

Relational Frame Theory

Basic concepts
and clinical implications

Niklas Törneke
Jason Luoma

Cognitive and behavioral therapies (CBT)

A psychological treatment which is based
on talking but that lacks a scientific theory
of this very phenomena (talking)

Törneke/Luoma

2

Historical overview

Behavioral tradition: Skinner and verbal behavior

Two problems:

- Noam Chomsky
- A lack of an extensive research program

Cognitive tradition: Mental representations, schema

Two problems:

- Central phenomena cannot be manipulated
- Analysis of talking disappeared when thinking was made the central issue

Törneke/Luoma

3

What is RFT about?

Arbitrary applicable relational responding
(AARR)

A particular kind of behavior

Törneke/Luoma

4

Three questions to answer today

1. If languaging is behavior, what kind of behavior is it?
Or: what are we doing?
2. How does this kind of behavior interact with, or contribute to, our
behavior as a whole?
3. What controls this kind of behavior?

Törneke/Luoma

5

Important concepts in behavior analysis

- Stimulus
Stimulus and response are one unit
- Stimulus function
Light as an example
- Functional classes
- Contingencies

Törneke/Luoma

6

Stimulus function is transformed (changed, altered) as a result of the relation between stimuli

Unconditioned stimulus → Unconditioned response
 :
 Conditioned stimulus → Conditioned response

A_{ntecedent} → B_{ehavior} → C_{onsequence}

A change of relation transforms function

Törneke/Luoma

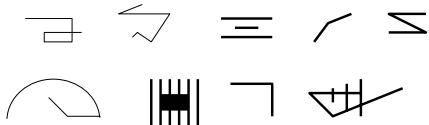
7

Stimulus relations which are not directly trained

- Sidmans experiments with language training
 Train some relations between words/objects/sounds and get others "for free" (without specific training)
- Example: train; ball (sound) → ball (written)
 train; ball (written) → ball (object)
 get "for free"; ball (object) → ball (sound)
- This is hard to explain from a traditional respondent/operant account

Törneke/Luoma

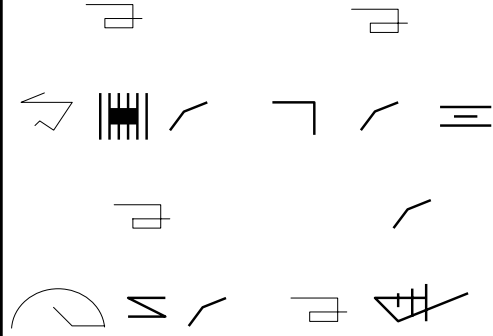
8



URD OXQ TGG GCF
 EWT RKO AFD HFU

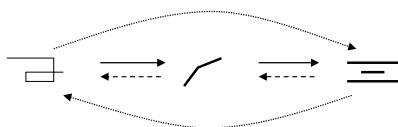
Törneke/Luoma

9



Törneke/Luoma

10

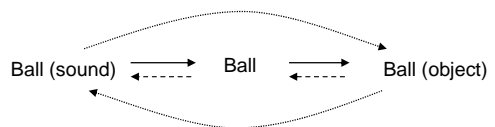


Arbitrary applicable relational responding
 Derived relational responding

Directly trained _____
 Mutual entailment - - - - -
 Combinatorial mutual entailment ·····

Törneke/Luoma

11



Directly trained _____
 Mutual entailment - - - - -
 Combinatorial mutual entailment ·····

Törneke/Luoma

12

Question 1: If languaging is behavior, what kind of behavior is it?

Languaging (verbal behavior) is the behavior of relating stimuli/events in a particular way. As certain relations are trained directly, through the principles of operant and respondent conditioning, other relations are derived. The ability to relate stimuli/events in this way is learned, through operant conditioning.

This way of responding (behaving) is called arbitrary applicable relational responding (AARR)

Remember the initial exercise. AARR is what we do.

Törneke/Luoma

13

Question 2: How does derived relational responding interact with human behavior as a whole?

Derived relational responding affects human behavior as a whole due to the way relational responding transforms stimulus functions.

