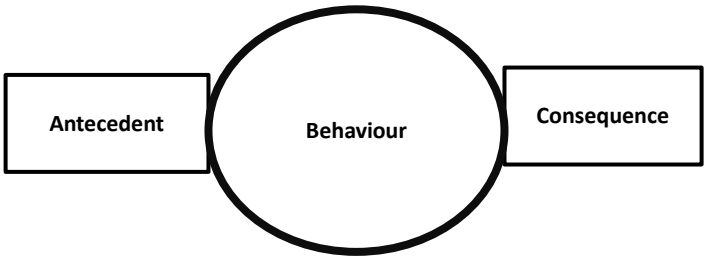


Variation and Selective Retention in Context.

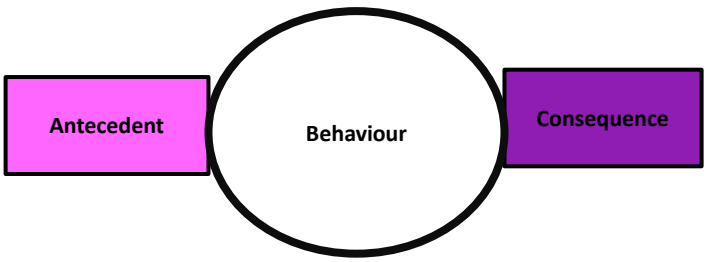
ABC

RFT

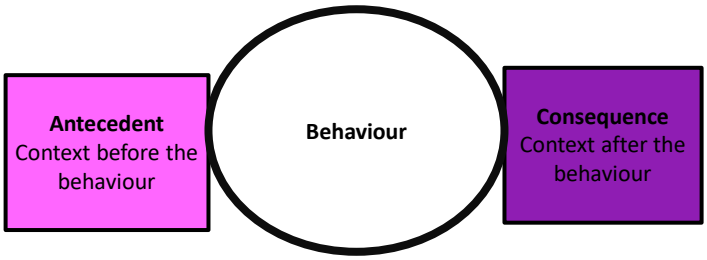
24


Antecedent
Behaviour
Consequence

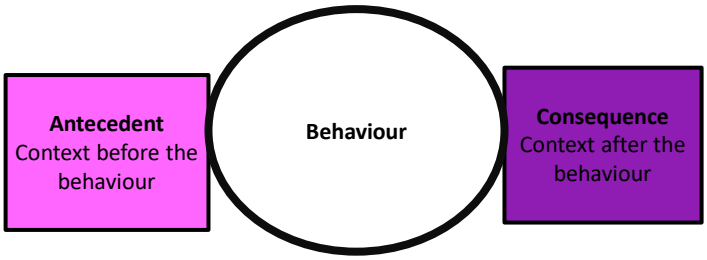
25


Antecedent
Behaviour
Consequence

26



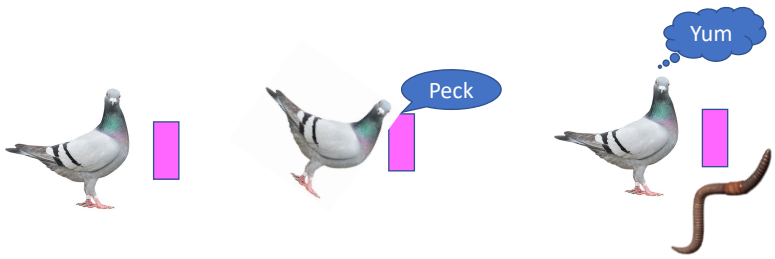
27



Operant conditioning

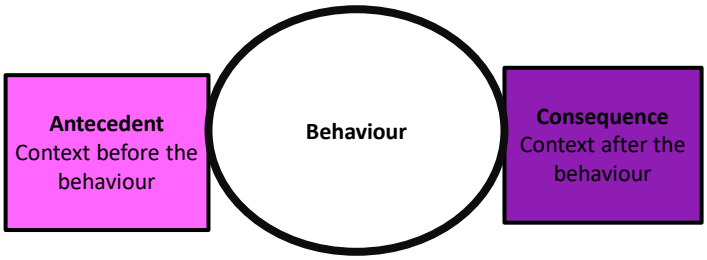
Reinforcement - increasing a behavior

Punishment - decreasing a behavior



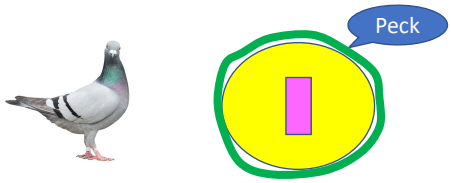
Reinforcement

28



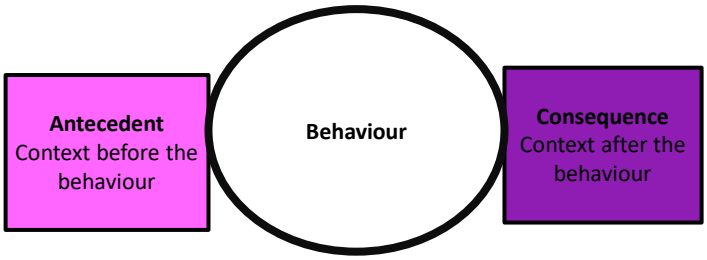
Reinforcement - increasing a behavior

Punishment - decreasing a behavior



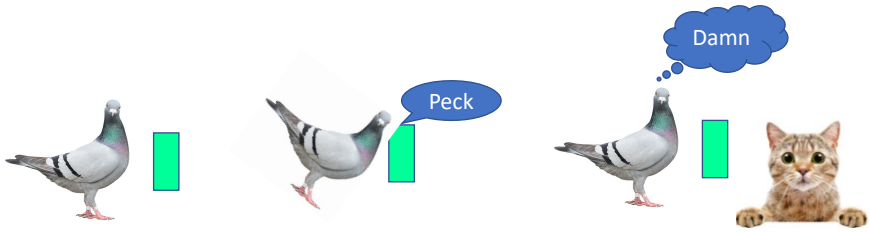
Reinforcement

29



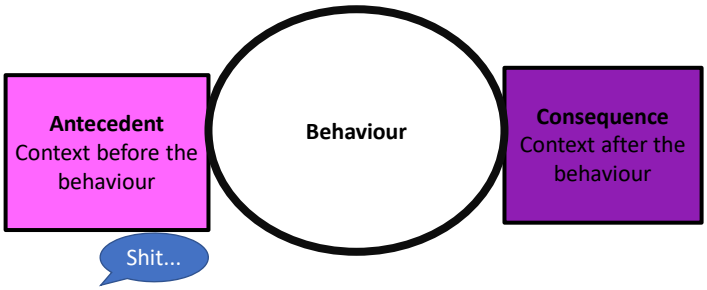
Reinforcement - increasing a behavior

Punishment - decreasing a behavior



Punishment

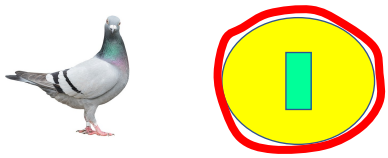
30



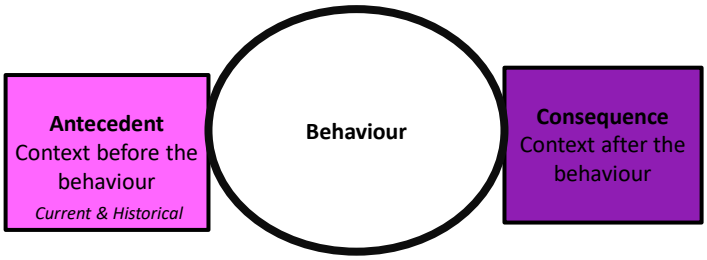
Reinforcement - increasing a behavior

Punishment - decreasing a behavior

Punishment



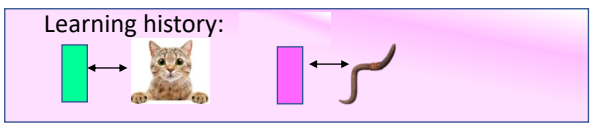
31



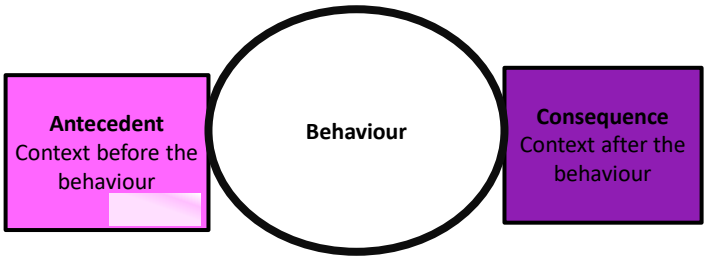
Reinforcement - increasing a behavior

Punishment - decreasing a behavior

N.B. Antecedent – Context before the behaviour
- includes everything current and historical.



32



Reinforcement - increasing a behavior

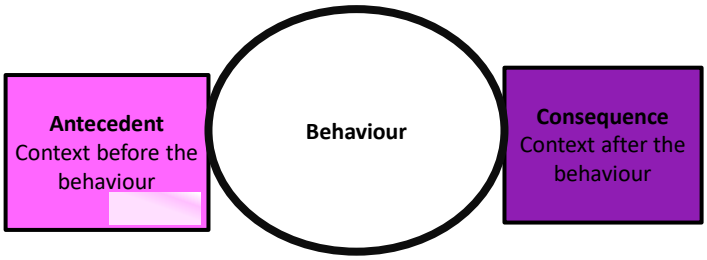
Punishment - decreasing a behavior

In a given context we behave

If the behaviour makes the context better,
we are MORE likely to do it again in contexts like this.

If the behaviour makes the context worse,
we are LESS likely to do it again in contexts like this.

33



Reinforcement - increasing a behavior

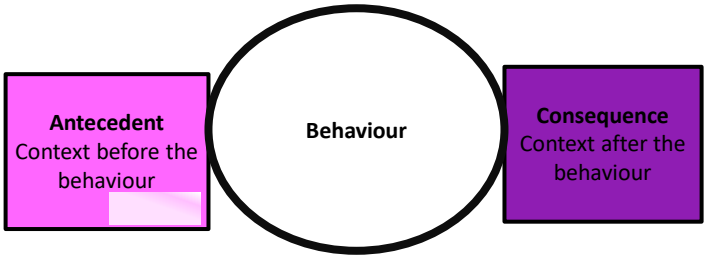
Punishment - decreasing a behavior

In a given context we behave

If the behaviour makes the context better, (**more appetitive**)
we are MORE likely to do it again in contexts like this.

If the behaviour makes the context worse,(**more aversive**)
we are LESS likely to do it again in contexts like this.

