



**Contributions from attachment theory to the
understanding of the development and nature of
psychosis:**

**Convergence and divergence with the developmental
psychopathology perspective**

ISPS Copenhagen

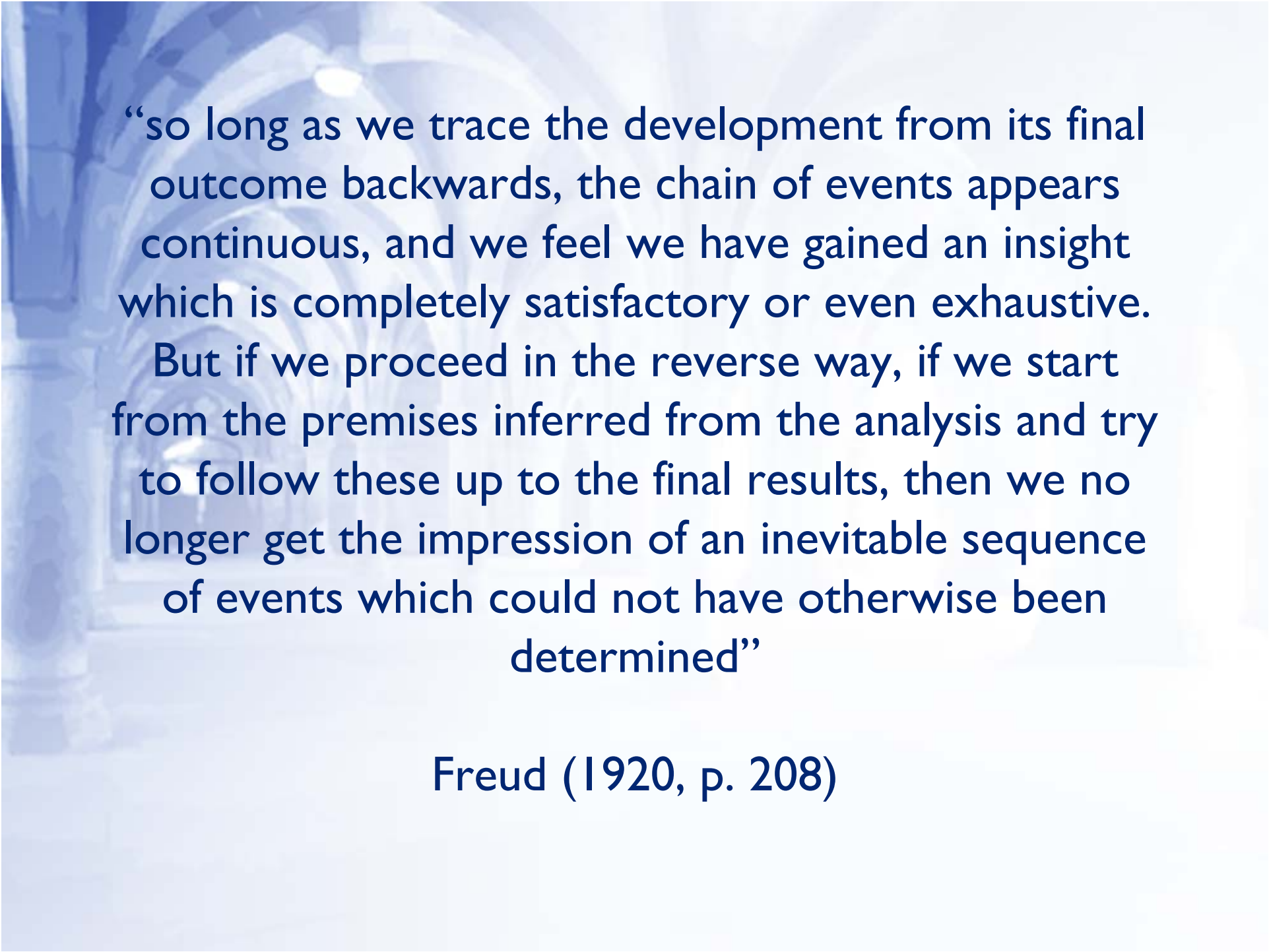
16th June 2009

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Acknowledgements

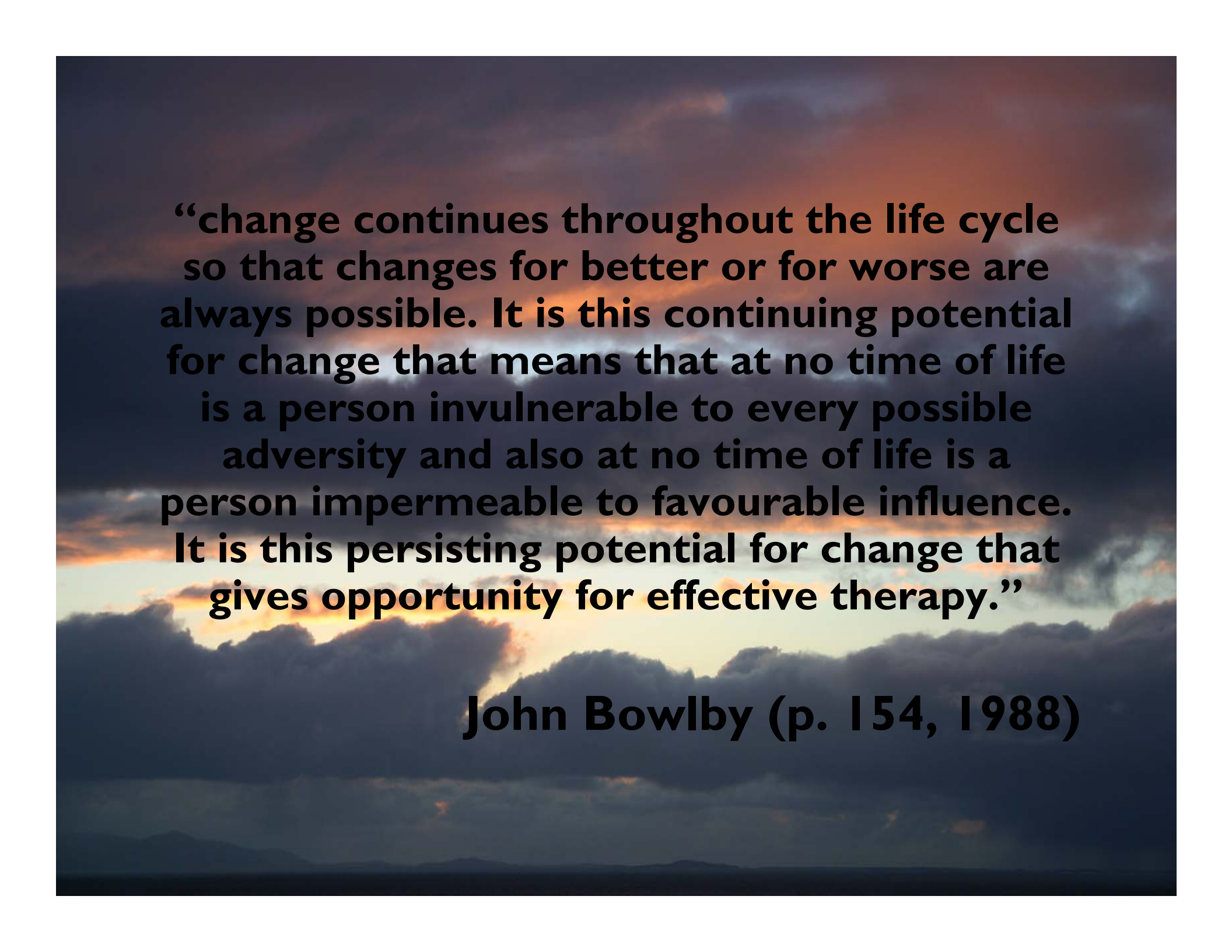
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Gumley AI (2009) The developmental roots of compromised mentalisation in complex mental health disturbances of adulthood: an attachment based conceptualisation. In G Dimaggio & PH Lysaker. *Metacognition and severe adult mental disorders: From basic research to treatment*. London: Routledge.