For example:

- Something that used to have one meaning now has another.
- Something that was neutral suddenly elicits anxiety.
- A stimulus that was discriminative for approach now is discriminative for avoidance.
- Something that was neutral now becomes reinforcing or punishing.

Törneke/Luoma

14

Summary so far:

1. If languaging is behavior, what kind of behavior is it?

A particular kind of relating (AARR)

2. How does this kind of behavior interact with, or contribute to, our behavior as a whole?

By this particular kind of relating we transform stimulus functions

Törneke/Luoma

15

Abstracting features of the environment

- Pigeons and color
- To abstract relations between stimuli: rhesus monkeys and "the longer stick"
- AARR goes one step further: we abstract features of the environment which control relations between stimuli independently of direct links or physical features as a base for relating
- If relations are controlled by stimuli other than the ones related, then these relations become *arbitrarily applicable*. They can be "moved around" at social whim. Anything can be related to anything

Törneke/Luoma

16

An exercise to illustrate our ability to relate arbitrarily

Pick one from each column

Goose	larger than	a salad
Father	smaller than	a canyon
Car	inside of	Bread
Bacteria	outside of	a dog
Screwdriver	a part of	a whistle
Friend	the same as	the sky
A culture	better than	a string

Törneke/Luoma

17

Question 3: What controls this kind of behavior?

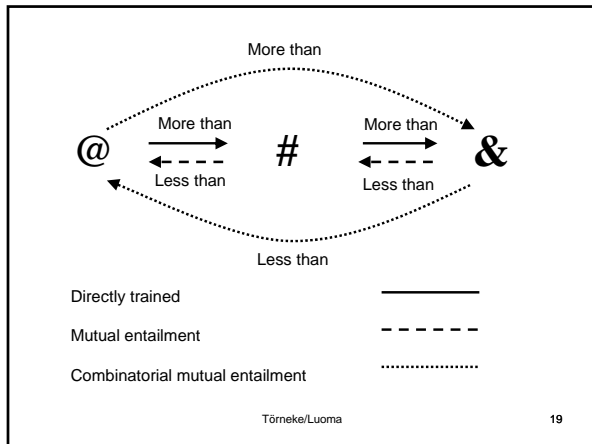
This particular way of relating is controlled by other features of the environment (context) than the stimuli which are related

> & If & is 10000 euro, which do you want?

is more than & @ is more than

Törneke/Luoma

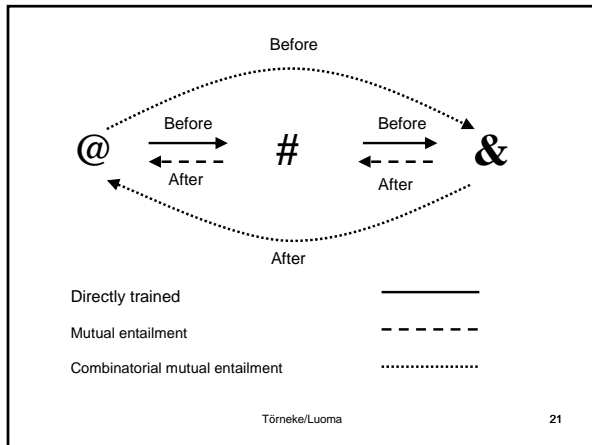
18



Different kinds of relations

Coordination, "the same as"	Spatial relations (above/under)
Opposite	Causal relations (if-then)
Comparison (more/less)	Temporal relations (before/after)
Hierarchical relations	Perspective (here/there, I/you)

Törneke/Luoma 20



Summing up with some terminology

- Arbitrarily applicable relational responding (AARR)
- Same thing, different names: relational framing, derived relational responding
- Direct and derived stimulus relations
- Direct and indirect (derived) stimulus functions
- Direct contingencies
- Relational frames
- Relational networks
- Crel (Context of relation) and Cfunc (Context of function)

Törneke/Luoma 22

Definition of relational framing

To relate in a way characterized by:

- Mutual entailment
- Combinatorial mutual entailment
- Transformation of stimulus functions according to the established relation