34



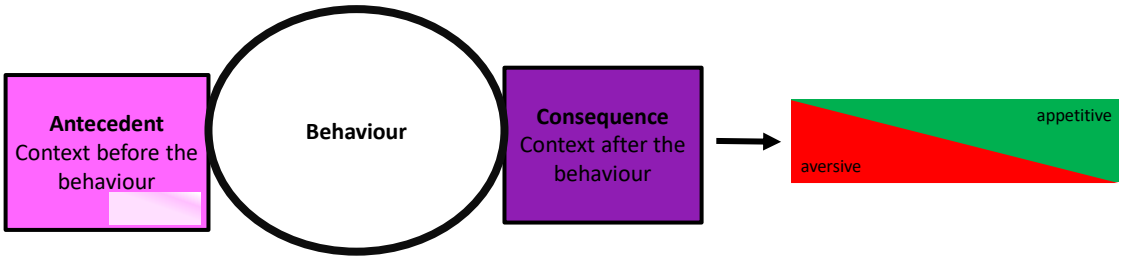
Reinforcement - increasing a behavior

Punishment - decreasing a behavior

In a given context we behave If the behaviour makes the context better –
(**MORE appetitive or LESS aversive**)

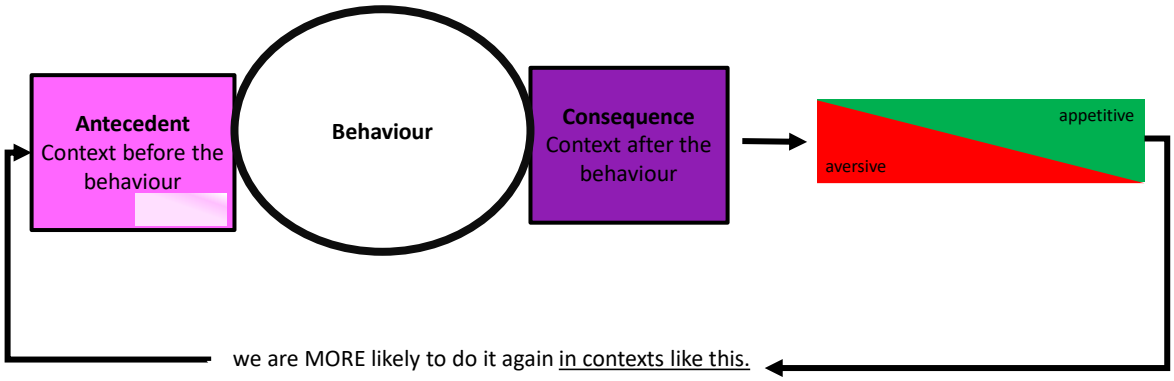
we are MORE likely to do it again <u>in contexts like this.</u>

35



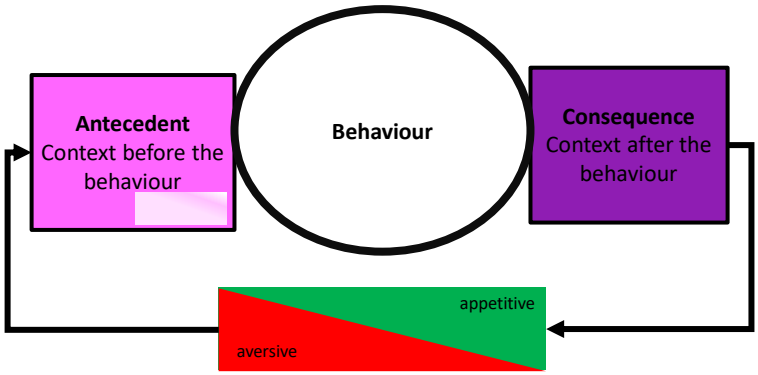
we are MORE likely to do it again <u>in contexts like this.</u>

36



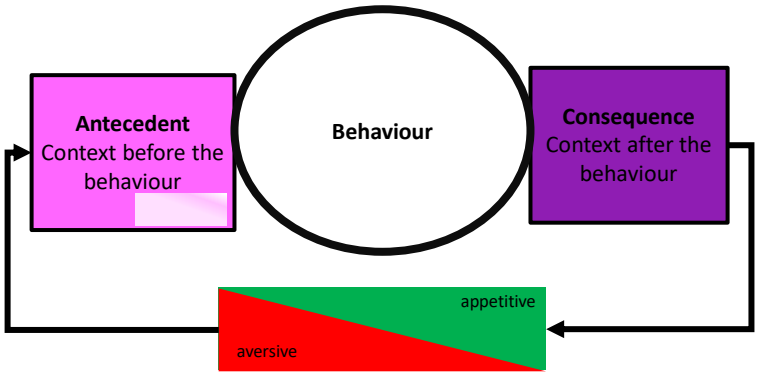
Behavioural Variation is Selectively Retained by its Consequence in a given Context.

37



Variation and Selective Retention in Context.

38



Variation and Selective Retention in Context.

What do we mean by 'Behaviour'?

39

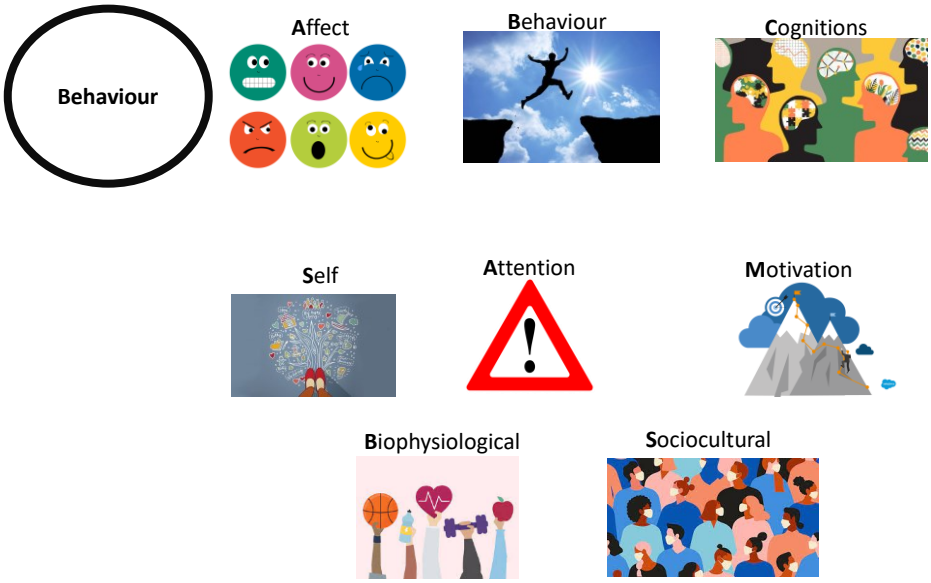
"Behaviour encompasses **every observable response** that a living organism can make, regardless of whether the response is produced by:

- the somatic nervous system (e.g., pressing a lever),
- the autonomic nervous system (e.g., salivation),
- or neural processes (e.g., electrical activity in the brain).
- Also, conscious thought is considered to be behaviour, be it a subclass of behaviour that can be observed only by the organism itself.".

De Houwer, Barnes-Holmes, Moors (2013)

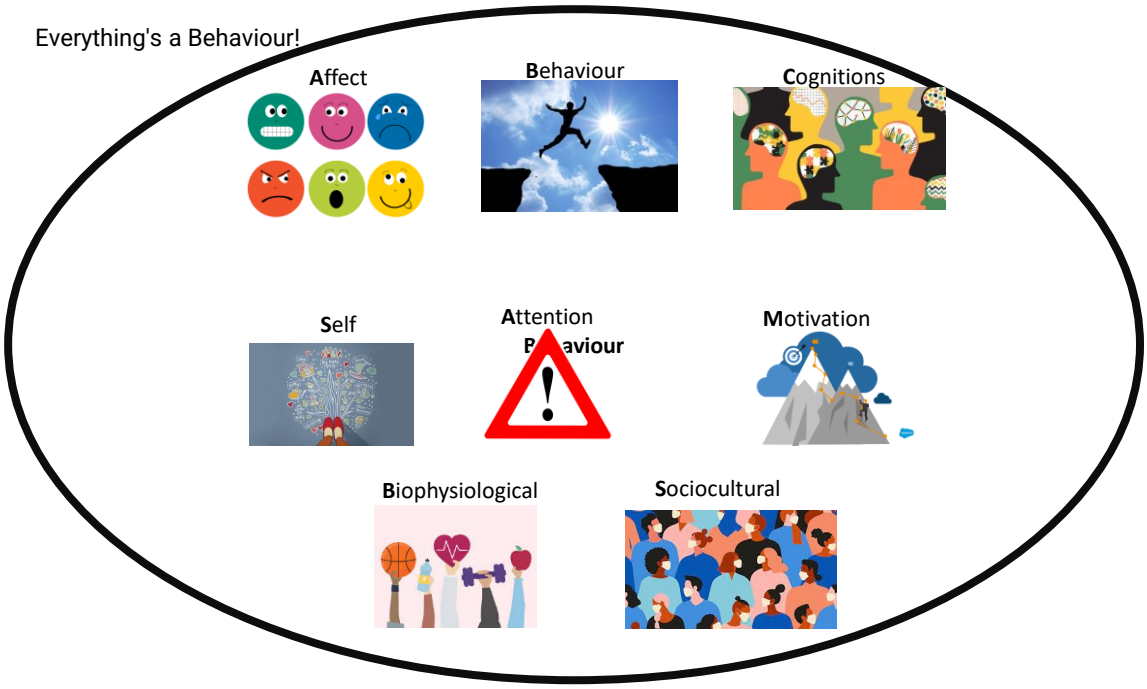
40

Everything's a Behaviour!



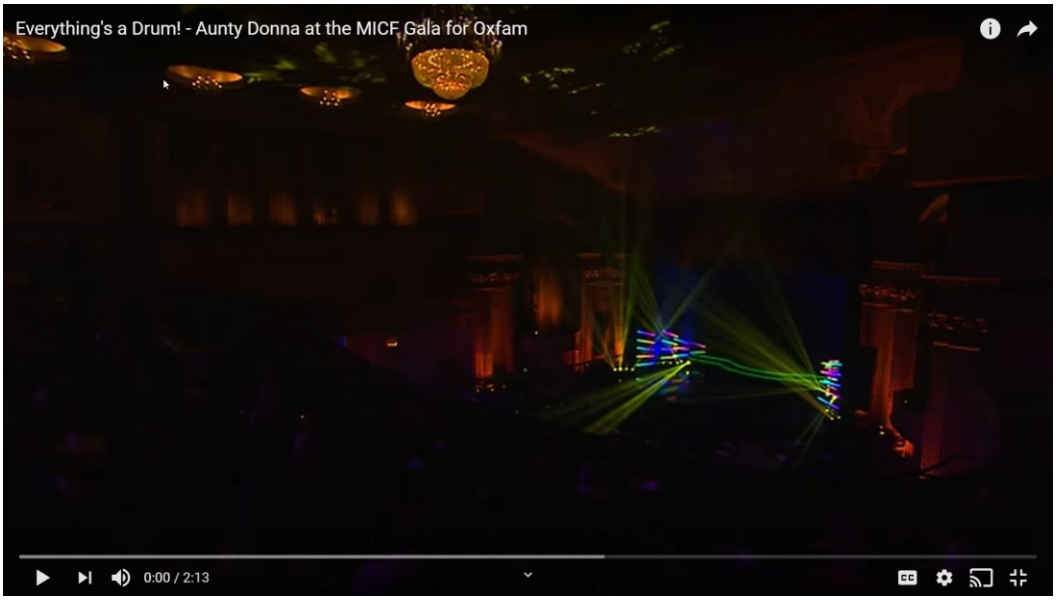
41

Everything's a Behaviour!