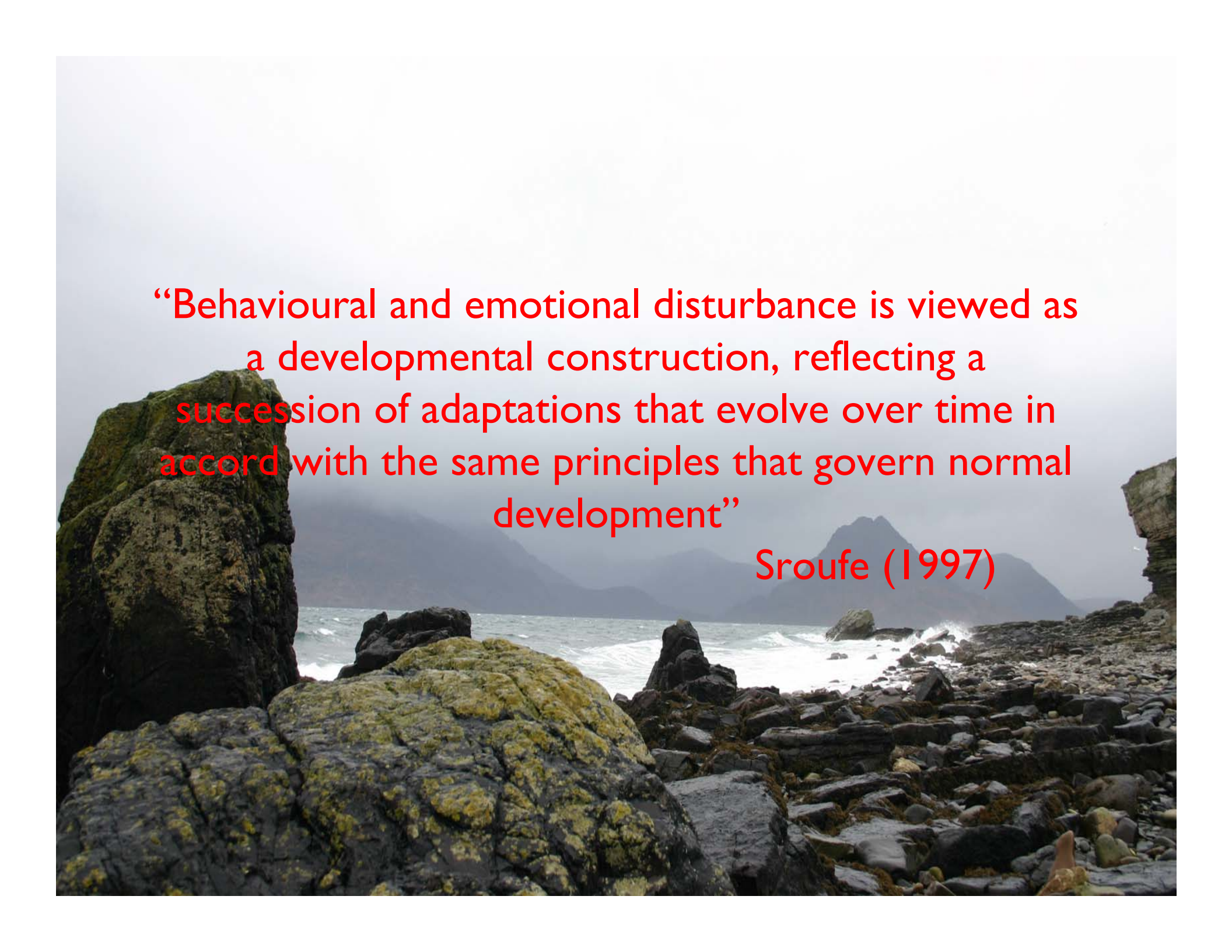
“so long as we trace the development from its final outcome backwards, the chain of events appears continuous, and we feel we have gained an insight which is completely satisfactory or even exhaustive. But if we proceed in the reverse way, if we start from the premises inferred from the analysis and try to follow these up to the final results, then we no longer get the impression of an inevitable sequence of events which could not have otherwise been determined”

