

# **Human Ethology and the Understanding of Personality Disorders**

Gerhard Medicus, Innsbruck

## Part I: *Proximate Causes*

- *Zurich Model*

- *Coping strategies*

(after Bischof's contribution to Attachment Th.)

– *Bonding types* (after M. Ainsworth)

- *Personality disorders:*

Imprinting-similar developments  
or inappropriate, fixed “*working  
models*” (J. Bowlby, M. Main)

on regulation of emotions

– in contrast to neuroses

## Part II: *Ultimate C.*

- *Roots of sociality*

- *Emotional aspects*

- *Cognitive aspects*

**Working Hypothesis on Personality Disorders.**

## Part I: *Proximate causes*

Charles Darwin, 1871: “.. but it is worthy of remark that a belief [or a fixed “working model”] constantly inculcated during the *early years of life*, whilst *the brain is impressible*, appears to acquire almost the nature of an *instinct*; and the very essence of an *instinct* is that it is followed independently of reason. ”

## **Social negligence and its influences upon the ability to can, want and ought**

- only 5% of prisoners / violent criminals had a stable and long-term caregiver during their childhood
- 50% had more than five successive caregivers by the age of 14.

At court, Leon watched the victims' family cry and asked:  
"Why are they crying? I'm the one who's going to jail." Perry 2006

- 90% of prison inmates are male
  - bio-psychological aspects?

# The three motivational systems of the Zurich model of social motivation

after Norbert Bischof

Motivational system	When lacking	When excessive
<b>1. Security system</b> (Bowlby) appentence for protection	<ul style="list-style-type: none"> <li>• <i>separation anxiety, grief</i></li> </ul>	case of overfamiliarity: <ul style="list-style-type: none"> <li>• <i>tedium</i> (Bischof)</li> </ul>
<b>2. Arousal system</b> (Bowlby) appetence for arousal, i.e. exploration, curiosity	<ul style="list-style-type: none"> <li>• <i>boredom</i></li> </ul>	in case of excess arousal: <ul style="list-style-type: none"> <li>• <i>anxiety</i></li> </ul>
<b>3. Autonomy system</b> (Bischof) <ul style="list-style-type: none"> <li>• correlates with self-confidence &amp; dependency</li> <li>• Roots:               <ul style="list-style-type: none"> <li>- power, dominance</li> <li>- recognition motivation</li> <li>- competence motivation</li> </ul> </li> </ul>	assertiveness	submissiveness

Further reading: <http://bischof.com>

# Assertiveness and submissiveness

are observable in context of any motivational system  
(after Norbert Bischof)

assertiveness through  
*coping strategies*

such as

- *inventiveness,*
- *aggressiveness*

submissiveness through  
*coping strategies*

such as

- *supplication,*
- *acclimatization*

Further reading: [http://bischof.com/mat/Zuercher\\_Modell.pdf](http://bischof.com/mat/Zuercher_Modell.pdf)

# Coping Strategies

If facing a hurdle (or striving for a goal)

## Assertiveness

- She/he can react **aggressively** and destroy it.
- She/he can **find an intelligent way** to overcome it.

## Submissiveness

- She/he can **acclimatize** to it and deny the goal.
- She/he can beg for support (**supplication**) to overcome it.

*Further reading:*

[http://www.psychology.sunysb.edu/attachment/video\\_contents/videos\\_index\\_2010\\_kg2\\_infant\\_script.html](http://www.psychology.sunysb.edu/attachment/video_contents/videos_index_2010_kg2_infant_script.html)

# Coping strategies and Attachment styles

Attachment styles (after Ainsworth),  
with reference to coping strategies (after Bischof-Köhler)

A < B < C

(aggression) *Assertion* •  
(submission) *Supplication* •

**A** (*attachment:*  
*insecure avoidant*)  
**pseudo independent**

**B** (*attachment:*  
*secure*)  
**independent**  
• *strong*  
*inventiveness*

**C** (*attachment:*  
*insecure ambivalent*)  
**dependent**

• *Acclimatization*

A > B > C



# Coping strategies

after Bischof 2012, p. 160, Tab. 8.1

<b>External coping</b>
Invention
Supplication/ $\omega$ -strategy
Aggression/ $\alpha$ -strategy
<b>Internal coping</b>
Acclimatization*
Revision**