42

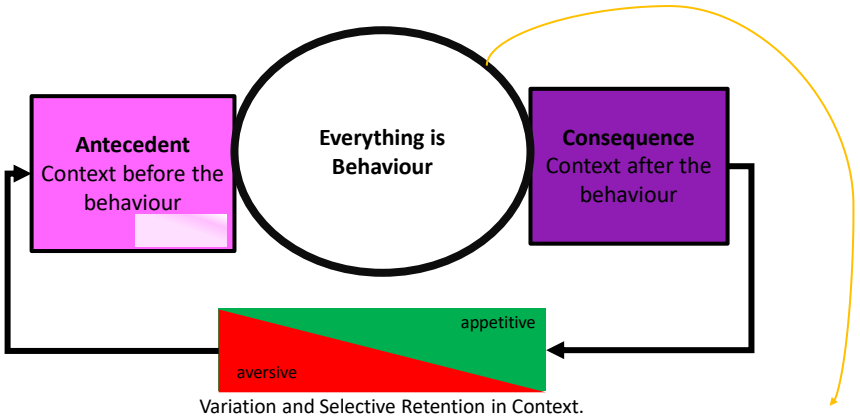
Everything's a Drum! - Aunty Donna at the MICF Gala for Oxfam – start

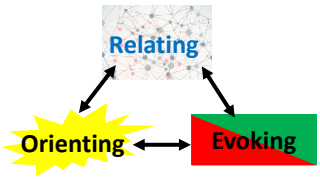


43

Everything's a Drum! - Aunty Donna at the MICF Gala for Oxfam

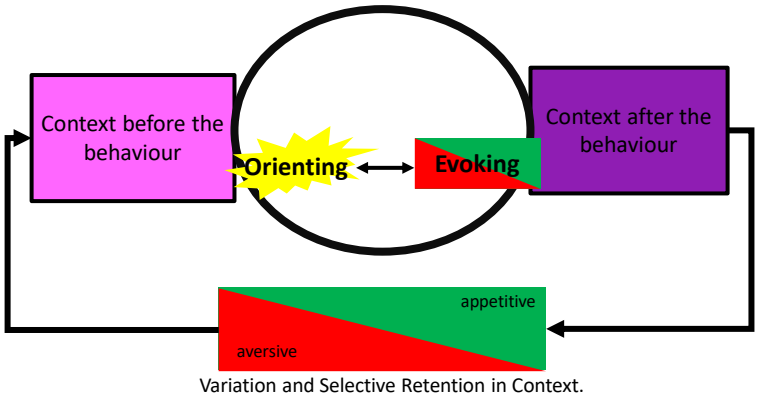
44





Unit of Behaviours is a ROE!

45



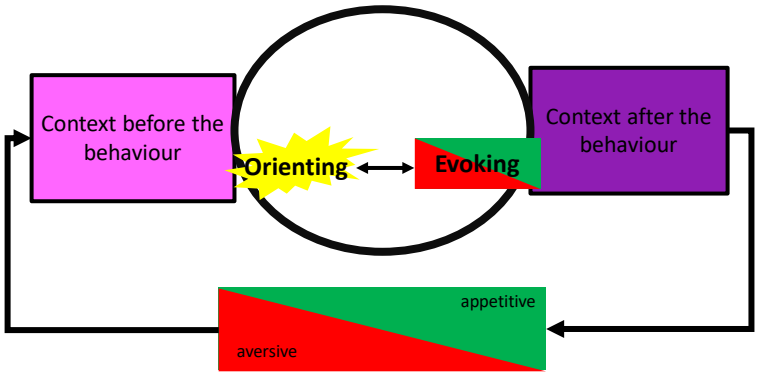
Orienting

noticing or attending to a stimulus or event.

Evoking

a noticed stimulus or event is appetitive, aversive, or relatively neutral

46



Variation and Selective Retention in Context.

Orienting

noticing or attending to a stimulus or event.

Evoking

a noticed stimulus or event is appetitive, aversive, or relatively neutral

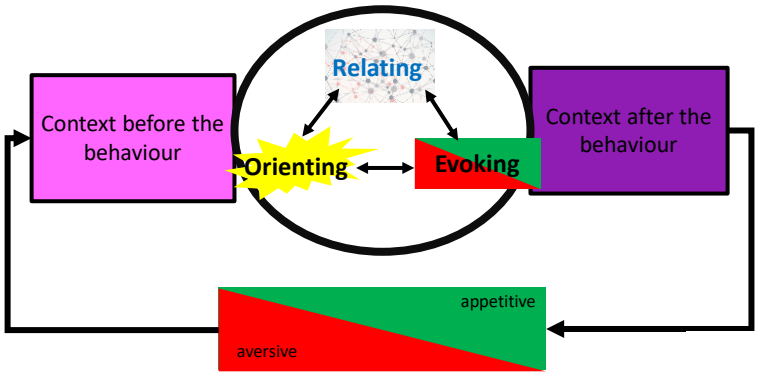
47

Orienting ⟷ **Evoking**

noticing or attending to a stimulus or event.

a noticed stimulus or event is appetitive, aversive, or relatively neutral

48



Variation and Selective Retention in Context.

Just a skateboard with new paint!

Relating

the complex ways in which
we relate stimuli and events.

49

Unbelievable FACT

Doc Brown

Flux Capacitor

40 years

Delorean time machine

Steven C. Hayes

Relating

Relating is an Operant!

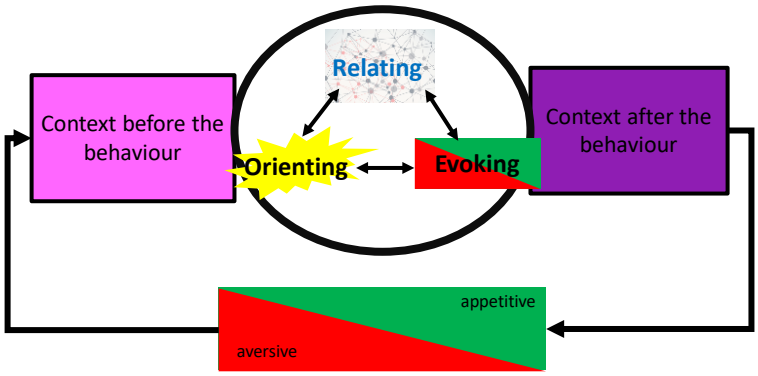
40 years

RFT

Relational Frame Theory

ACBS

50



Variation and Selective Retention in Context.

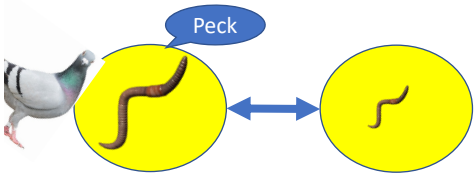
Relating

the complex ways in which
we relate stimuli and events.

51

Relating

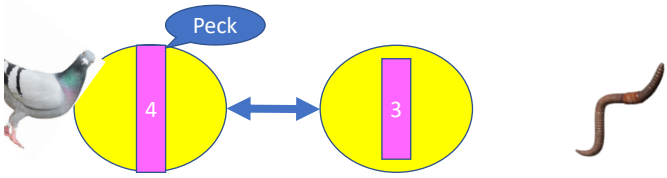
Peck the bigger one



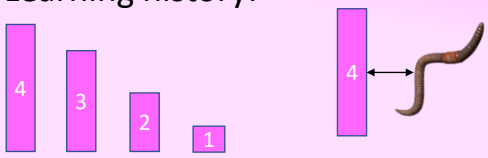
52

Relating

Peck the bigger one



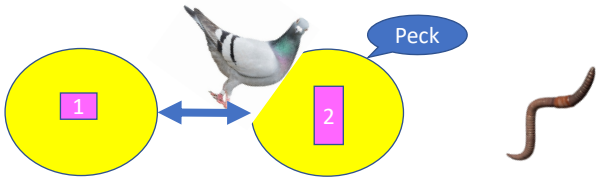
Learning history:



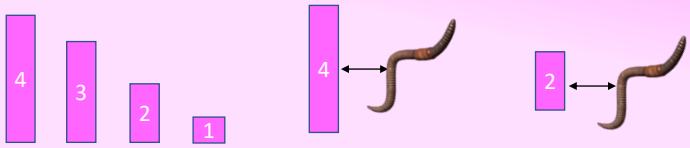
53

Relating

Peck the bigger one



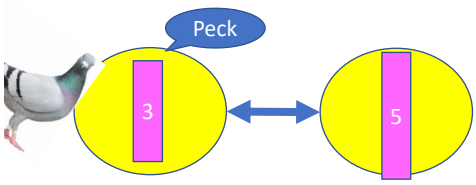
Learning history:



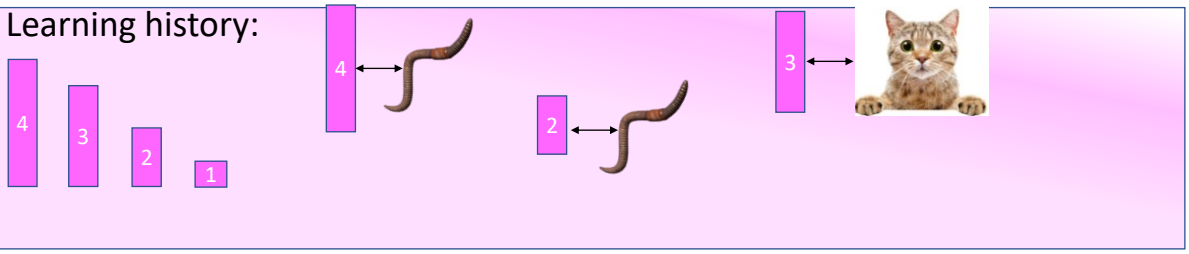
54

Relating

Peck the bigger one



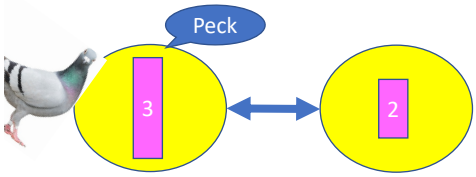
Learning history:



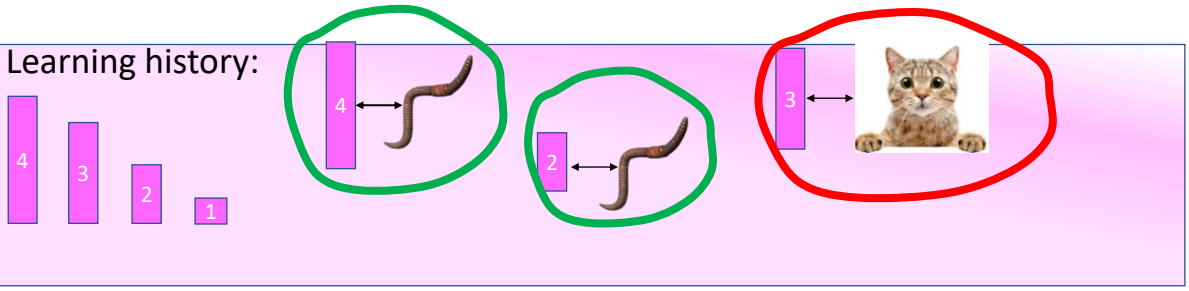
55

Relating

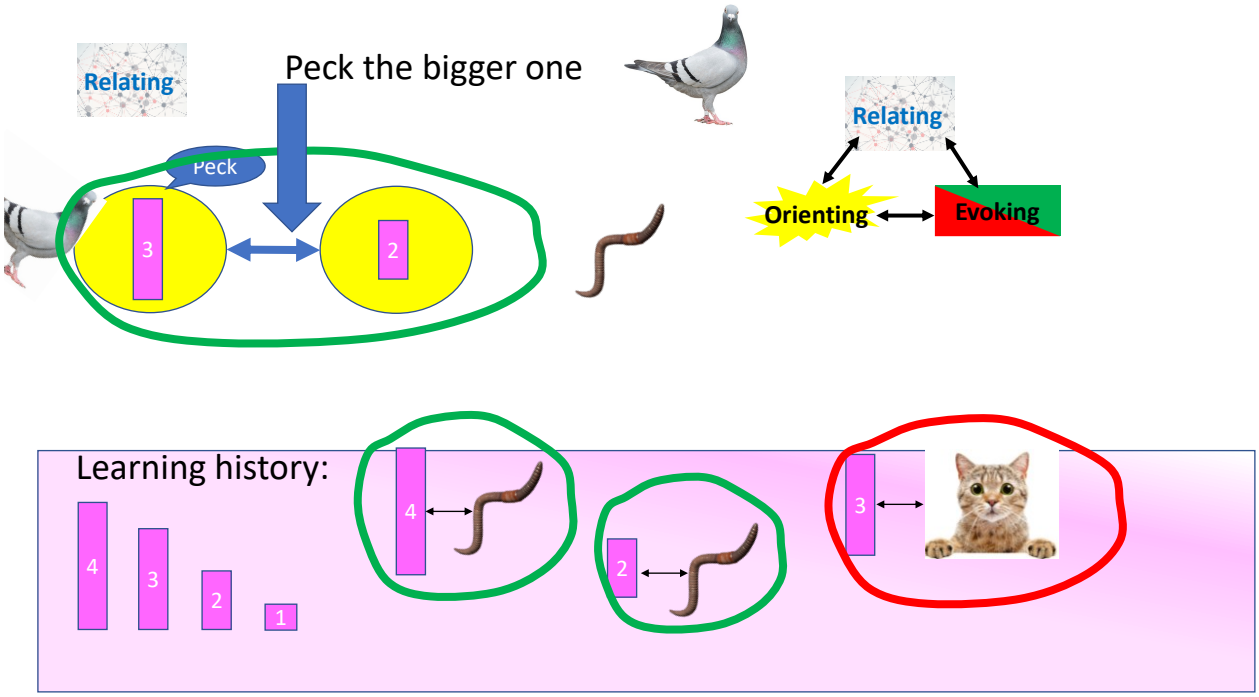
Peck the bigger one



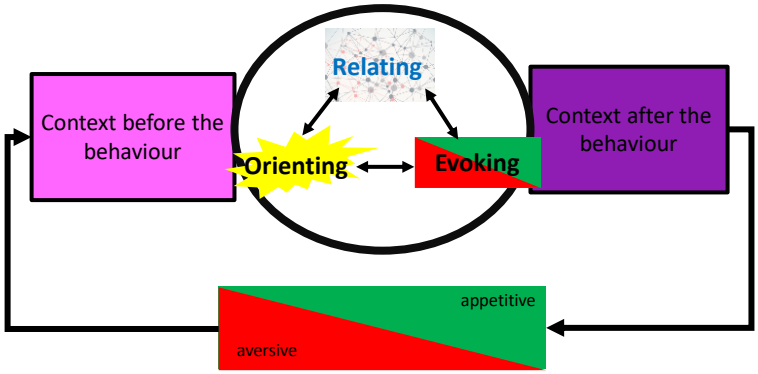
Learning history:



56



57



Variation and Selective Retention in Context.

We ALMOST have a hoverboard…
It can get off the ground, but still can't fly!

Relating

~~the complex ways in which we relate stimuli and events~~.

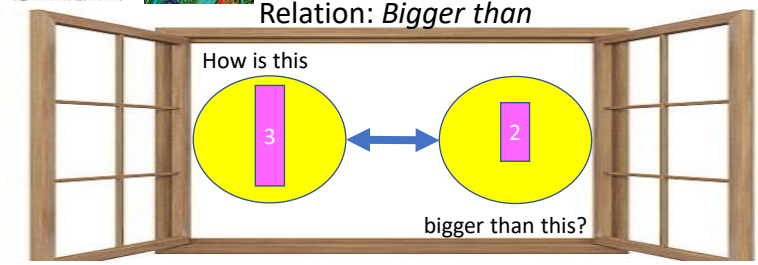
the complex ways in which **verbal humans** can relate stimuli and events.

58

59

Relational Framing

Relation: *Bigger than*



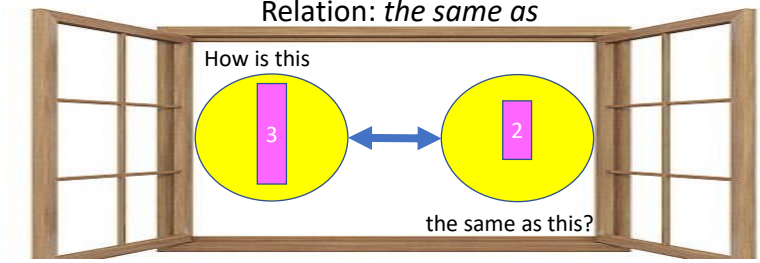
Frame of comparison

It is taller.

60

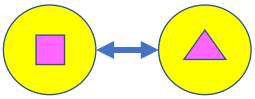
Relational Framing

Relation: *the same as*



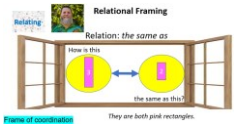
They are both pink rectangles.

Frame of coordination

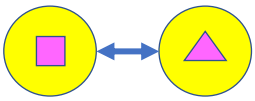


They are both pink.

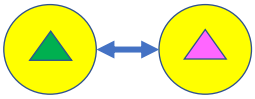
61



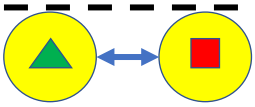
the same as



They are both pink.

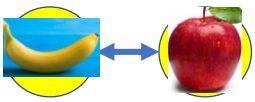


They are both triangles.



They are both 'shapes'.

They are both 'animals'.



They are both 'fruit'.

The stimuli properties (e.g. shape, colour, size) are the context that informs the relating (e.g. 'same')

Relational responding

Only Human cognition past this line!

The Relating (e.g. 'how are they the same') is the context that informs the stimuli properties (e.g. both 'shapes')

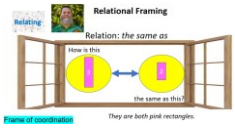
Anything can be RELATED to Anything!

Arbitrarily Applicable Relational Responding (AARRing).

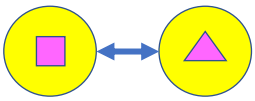
AARR!!!

Is a learned behaviour

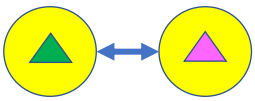
62



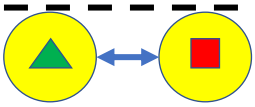
the same as



They are both pink.

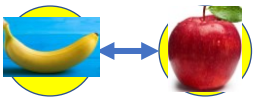


They are both triangles.

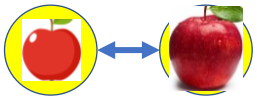


They are both 'shapes'.

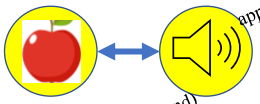
They are both 'animals'.



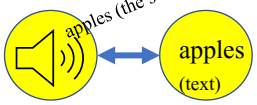
They are both 'fruit'.



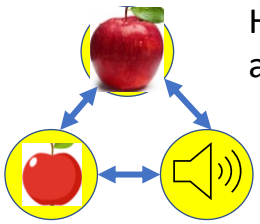
They are both 'apples'.



They are both 'apples'.



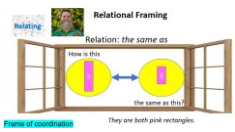
They are both 'apples'.



Human language and cognition!

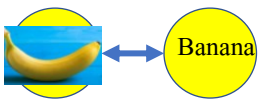
Anything can be RELATED to Anything!

63

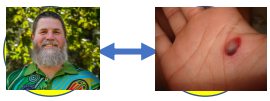


the same as

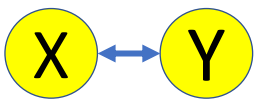
Anything can be RELATED to Anything!



They are both 'bananas'.



They both 'show up once the hard work is done'.



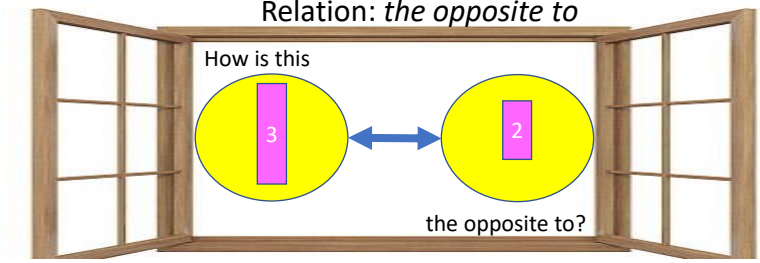
They are both '_____'.

64

Relational Framing

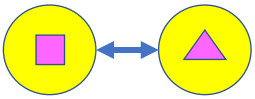
Relating

Relation: *the opposite to*

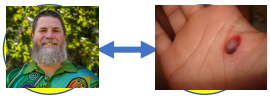


Frame of opposition

One is big, the other small.