Freud (1920, p. 208)



“change continues throughout the life cycle so that changes for better or for worse are always possible. It is this continuing potential for change that means that at no time of life is a person invulnerable to every possible adversity and also at no time of life is a person impermeable to favourable influence. It is this persisting potential for change that gives opportunity for effective therapy.”

John Bowlby (p. 154, 1988)

A photograph of a rugged coastline. In the foreground, large, dark grey rocks are covered in patches of yellow-green moss. The ocean is turbulent, with white foam from waves crashing against the rocks. In the background, a range of mountains is visible under a heavy, grey, overcast sky.

“Behavioural and emotional disturbance is viewed as a developmental construction, reflecting a succession of adaptations that evolve over time in accord with the same principles that govern normal development”


Sroufe (1997)

Metacognition and mentalisation

- Mentalisation or metacognition has been variously referred to:
 - process by which an individual implicitly or explicitly interprets his own actions and those of others as meaningful on the basis of intentional mental states (e.g. desires, needs, feelings, beliefs and reasons) (Bateman & Fonagy, 2004; page 302).
 - the cognitive ability to attribute mental states such as thoughts, beliefs and intentions to people allowing an individual to explain, manipulate and predict behaviour (Sprong et al., 2007).
 - or the ability to think about one's own inner states, and the inner states of others, allowing for complex self-experience and coping with distress (Semerari et al., 2003).

Development and metacognition

- The capacity for metacognition and mentalisation evolves through the experience of social interaction and caregiving and it has been hypothesized that early disruption of affectional bonds will increase the risk of later maladaptation through impaired mentalisation.
- In this sense, mentalisation is crucial to the maintenance of a coherent sense of self and acts as a buffer between early adversity on the one hand and later emotional and interpersonal adaptation on the other hand (Fonagy and Target, 2006)

A long, vaulted hallway with a series of arches and columns, receding into the distance. The image is overlaid with a semi-transparent blue filter. The text "Two traditions: two narratives" is centered in red.

Two traditions: two narratives

Metacognition in Complex Mental Health

- Bateman and Fonagy (2004) have argued that in individuals diagnosed with borderline personality disorder (BPD) there is an inhibition of mentalisation where individuals will defensively avoid thinking about the mental states of self and others, as these are linked to experiences in the past (e.g. trauma and maltreatment) which have been associated with extreme pain.
- The collapse of mentalisation in the face of further stress (e.g. increased emotional arousal) leads to the loss of awareness and an inability to differentiate internal and external experiences. This results in extreme states of affect combined with dissociative responding thus creating the affective and interpersonal instability.