<b>Internal coping e.g.:</b>
Frustration tolerance***↓
Appetence for security ↑
Arousal high (Anxiety)
Pro-social coldness****
Desire for autonomy ↑

\* reference value → displacement

\*\* perception → denial

\*\*\* calm wait-and-see *or* precipitate coping reaction

\*\*\*\* beneficial social emotions ↔ pro-social coldness

# Distinction between

- **Coping highly activated**

**External coping**

Invention

**Supplication**

Aggression

- **Fixed “working model”**

**External coping**

Invention

**Supplication**

Aggression

**External coping**

Invention

Supplication

**Aggression**

**External coping**

Invention

Supplication

**Aggression**

# Paranoid Personality Disorder

## External coping

Invention

Supplication

Aggression

## Internal coping

Frustration tolerance ↓

Appetence for security ↑

Arousal high (fear)

Pro-social coldness

Desire for autonomy ↑

*“Disintegrations”  
within Zurich Model*

- Bonds ambivalent:
- Badger & demean others because of
  - anxiety and arrogance
- Dependent upon loyalties (security system)

# Schizoid Personality Disorder

## External coping

Invention

Supplication

Aggression

## Internal coping

Frustration tolerance

Appetence for security

Arousal high (fear)

Pro-social coldness

Desire for autonomy ↑

- Rarely show pro-social emotions
- Avoidance of social bonds because of social risks or disappointments

# Antisocial Personality Disorder

External coping
Invention
Supplication
Aggression

Internal coping
Frustration tolerance ↓
Appetence for security
Arousal high (fear)
Pro-social coldness
Desire for autonomy ↑

- Aggressiveness high
- Weak pro-social beneficial emotions
- Weak guilt & shame
- Low empathy (“egocentric”)

# Narcissistic, partly Histrionic PD

## External coping

Invention

Supplication/ $\omega$ -strategy

Aggression/ $\alpha$ -strategy

## Internal coping

Frustration tolerance ↓

Appetence for security

Arousal high (fear)

Pro-social coldness

Desire for autonomy ↑

- Opponents are fought against
- Attachment ambivalent
- Self-centred, craving for recognition
- Self-esteem fluctuations

# Compulsive Personality Disorder

## External coping

Invention (revision)

Supplication

Aggression/ $\alpha$ -strategy

## Internal coping

Frustration tolerance ↓

Appetence for security ↑

Arousal high (fear)

Pro-social coldness

Desire for autonomy ↑

- Appetence for security
- Desire for security through order
- Anxiety concerning own & others' mistakes

# Avoidant Personality Disorder

## External coping

Invention (revision)

Supplication/ $\omega$ -strategy

Aggression

## Internal coping

Frustration tolerance

Appetence for security ↑

Arousal high (fear)

Pro-social coldness

Desire for autonomy

- Appetence for security
- Anxiety concerning own mistakes
- Social reassurance important
- Self-abasement



# Dependent PD

External coping
Invention
Supplication/ $\omega$ -strategy
Aggression

Internal coping
Frustration tolerance
Appetence for security ↑
Arousal high (fear)
Pro-social coldness
Desire for autonomy

- Craving for security and support ( $\omega$ -strategy)
- Social anxiety
- Self-abasement
- Overestimation of others

# Part II: *Ultimate causes*

- *Roots of sociality* -

*dispositions listed under internal coping*

- Charles Darwin, 1859: “Psychology will be based on a new foundation, that of the necessary acquirement of each mental power and capacity by gradation.”
- Charles Darwin, 1871: “The feeling of pleasure from society is probably an extension of the parental or filial affections, since the social instinct seems to be developed by the young remaining for a long time with their parents; and this extension may be attributed in part to *habit*, but chiefly to natural selection. ”

# What is Phylogeny good for?

Animal behaviour and phylogenetic behavioural reconstructions can help complete the list of faculties involved in the ontogeny of personality disorders.