They are different shapes, square and triangle.

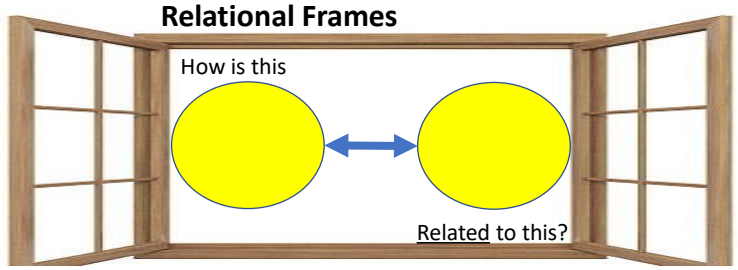


People find blisters painful, but Tim is helpful when he shows up.

65

Relational Frames

Relating



Frame of coordination

Frame of opposition

Frame of comparison

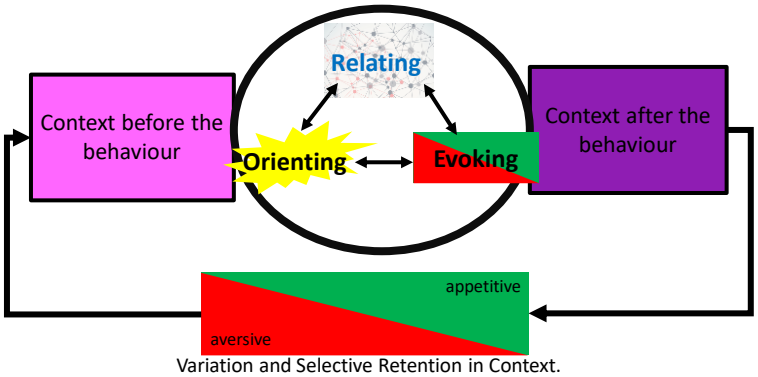
Frame of temporality

Frame of hierarchy

Frame of distinction

Frame of perspective taking (deictics)
I-YOU HERE-THERE NOW-THEN
(Self – Other)

66



Variation and Selective Retention in Context.

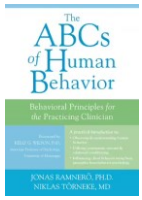
The Hoverboard is built – let's take it for a ride!

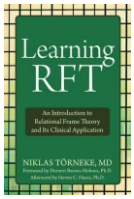
67

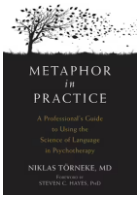
Chapter 3.
Riding a hoverboard

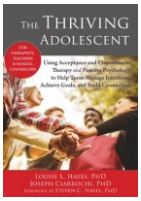
68

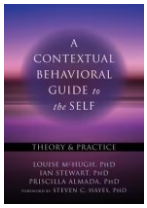
There are lots of good books on how to ride the hoverboard!

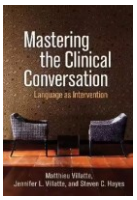


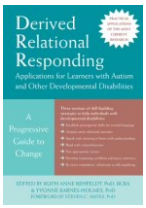


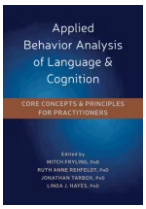








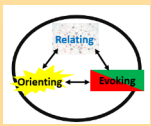




69

Quick start guide

Learn it in one
Derive it in two
Put it in networks
Change what we do

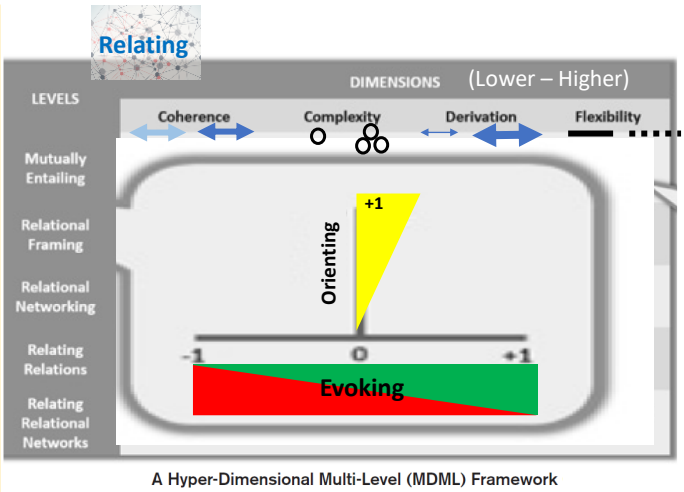


Learn it from others
Get it for free
Put it in networks of networks
About you and me

Can never delete them
Try hard to complete them
Get stronger and quicker and faster
Watch out for disaster!

With loops like "I'm Broken"
Want to run, hide, or choke em!
But if we approach with gentle reflections
We can build helpful new connections.

No matter the song
Your mind hums along
Know that each of us humans
Just needs to belong.

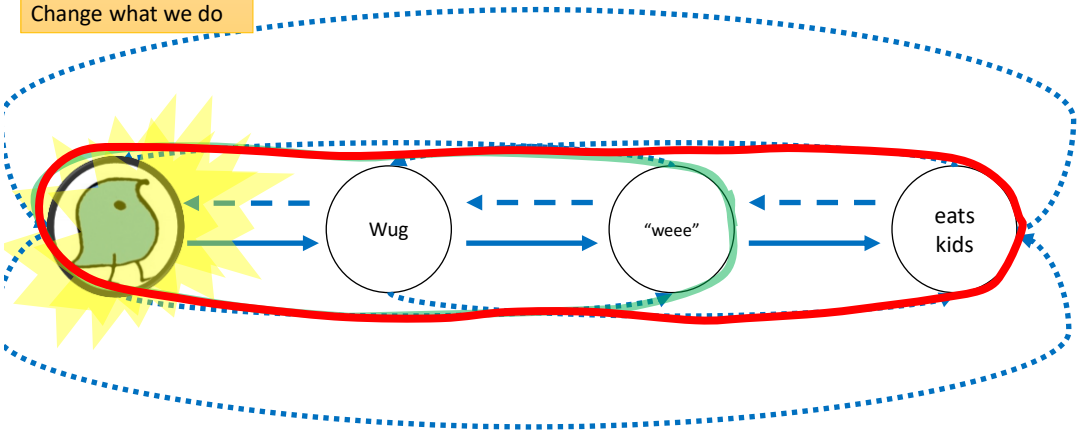


A Hyper-Dimensional Multi-Level (MDML) Framework

Barnes-Holmes, D., Barnes-Holmes, Y., McEnteggart, C., & Harte, C. (2021). Back to the future with an updated version of RFT: More field than frame? Perspectivas em Análise do Comportamento, 12(1)

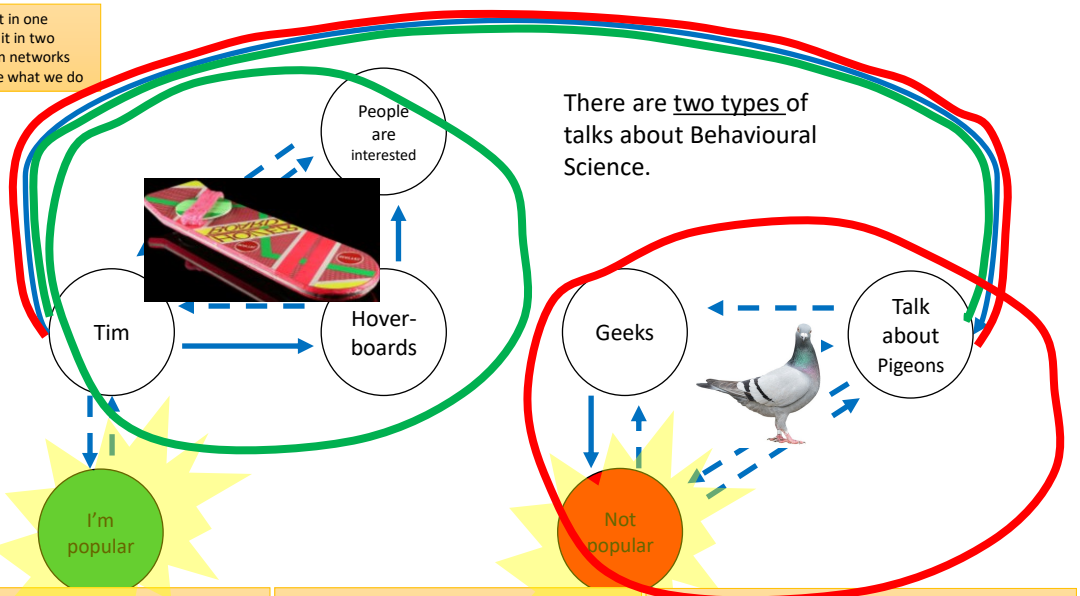
70

Learn it in one
Derive it in two
Put it in networks
Change what we do



71

Learn it in one
Derive it in two
Put it in networks
Change what we do



Learn it from others
Get it for free
Put it in networks of networks
About you and me

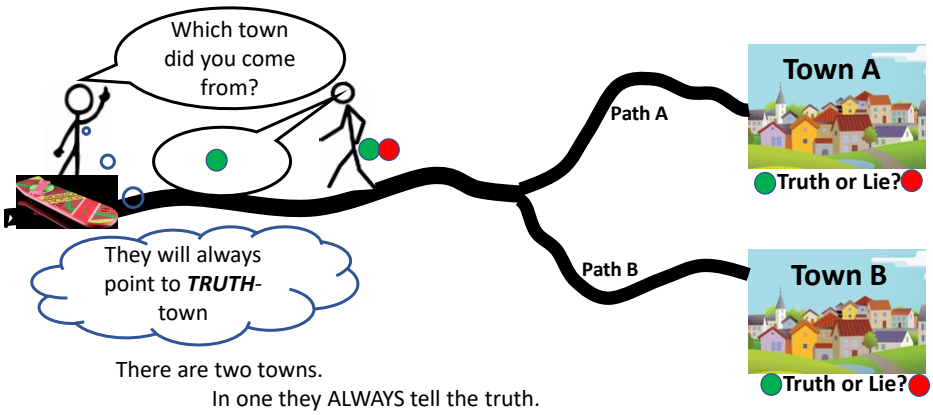
Can never delete them
Try hard to complete them
Get stronger and quicker and faster
Watch out for disaster!

With loops like "I'm Broken"
Want to run, hide, or choke em!
But if we approach with gentle reflections
We can build helpful new connections.

72

Finding TRUTH-town

73



There are two towns.
In one they ALWAYS tell the truth.
In one they ALWAYS tell lies.

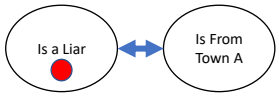
You want to go to **TRUTH-town**!