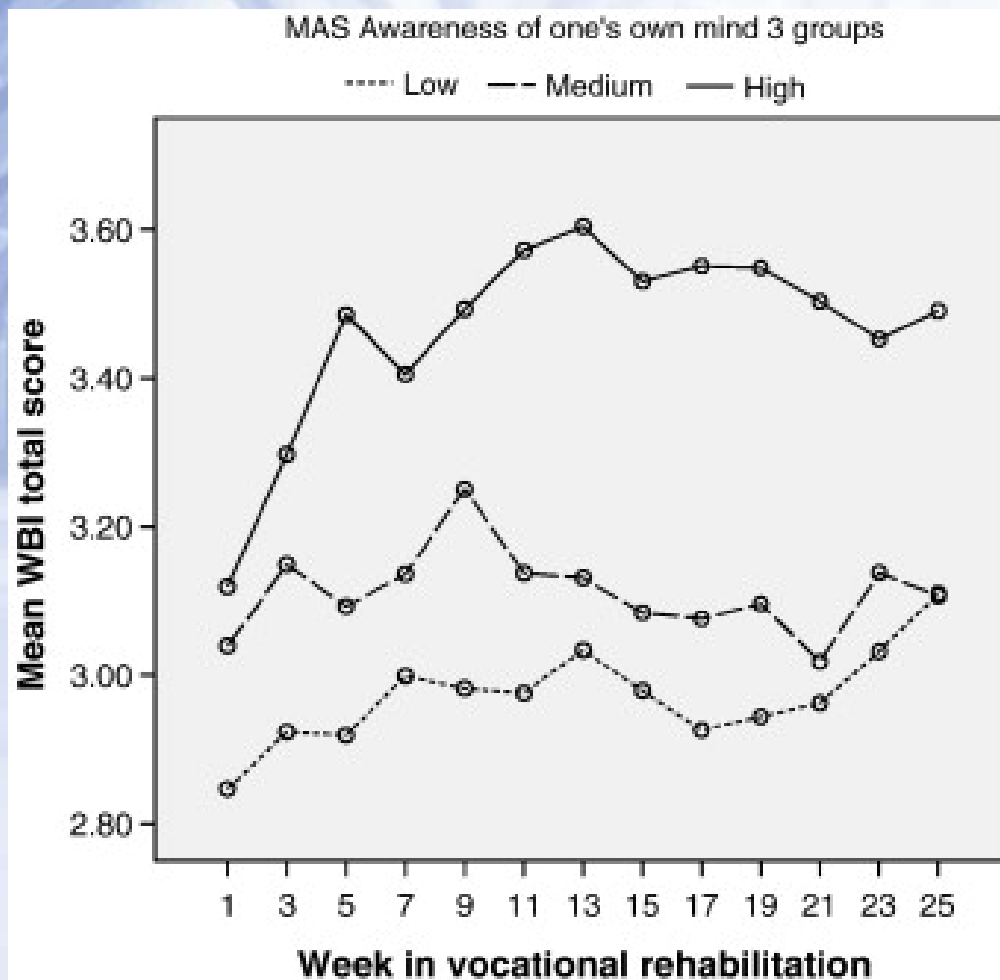
Metacognition in Psychosis

- Amongst individuals diagnosed with Schizophrenia
 - robust evidence of problems in mentalisation compared to non-patient controls
 - those individuals with more severe and complex symptoms including disorganization, negative symptoms and paranoia experienced the most profound difficulties in mentalisation (Sprong et al., 2007)
 - Problems observed amongst those at high genetic risk and those with ‘at risk mental states’

Metacognition in Psychosis

- Narrative based approaches to the assessment of metacognition (Metacognitive Assessment Scale, Semerari et al., 2003) capture the way in which individuals utilise mentalisation processes including understanding self and other mental states, and the ability to use mental state information to solve problems.
- Greater difficulties in metacognition were linked to greater cognitive impairment in attention, verbal memory and executive function.
- Better metacognitive functioning was also linked to greater depression (Lysaker et al., 2005; Lysaker et al., 2007; Lysaker et al., 2008).

Self reflexivity and adaptation to work over time



Lysaker et al., in press
(Schizophrenia
Research)



**Developmental roots of
metacognition and mentalisation**

Maternal reflective functioning and infant attachment security

- Fonagy et al., (1991) explored maternal reflective functioning as assessed by the AAI and its relation to infant attachment security at 12 and 18 months.
 - RF was strongly associated with infant security and was a more powerful predictor of infant security than maternal narrative coherence (a key predictor of attachment security on the AAI).
 - Maternal RF has also been associated with more accurate and appropriate affective communication between mothers and their infants.
 - Lower RF is associated with more affective communication errors, greater boundary confusion, increased intrusiveness and more fearful, disorientated and disorganised behaviour (Grienenberger, Kelly & Slade, 2005).