Törneke/Luoma 23

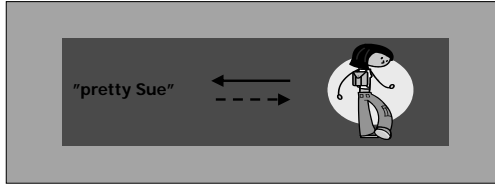
Once more: two different kinds of relating

1. In operant and respondent conditioning
Stimuli (events) "belong together" through:
 - Being close together (either in time or space), and/or
 - Formal characteristics (generalisation)
2. In arbitrarily applicable relational responding
Stimuli (events) are related based on other contextual cues, independently of the stimuli related. Anything can be related to anything.

These two types of relating occur continuously together and to understand and influence human behavior you need to see both

Törneke/Luoma 24

Lisa, the parrot and pretty Sue



Törneke/Luoma

25

The three most important effects of derived relational responding:

- The birth of human language
Stimulus functions can be "moved around" at social whim and effect behavior of yourself and others
- The ability to discriminate yourself verbally
The effect of perspective taking frames. "Me" as an object
- Rule-governed behavior
Use of temporal and causal framing

Törneke/Luoma

26

An exercise and three aspects of self

- Self as perspective (context)
- Self as story (content)
- Self as process

Törneke/Luoma

27

The most dramatic effect of relational framing: Rule-governed behavior

- An antecedent can give apparent contact with (specify) behavior and consequence as a result of the ability of humans to relate events arbitrarily
- This has great effects on human behavior

Törneke/Luoma

28

Rule-governed behavior

Relational framing makes it possible for the social context to arbitrarily specify behavior (B) and consequence (C) by antecedents (A), that is: to set up rules

For this you need at least frames of coordination, temporal and causal frames

An antecedent functioning as a rule (specifying behavior and consequence):

- "If you go shopping (B) you can by an ice-cream (C)"
 - "If you do that once more (B) I will never come back (C)"
- We learn to formulate self-rules:
- "Study now (B) so you'll pass the exam (C)"
 - "Don't say what you think (B) for then you'll be alone (C)"

Törneke/Luoma

29

A B C A

Törneke/Luoma

30

A B C A

Törneke/Luoma 31

Three kinds of rule-governed behavior

Pliance and **tracking** are two types of rule-governed Behavior controlled by rules that specify a behavior and a consequence. They are differentiated from each other based on different kinds of reinforcement history.

Augmenting is a kind of "add on" to the two basic ones, and works by affecting the degree to which a consequence functions as reinforcing or punishing

Törneke/Luoma 32

Rule-governed behavior: The blessing and the curse

- The coin has two sides: the ability to sidestep immediate gratification on one side and insensitivity to direct stimulus functions on the other
- The tendency of indirect stimulus functions to dominate over direct. Classical experiments

Törneke/Luoma 33

Derived relational responding and a broadened interface with pain

Generalisation
AARR adds:
 Mutual entailment
 Combinatorial mutual entailment
 Greater pain (comparative framing)
 can come later (temporal framing)

An antelope and a human taking refuge from danger (mutual entailment)
 Exercise (opposition)
 At the Mediterranean (causal framing)
 "You really did this well! (opposition)

Törneke/Luoma 34

Rule-governed behavior

- Pain is inevitable. What we do when verbal contact is established is key.
- Functional tools can become traps.
- The heart of the matter is the effort to control private events.

Törneke/Luoma 35

Two connected, general problems

- **Fusion**: when certain verbal (indirect) stimulus functions dominate over other potentially available stimulus functions, direct as well as indirect.
Or: Interacting with events on the basis of indirect rather than direct stimulus functions, while being oblivious to the ongoing relational framing that establishes those functions

Fusion is the same as *fused behavior*.