You are walking along the road, and you see someone from one of the towns (you don't know which).

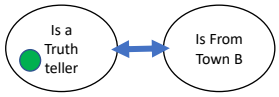
What ONE simple question can you ask to work out which town is TRUTH-town?

74

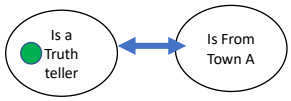
OPTION 1.
They are a Liar
From Town A



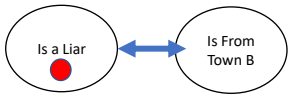
OPTION 2.
They are a Truth teller
From Town B



OPTION 3.
They are a Truth Teller
From Town A

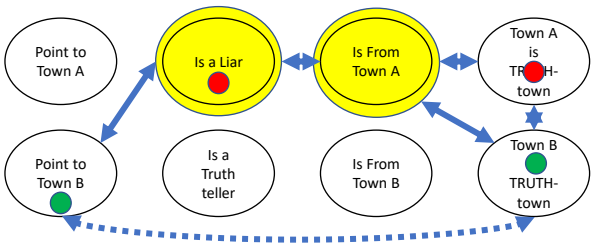


OPTION 4.
They are a Liar
From Town B

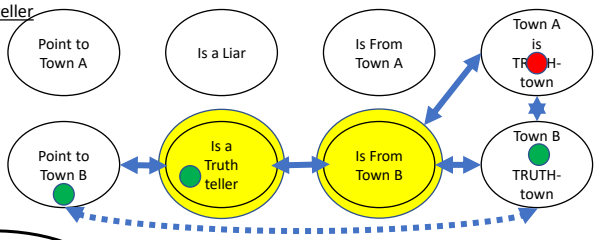


75

OPTION 1.
They are a Liar
From Town A



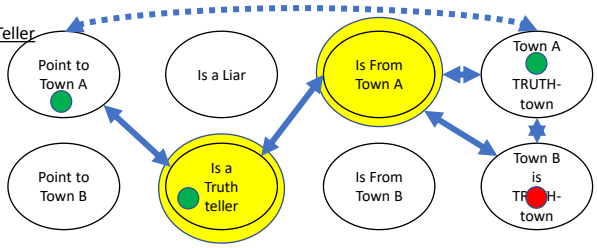
OPTION 2.
They are a Truth teller
From Town B



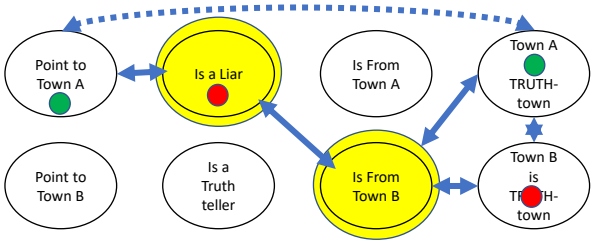
Which town did you come from?

76

OPTION 3.
They are a Truth Teller
From Town A



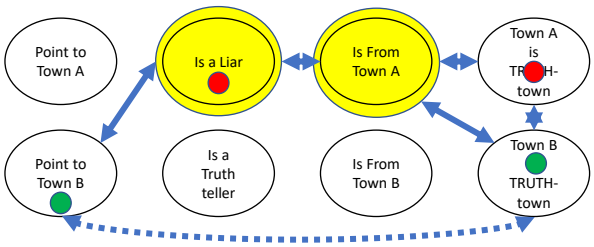
OPTION 4.
They are a Liar
From Town B



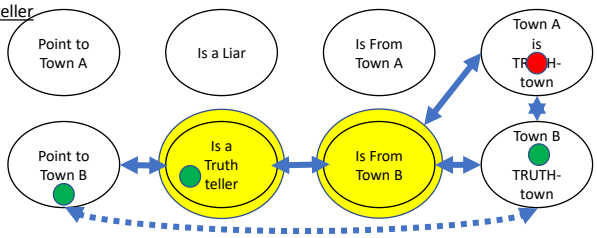
Which town did you come from?

77

OPTION 1.
They are a Liar
From Town A

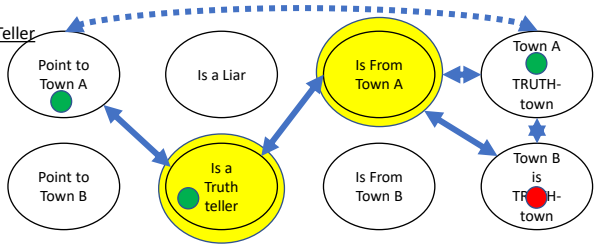


OPTION 2.
They are a Truth teller
From Town B

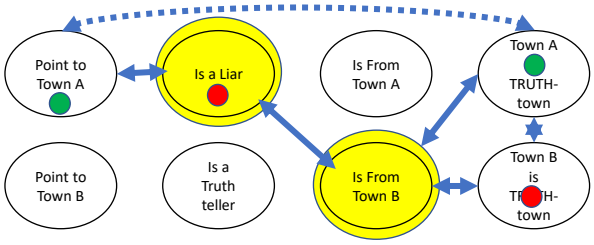


78

OPTION 3.
They are a Truth Teller
From Town A



OPTION 4.
They are a Liar
From Town B



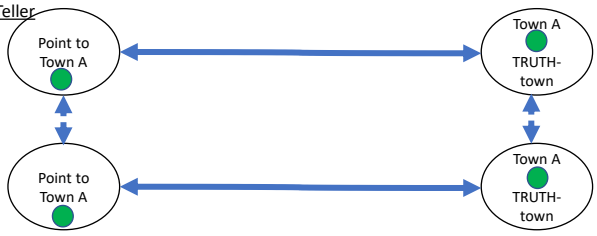
79

OPTION 1.
They are a Liar
From Town A

OPTION 2.
They are a Truth teller
From Town B

OPTION 3.
They are a Truth Teller
From Town A

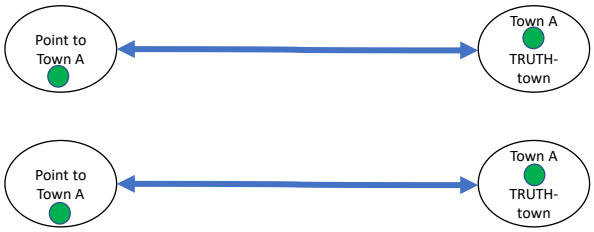
OPTION 4.
They are a Liar
From Town B



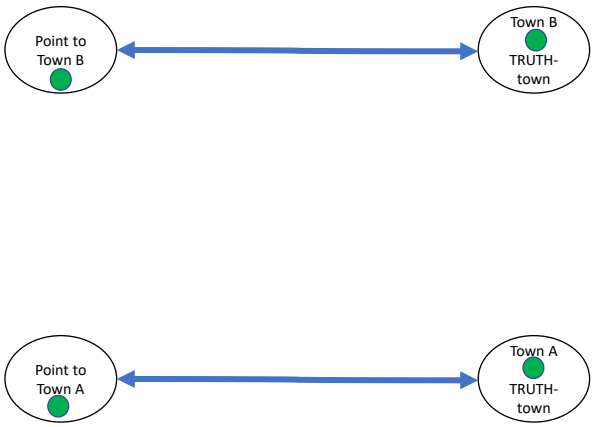
80

OPTION 1 & 2

OPTION 3 & 4.