Maternal Mind Mindedness

- Caregiver infant communication is therefore understood as a key vehicle through which parental RF and affect regulation is translated and communicated to the child. Related to this, maternal mind-mindedness has been an important focus of study in the development of security in infancy and childhood and the evolution of mentalisation capacity (Meins, 2003).
 - Greater MM has been associated with more sensitivity, less intrusiveness and less hostility during play (Lok & McMahan, 2006), greater security of attachment (assessed using the AAI) and higher RF (Arnott & Meins, 2007).

Longitudinal MM and infant security

- Arnott and Meins (2007) found that autonomous maternal AAI was associated with high MM and subsequent secure infant attachment and non-autonomous insecure maternal AAI was associated with low MM and insecure infant attachment.
 - High MM appeared to ameliorate the effects of insecure AAI on infant attachment security.
 - MM was also linked to mothers' use of mind related comments in communication with their infants, and is a predictor of infant security at 12-months (Meins et al., 2001).

Security, MM and metacognitive development

- Infant attachment security has been associated a number of improved outcomes in childhood including better problem solving, greater use of symbolic play, greater independence and autonomy, greater persistence on tasks and improved peer competence in comparison to insecurely attached infants (Meins, 2003).
 - Maternal MM at 6 months has been associated with children's understanding of mind assessed using both TOM tasks and narrative at 45 and 55 months (Meins et al., 2003)
 - Mothers' use of mental state language predicts TOM performance (at 45 and 48 months) independent of the child's attachment security at 12-months (Meins et al., 2002).

Pretend play and the development of metacognition

- Pretend play has its basis in security of attachment, which promotes and stimulates playful exploration.
- The attachment relationship provides the basis for the transformation of objects, intentions and affects into pretend and “nonconsequential” modes of expression and communication, which are “decoupled” from physical reality (Fonagy et al., 2004).
- Pretend play and the use of pretence in parental or peer relationships promotes the development of metacognitive skills involved in mentalising and theory of mind during early to middle childhood (Twin Earth Theory, Lillard, 2001).



Compromised developmental experiences: a shared narrative

Compromised developmental experiences in BPD and Psychosis

- Parental Trauma and Loss
 - Liotti et al., (2000) found that the risk of developing BPD, rather than another type of mental disorder (anxiety, affective and cluster C personality disorders) was increased by the individual's mother was mourning over a loss (or dealing with a serious trauma) during the individual's infancy
 - Miti and Chiaia (2003) found high rates of parental trauma and loss in the two years before or after the birth of offspring who were later diagnosed with dissociative disorders or BPD and schizophrenia.

Compromised developmental experiences in BPD and Psychosis

- Parental Separation and Loss
 - In those who are diagnosed with BPD rates of parental separation and loss (80%) through divorce, parental illness or death are elevated.
 - In the ÆSOP study (Morgan et al., 2007) individuals with psychosis, compared with controls, were approximately three times more likely to have experienced long-term separation from one or both parents before the age of 16, and approximately three times more likely to have had a parent die before the age of 16.
 - Copenhagen High Risk Study found early parental separation leading to institutionalisation (not supportive foster carers) associated with later schizophrenia.

Longitudinal High Risk Methodology

- Family disharmony and later psychosis
 - Copenhagen High Risk Study (207 offspring of mothers with Schizophrenia)
 - HR children at increased risk in context of maternal disorganisation (e.g. antisocial behaviour, substance abuse, unemployment).
 - HR children also reported less satisfactory relationships.
 - Findings not accounted for by retrospective assessment infant temperamental characteristics.
 - Danish Perinatal HR Study (HR Group n = 72 versus matched controls with and without family history of psychiatric diagnosis).
 - Later development of schizophrenia associated with more stressful family interactions during childhood.