- **Experiential avoidance**: actions aimed at controlling and/or eliminating affects, thoughts, memories, and bodily sensations

Experiential avoidance is rule-governed
 Problematic experiential avoidance is fused behavior

Törneke/Luoma 36

Two problems with experiential avoidance

- Does not work well. The more effort you put into it and the more important it is to control private events, the higher the risk that you get more of what you are trying to avoid
- It blocks other behavior. And the more important it is to do it, the more the blocking effect increases

Törneke/Luoma

37

Clinical implications

Törneke/Luoma

38

Relational Frame Theory and psychological treatment

Skinner: There are two ways psychological treatment can effect behavior.

1. Provide new direct contingencies in session
2. Give instructions (rules)

Different models of psychotherapy can be analysed from this perspective. Psychodynamic therapy. Cognitive therapy. Functional analytical psychotherapy. Behavioral activation.

RFT adds new understanding of these.

RFT also suggests new interventions: ACT

Törneke/Luoma

39

The essence of RFT for clinical use

We can now understand how rule-governed behavior works **and we understand some new things about it's pitfalls**

ACT: we need to undo a particular problematic kind of rule-governed behavior – i.e., experiential avoidance.

Törneke/Luoma

40

Experiential avoidance

Experiential avoidance emerges from two elements:

1. effects of derived relational responding that give private events aversive functions
2. a learning history by which the individual has learned avoidance of such events as the way to act.

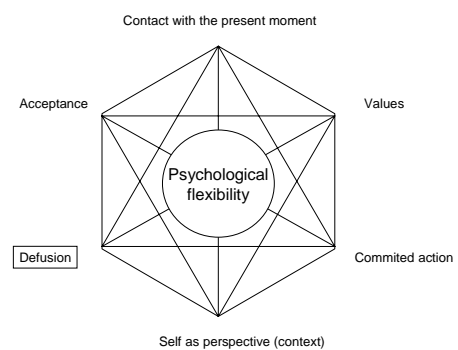
The work to undo these behavioral traps consists of two basic strategies:

Valued action
Defusion

These two roughly correspond to the two sides of the ACT hexagon

Törneke/Luoma

41



Törneke/Luoma

42

Valued action:

To act towards what you want

- In problematic experiential avoidance you act as if the most important thing is to avoid certain private events. ACT therapists help the client discriminate this very behavior as problematic (creative hopelessness)
- As an alternative, help the client discriminate what he/she wants, as if experiential avoidance was not an issue. This is using the strength of rule-governed behavior; the ability to go for general and long-term goals (values).

Törneke/Luoma

43

Valued Action (continued)

- For the trapped individual, aversive private events are in opposition to valued actions. To take valued action **with these events present** is to have them in coordination with such action.
- Encourage behavior in valued directions, using defusion on the way to undo general language traps and their specific function for this particular individual.

Törneke/Luoma

44

Defusion:

To deal with private events and the functions they obtain as a result of AARR

- **The basic strategy is using the ability of taking perspective on private events**
- When a person is fused with particular thoughts (or other private events and their "meaning") the person is acting from these thoughts, on the basis of these thoughts. It is all "here/now". Defusion is discriminating a particular private event as occurring "there/then" and thereby the stimulus functions of that event is changed

Törneke/Luoma

45

Defusion (continued)

- Fusion occurs when there is a lack of differentiation between my thoughts on one hand and me as the observer on the other.
- Taking perspective on private events (putting them "there/then") transforms stimulus functions and creates flexibility, or what is normally called "choice"

Törneke/Luoma

46

Two clinical principles

- Support coordination rather than opposition between painful private events and valued actions
- Support differentiation (opposition) rather than coordination between private events and self

Both of these are done by altering the context of behavior.

ACT is a treatment package that focuses on this work

Törneke/Luoma

47

Typical ACT interventions focusing coordination between aversive private events and valued action

- The pen through your hand
- The swamp metaphor
- Tug of war
- Push away - have on your lap
- Take your keys with you
- The bus metaphor
- Doing things regardless of opposing verbal content

Törneke/Luoma

48

Typical ACT interventions focusing distinction between private events and self

- The buss metaphor
- "Who is watching that?"
- Leaves on the stream
- Physicalizing exercise
- "I am having the thought that..."
- Put on the wall
- The chess metaphor
- Distancing exercise