81

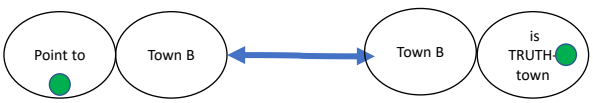


82

Point to
Town B
Town B
TRUTH-
town

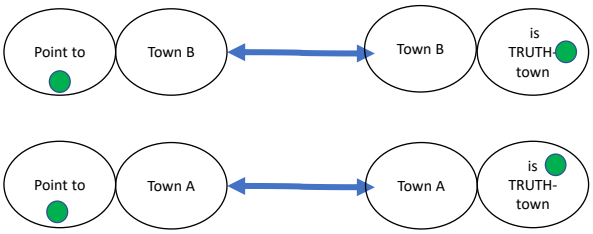
Point to
Town A
Town A
TRUTH-
town

83

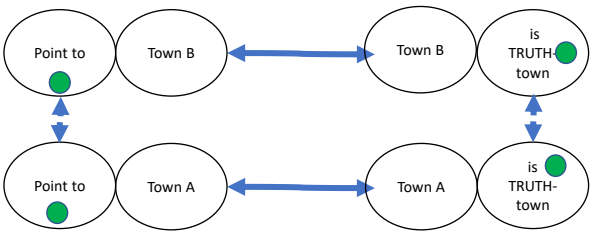

Point to
Town B
Town B
is
TRUTH-
town

Point to
Town A
Town A
is
TRUTH-
town

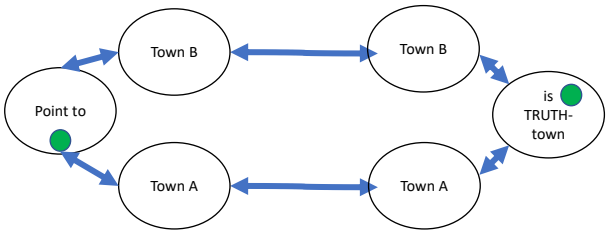
84


Point to
Town B
Town B
is
TRUTH-
town
Point to
Town A
Town A
is
TRUTH-
town

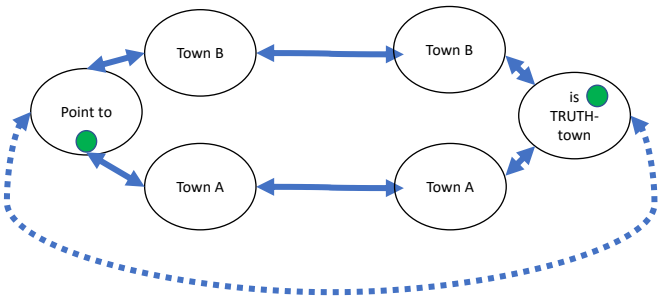
85


Point to
Town B
Town B
is
TRUTH-
town
Point to
Town A
Town A
is
TRUTH-
town

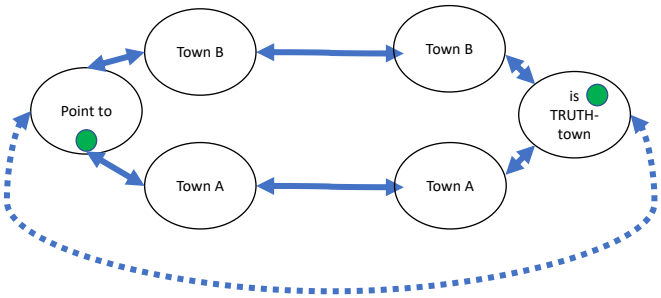
86


Town B
Town B
Point to
is
TRUTH-
town
Town A
Town A

87


Town B
Town B
Point to
is
TRUTH-
town
Town A
Town A

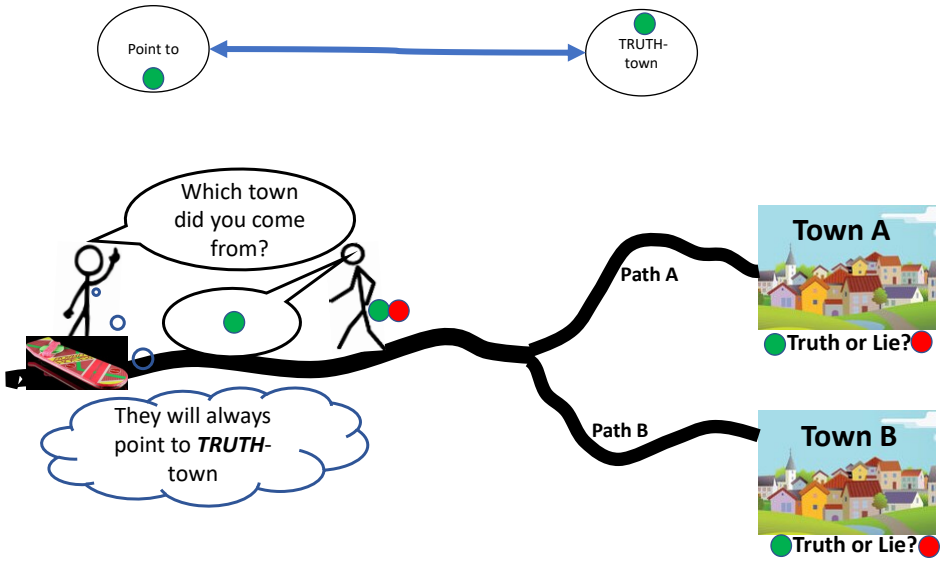
88


Town B
Town B
Point to
is
TRUTH-
town
Town A
Town A

89

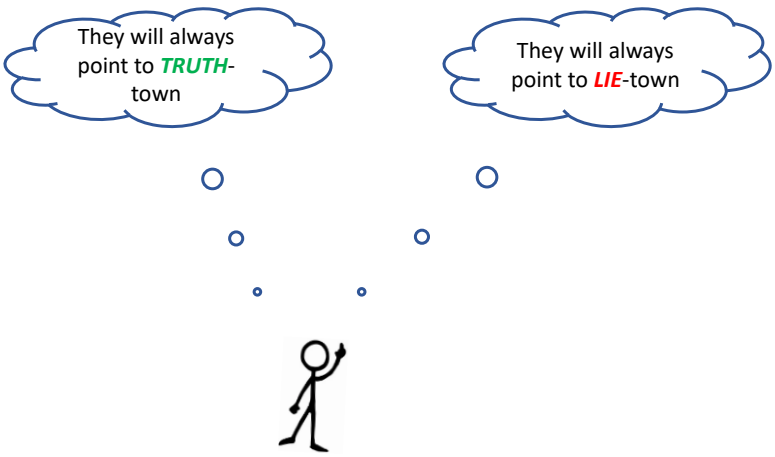
Point to
is
TRUTH-
town

90



91

Follow the rules…

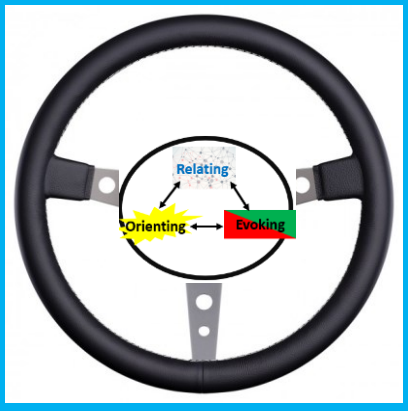


92

Follow the rules…

93

Chapter 4.
Steering a hoverboard



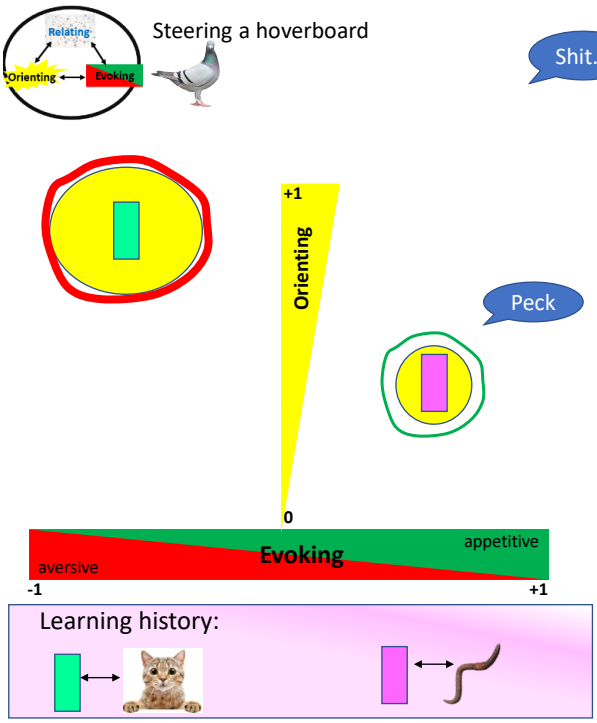
94

New Referrals

Client 1. Phobia of Wugs.

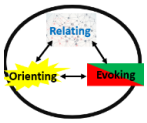
Client 2. Thinks he is a 'blister'.

95

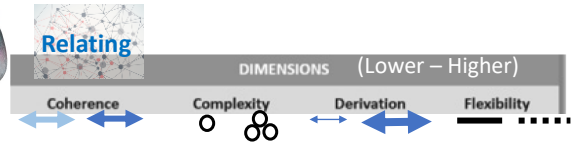


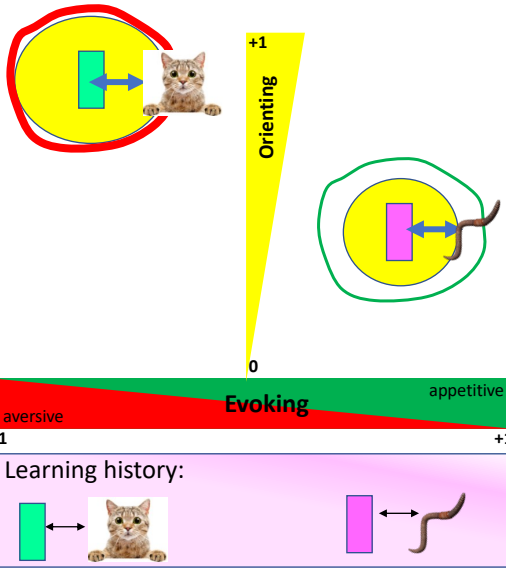
A Hyper-Dimensional Multi-Level (MDML) Framework

96



Steering a hoverboard

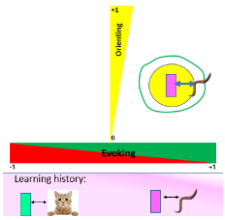




A Hyper-Dimensional Multi-Level (MDML) Framework

97

Steering a hoverboard



Derivation (practice)
*Extent of practice with this Relating in the past**

Lower

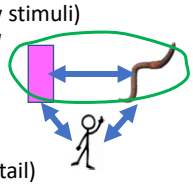
Higher

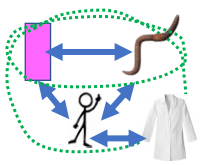
Coherence (makes sense)
Relating is consistent with previous patterns

Plastic worm

Can never delete them
Try hard to complete them
Get stronger and quicker and faster
Watch out for disaster!

Flexibility (respond to new stimuli)
Response may be modified by current contextual variables





Complexity (how much detail)
the level of detail or density of the patten of R*elating*

* N.B. High Derivation = Lower practice; Low Derivation = Higher practice. But for clarity I will use the terms flipped here.

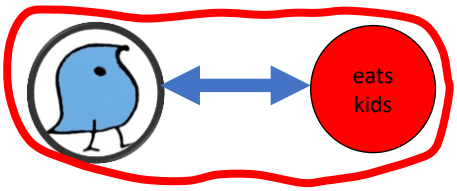
A Hyper-Dimensional Multi-Level (MDML) Framework

98

Client 1. Phobia of Wugs

Client: My family wants a pet Wug. I do want them to have a pet, but Wugs are disgusting!
Therapist: Would it be ok if we talk about Wugs a little more?
Client: Did you know Wugs eat kids!!!

Build the network!!



Derivation (practice) = High (thick arrow)

Coherence (makes sense) = High (dark blue arrow)

Flexibility (respond to new stimuli) = Low (unbroken evoking line)

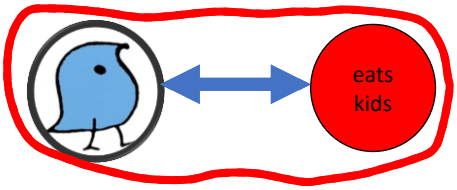
Complexity (how much detail) = Low (only two stimuli in the network)

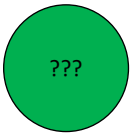
99

Client 1. Phobia of Wugs

Client: My family wants a pet Wug. I do want them to have a pet, but Wugs are disgusting!
Therapist: Would it be ok if we talk about Wugs a little more?
Client: Did you know Wugs eat kids!!!

Update network!!





Derivation (practice) = Lower (thin arrow)

Coherence (makes sense) = Lower (light blue arrow)

Flexibility (respond to new stimuli) = Higher (dashed evoking line)

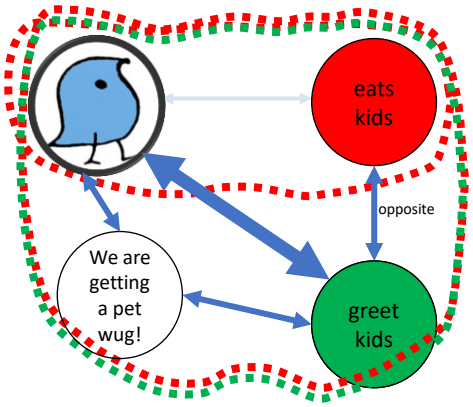
Complexity (how much detail) = Higher (three stimuli in the network?)

100

Client 1. Phobia of Wugs

Client: Did you know Wugs eat kids!!!
Therapist: I went to that Hoverboard talk too, and it sounded like he said, *eat* kids, but it was actually *greet* kids.

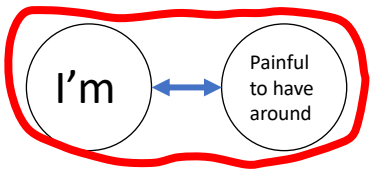
Add to the network!!