Compromised developmental experiences in BPD and Psychosis

- Childhood abuse and maltreatment
 - Elevated rates of childhood trauma, abuse and maltreatment amongst individuals diagnosed with BPD have been noted (Bateman & Fonagy, 2004) Evidence is also emerging from longitudinal studies showing that childhood abuse and neglect substantially increase the risk of BPD specifically and Cluster B symptoms generally (Johnson et al., 1999; Johnson et al., 2000).
 - A recent review of forty-six studies of individuals diagnosed with schizophrenia found that around one half had been subjected to childhood sexual abuse (CSA) and to childhood physical abuse (CPA). The majority had been subjected to either CSA or CPA (Read et al., 2005).

Urban social environments

- Summarising the literature on urban environment and risk of later psychosis:
 - Van Os (2004) argues that individuals with increased genetic liability to psychosis may have less opportunity to modify unusual or psychotic experiences in an (urban) environment with high levels of social fragmentation and low levels of social control, in combination with the lack of perceived safety and increased social stress associated with living in inner city environments.
 - **British Journal of Psychiatry**



**Bringing these narratives
together...**

Reflective Functioning and Affect Regulation

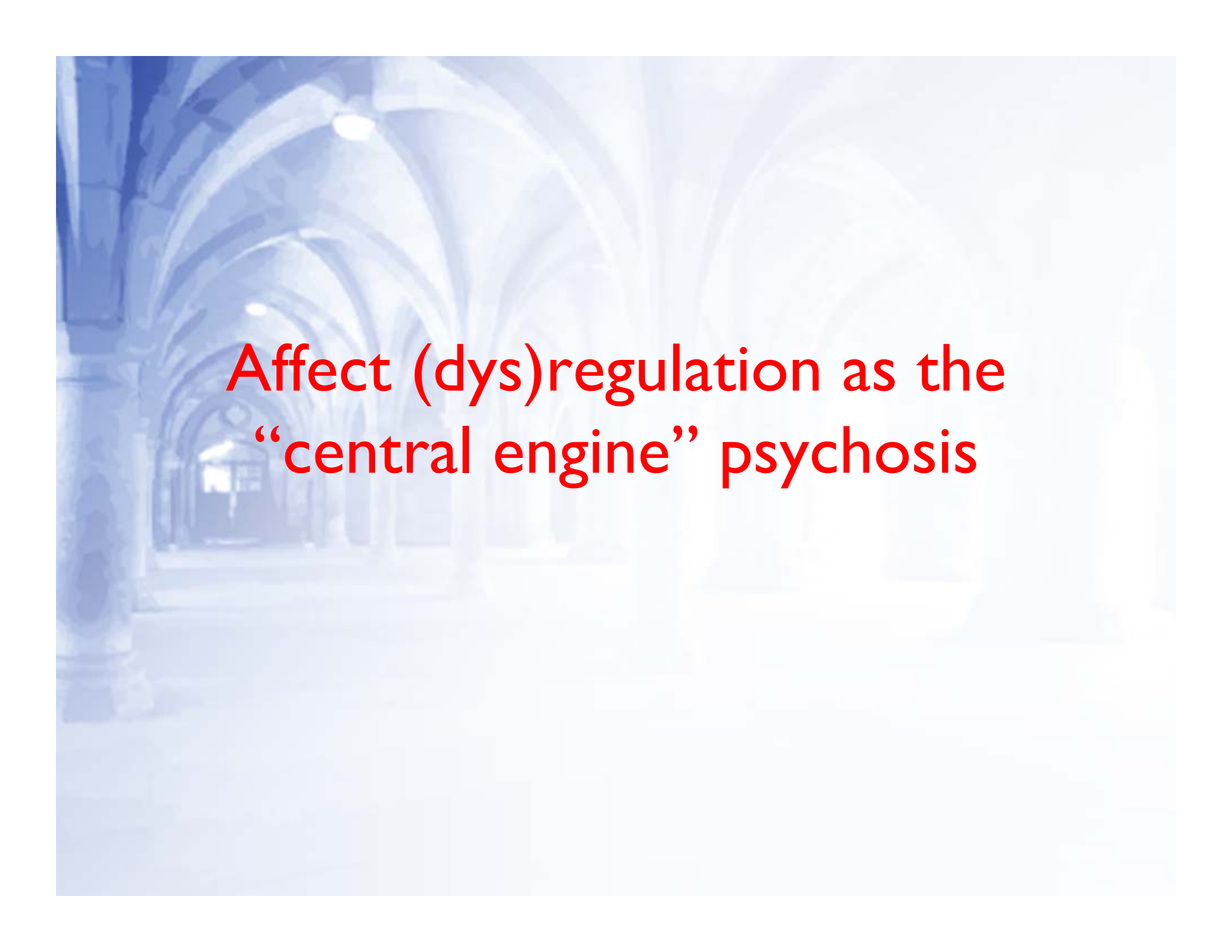
- Both psychosis and personality disorders share common developmental pathways characterized by the lack of secure base and / or the presence of relational trauma and loss during childhood and adolescence.
- Compromised developmental pathways increase risk of underdeveloped or weakened mentalisation and reflective functioning.
- In this context threatening life events and experiences create painful and overwhelming affects leading to disorganisation and disorientation and the collapse of reflective functioning.