# Phylogenetic roots of pro-social and antisocial dispositions in

- emotional,
- cognitive aspects, humanisms &
- **beneficial dispositions**

**Homo sapiens**

**H. erectus & 4-y-old child**

**Apes & 2-y-old child**

**Monkeys**

lower **Mammals**

*After a deprived childhood, persons often have low sense for love, attachment or friendliness and lack the emotional basis for self esteem*

**brood care, family bonding; appetence for security; separation anxiety; grooming, warming/“cuddling”;** ➔ evolutionary *preconditions for:* love, attachment, friendliness; mood contagion

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**social behaviour**, **group** bonding, **intimacy**, **attractive behaviour** (e.g. **reconciliation**) are rooted in brood care; social curiosity/play & social functions of intellect

**brood care**, **family** bond; security appetite; separation anxiety; **grooming**, **warming**/'**cuddling**'; ⇨ evolutionary *pre-conditions for*: **love**, attachment, **friendliness**; **mood contagion**



Young tree shrews lick the saliva of the mother, possibly to drink before milk is available or to gain immune globulins or an adequate mouth flora

© Foto D. v. Holst, Bayreuth



# Phylogenetic roots of pro-social and antisocial dispositions in

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*after deprived childhood, persons often have low pro-social empathy (emotional lack)*

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*Rouge Test*

**self-exploration** (I/Me distinction) & appreciation of *emotions* of others (empathy): options for **comforting** & egoism, desire for (forced) recognition by display behaviour

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# “Without Empathy”?

- Some people “without empathy” show reduced (sometimes even no) pro-social empathy; but they are able to show antisocial empathy.

Some people “without empathy” have, because of their childhood, less or no perception of beneficial emotions, which are experienced during cuddling, reconciliation and comforting.

- Some manipulative psychopaths show fake empathy and hardly any pro-social reciprocity and have no pro-social reliability.



# Phylogenetic roots of pro-social and antisocial dispositions in

- emotional,
- cognitive aspects, **humanisms** &
- **beneficial dispositions**

*after deprived childhood, some persons can hardly feel shame*

*False Belief Test*

*theory of mind (ToM)*: concepts about what others can or cannot know ⇒ *shame*, desire for “justified” appreciation, **apologising / forgiving**; time horizon

**Homo sapiens**

**H. erectus & 4-y-old child**

**Apes & 2-y-old child**

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**brood care**, **family bond**; security appetite; separation anxiety; **grooming**, **warming/“cuddling”**; ⇒ evolutionary *pre-conditions of*: **love**, attachment, **friendliness**; *mood contagion*

**lower Mammals**

# Phylogenetic roots of pro-social and antisocial dispositions in

- emotional,
- cognitive aspects, **humanisms** &
- **beneficial dispositions**

**ToM** ⇒ reflection; language, **moral responsibility & reliability**; golden rule; power to discern between individual and common good; culture

**Homo sapiens**

theory of mind (ToM): concepts about what others can or cannot know ⇒ *shame*, desire for justified appreciation, **apologising / forgiving**; time horizon

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# Summary & Outlook

- Conceptual overlaps between Human Ethology, Developmental Psychology and Psychiatry can enhance research and discussion.
  - “*Attachment style D*” and *borderline personality disorders* are omitted here.
- New questions arise based on this ethological contribution.
- I expect comparisons with other theories on the development of personality disorders to yield reciprocal improvements.

Charles Darwin, 1871:

•“To do good in return for evil, to love your enemy, is a height of morality to which it may be doubted whether the social instincts would, by themselves, tended by the aid of reason, instruction, and the love or fear of God, before any such *golden rule* would ever be thought of and obeyed.”

•“As man advances in civilisation, and small tribes are united into larger communities, the simplest reason would tell each individual that he ought to extend his social instincts and sympathies to all the members of the same nation, though personally unknown to him. This point being once reached, there is only an artificial barrier to prevent his *sympathies extending to the men of all nations and races.*”

# Literature

- <http://bischof.com>
- [http://bischof.com/mat/Zuercher\\_Modell.pdf](http://bischof.com/mat/Zuercher_Modell.pdf)
- [http://www.psychology.sunysb.edu/attachment/video\\_contents/videos\\_index\\_2010\\_kg2\\_infant\\_script.html](http://www.psychology.sunysb.edu/attachment/video_contents/videos_index_2010_kg2_infant_script.html)
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Thank you  
for listening!