101

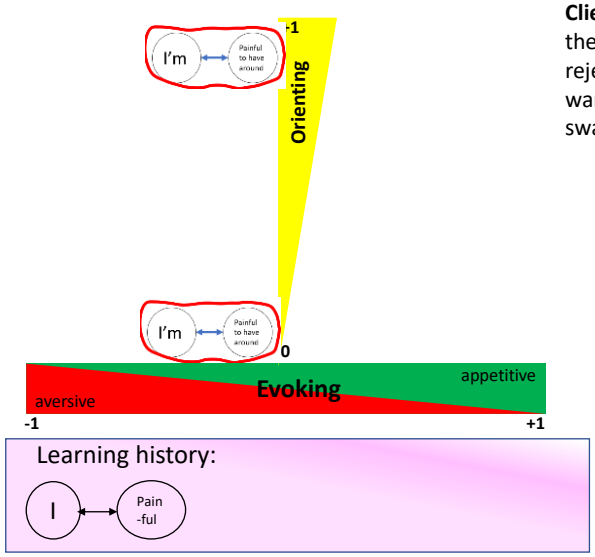
Client 2. Thinks he is a 'blister'.

Therapist: It says on the referral, you think you are a blister??
Client: What? No! It is that **I'm painful to have around.**
Therapist: Would it be ok if we talk about being painful?
Client: I think about it all the time, and I feel rejected and lonely. I just want the world to swallow me up!



102

Consider Orienting and Evoking



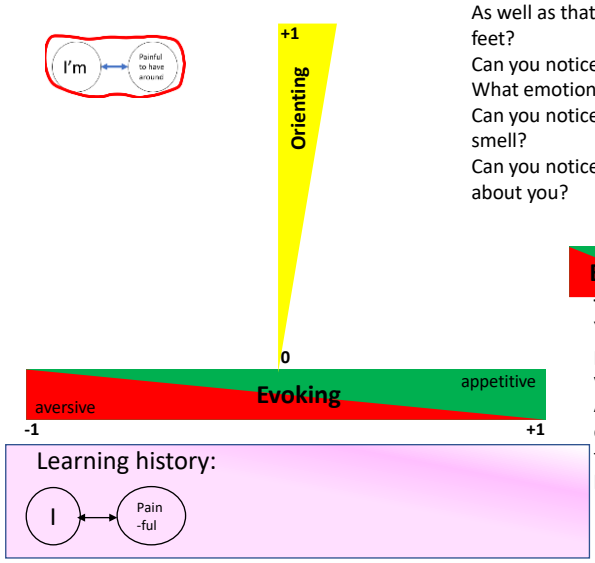
Client: I think about it all the time, and I feel rejected and lonely. I just want the world to swallow me up!

103

ADD **to the context to influence Orienting and Evoking and Relating**

Orienting

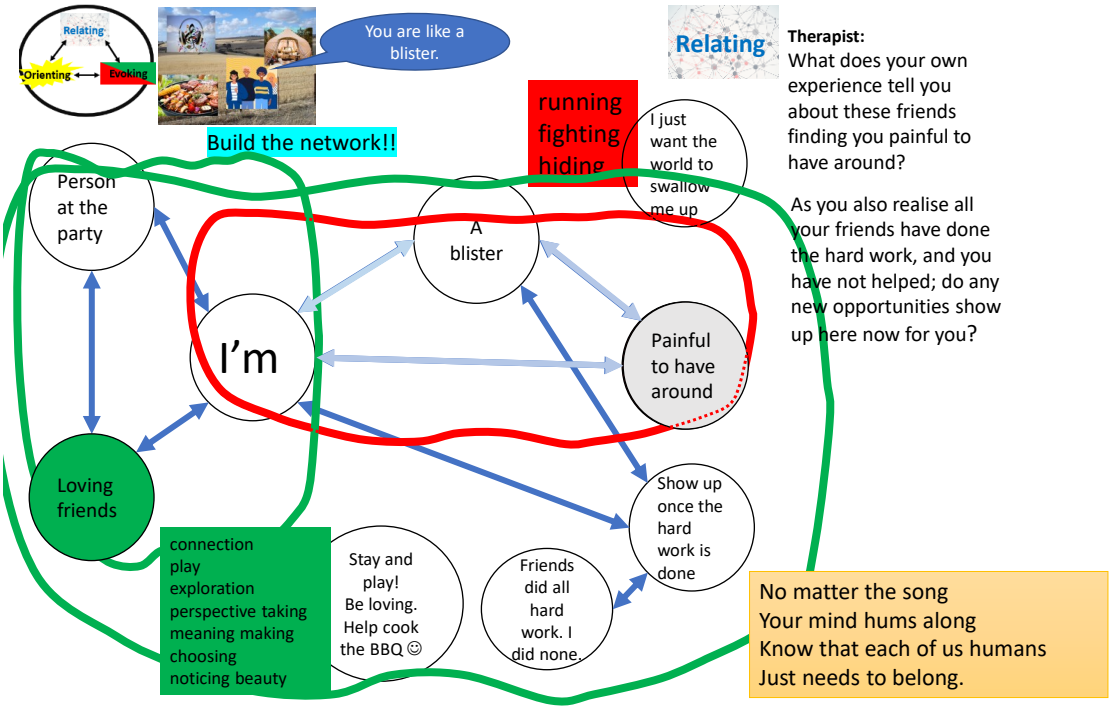
Therapist:
Can you notice how loud that thought is?
How old does that thought feel?
As well as that thought, can you also notice you have two feet?
Can you notice any feelings in your body right now?
What emotions are showing up inside you?
Can you notice the world around you, what you can see, hear, smell?
Can you notice there are also people here, now, who care about you?



Evoking

Therapist:
You and me are here, together, in this painful place because you care about showing up for your friends.
As you notice that strong pull to withdraw from everyone, would you be willing to have that feeling, just as it is, and discover what might happen if you stay for just a moment longer?

104



105

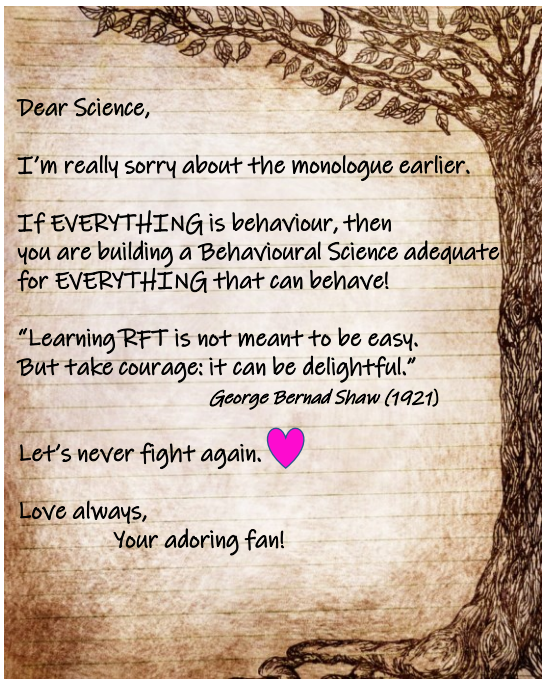
Chapter 5.

We all need a hoverboard

106

Dear Science,

107



THE END

- Credits -

Barnes-Holmes, D., Barnes-Holmes, Y., McEnteggart, C., & Harte, C. (2021). Back to the future with an updated version of RFT: More field than frame? *Perspectivas em Análise do Comportamento, 12*(1)

Harte, C. & Barnes-Holmes, D. (2021). A primer on relational frame theory (RFT). In M.P. Twohig, M.E. Levin, & J.M. Peterson (Eds.), The Oxford Handbook of Acceptance and Commitment Therapy. Oxford University Press

Barnes-Holmes, D., Barnes-Holmes, Y., & McEnteggart, C. (2020). Updating RFT (more field than frame) and its implications for process-based therapy. The Psychological Record, 70, 605-624.

108

Learn it in one (classical and operant conditioning)
Derive it in two (combinatorial and mutual entailment)
Put it in networks (arbitrarily applicable relational responding)
Change what we do (transformation of stimulus function) 1

RFT Cheat Sheet

Back to the Future with an Up-dated Version of RFT: More Field than Frame? ■ 001-019

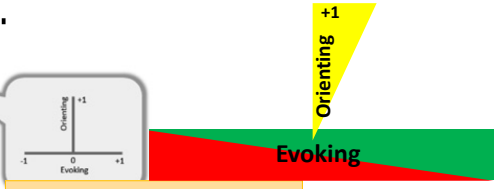
Table 2. A Hyper-Dimensional Multi-Level (MDML) Framework Consisting of 20 Intersections Between the Dimensions and Levels of Arbitrarily Applicable Relational Responding, Combined with the Dimensions of Orienting and Evoking from the DAARRE Model.

LEVELS
Learn it from others
Get it for free
Put it in networks of networks
About you and me 2

LEVELS	DIMENSIONS: Coherence	Complexity	Derivation	Flexibility
Mutually Entailing	Analytic Unit 1	Analytic Unit 2		
Relational Framing		Relating		
Relational Networking				
Relating Relations				
Relating Relational Networks				Analytic Unit 20

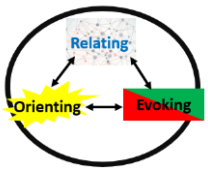
COHERENCE
Can never delete them
Try hard to complete them 3

COMPLEXITY DERIVATION FLEXIBILITY
Get stronger and quicker and faster 4



ORIENTING
Watch out for disaster!

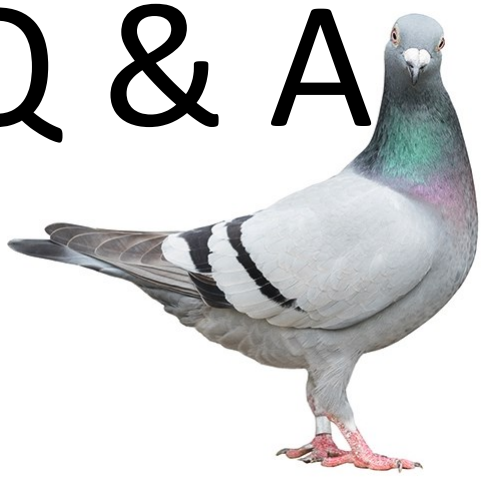
EVOKING ('sharks and dolphins')
With loops like "I'm Broken"
Want to run, hide, or choke em!
But if we approach with gentle reflections
We can build helpful new connections. 5



EEMM (Extended Evolutionary Meta Model)
No matter the song
Your mind hums along
Know that each of us humans
Just needs to belong.
Variation and Multidimensional (Psychological, Biophysiological, Sociocultural)
Selective Retention in Context. 6

109

Q & A



Space Head

Tim McLauchlan (Clinical Psychologist, Peer-reviewed ACT trainer)

www.spacehead.com.au

110