Adult Attachment Interview and Psychosis

- Studies using the AAI in individuals diagnosed with BPD have found that participants tend to be classified as preoccupied with attachment. Narratives tend to be long and **confusing and reflect angry, fearful or passive accounts of attachment experiences and unresolved loss and trauma** (Bateman & Fonagy; Dozier, Stovall & Albus, 1999).
- In contrast, individuals diagnosed with Schizophrenia tend to use dismissing / avoidant attachment strategies associated with the **closing down of positive and negative affect and the avoidance of emotionally valenced memories** (Dozier et al., 1992).

Mentalisation and Reflective Functioning

No Axis II	BPD	Antisocial / Paranoid	FEP (Gumley et al, In Prep)
Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
4.3 (1.7)	2.7 (1.6)	3.9 (1.8)	3.2 (2.1)
FEP Freely Autonomous and Secure	FEP Dismissing / Avoidant	FEP Preoccupied	
4.7 (2.2)	2.1 (1.1)	5.0 (2.3)	



**Affect (dys)regulation as the
“central engine” psychosis**

Common developmental pathways, contrasting affect regulation?

- Affect dysregulation is understood in BPD in the context of early attachment insecurity and disorganization, complex and relational trauma, and weakened reflective functioning or mentalisation.
- In BPD affect is under-regulated producing states of fear and intense pain, leading to dissociative and disorganised responding and maladaptive coping including self-harm and suicidal behaviour.
- Individuals with BPD experience greater difficulties in integrating mental states and distinguishing between pretend and reality based modes of responding.

Common developmental pathways, contrasting affect regulation?

- In those diagnosed with Schizophrenia, affect regulation strategies tend to close down, limit or minimise affect and affectively laden memories in the context of weakened mentalisation.
- Metacognitive deficits reflected in individuals' narrative accounts of their experiences are characterised by difficulties in awareness of self and other mental states and utilization of mental state information (Lysaker and colleagues).

Common developmental pathways, contrasting affect regulation?

- In people diagnosed with schizophrenia we observe a tendency towards greater difficulties in identifying and relating internal states.
- Therefore this combination of a predominance of avoidant or shut down affect regulation strategies with weakened mentalisation may begin to help us understand
 - the development and persistence of negative symptoms, disorganization and vulnerability to relapse (which is characterized by affect dysregulation).
 - Attachment disorganization, dissociative responding and impaired mentalisation may also help us understand psychotic experiences such as auditory, visual and other forms of hallucinations.



Thank you

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