Neurobiology of pedophilia or paraphilia?

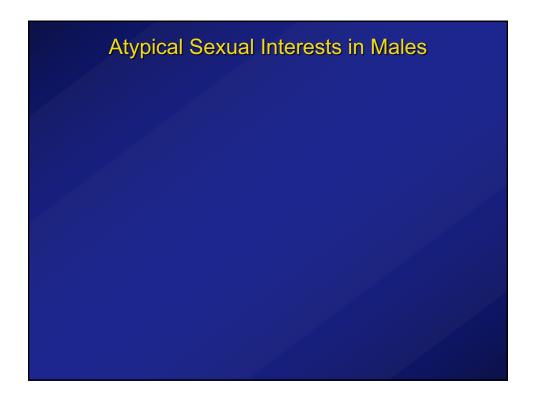
Towards a 'Grand Unified Theory' of sexual interests

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Atypical Sexual Interests in Males

What counts as a paraphilia?

Gay? Kink? Furries?

Atypical Sexual Interests in Males

Androphilia Urophilia, Coprophilia Stuff fetishism Autogynephilia Gynandromorphophilia Partialism Pedophilia & hebephilia Infantilism & diaperism Acrotomophilia Apotemnophilia Exhibitionism, Voyeurism Toucherism, frotteurism Sexual masochism Sexual sadism & biastophilia Paraphilic hypersexuality Exclusive vs non-exclusive Asexuality

Prior Taxonomies

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Asexuality (?)

Object paraphilias vs. Activity paraphilias

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Courtship Disorder

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3-D Model of Object interests:

Male/female Self-target/other-target Child/adult

Etiological Thinking

Psychodynamic theories

Learning/environmental theories

Neurological perturbation(s)

Sex and the Brain

The Sex Network

- Hypothalamus
- Occipital cortex
- Fusiform gyrus
- Parietal lobules
- Insula
- Mirror neurons

Sex and the Brain

The Sex Network

- Hypothalamus (hormone control)
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Network spans all (?) sexual interests

Pedophiles, gynephiles, and androphiles all "light up" in the same areas when shown sexual stimuli corresponding to their preference.

How do pedo- & teleio- processing differ?

<u>Study</u>	<u>Anatomy</u>	<u>Subjects</u>	<u>Results</u>
Walter	whole	13 pedophiles	pedophiles respond
(2007)	brain	14 healthy controls	analogously to controls
Schiffer	whole	11 homosexual pedophiles	pedophiles respond
(2008a)	brain	12 healthy gay men	analogously to controls
Schiffer (2008b)	whole brain	8 heterosexual pedophiles 12 heterosexual controls	no pedophilic responses
Poeppl	whole	9 pedophiles	pedophiles respond
(2011)	brain	11 nonsexual offenders	analogously, but > controls
Habermeyer	whole	8 heterosexual pedophiles	pedophiles respond part
(2013)	brain	8 heterosexual controls	analogous, "heterogenus"
Ponseti	whole	24 pedophiles	pedophiles respond to face
(2014)	brain	32 teleiophiles	analogously to controls
Cazala (in press)		25 non-exclusive pedophiles 24 teleiophiles	pedophiles respond analogously to controls

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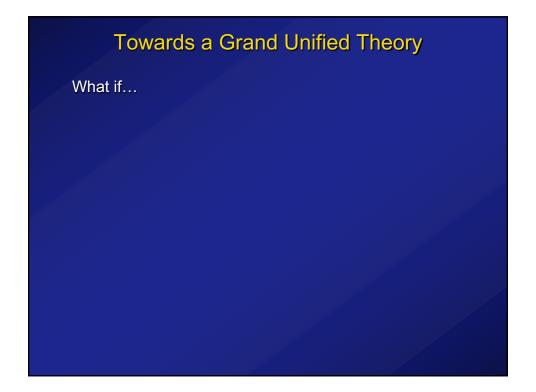
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Autism is often co-morbid with paraphilias

Antisociality/psychopathy is often co-morbid with paraphilias (?)



What if...

the paraphilias were NOT categorized among the sexual dysfunctions; and the paraphilias were categorized among *social* dysfunctions.

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What if *all* these problems—antisociality, autism/Aspergers, and paraphilia—were *all* the result of a problems in white matter circuitry that typically serve to handle social functions (of which sex is just a subset).

Cross-wiring in the Sex Network

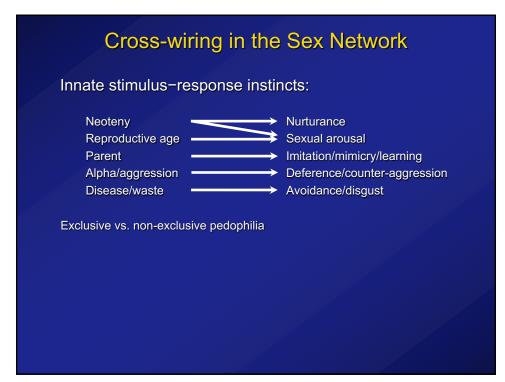
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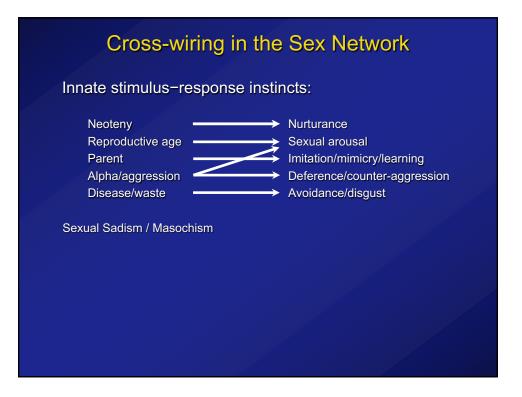
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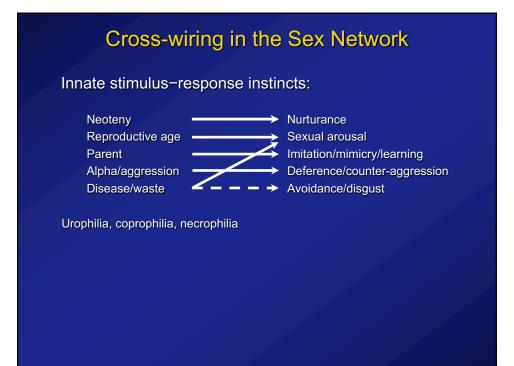


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Acrotomophilia/apotemnophilia, gynandromorphophilia, partialism

Cover animals don't show paraphilias?

Lower animals don't show paraphilias?

Ontogeny recapitulates phylogeny.

Dual Opponent Process Network?

Towards a Grand Unified Theory

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If the white matter mediated opponent-process mechanism:

- fails to suppress primitive responses...
- only partially suppresses primitive responses...
- suppresses responses to everything...
- suppresses responses to nothing...

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 suppresses responses to everything... Paraphilic Hypersex

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Courtship Disorders Non-exclusive para's Paraphilic Hypersex Asexuality

Connectivity Model Can Explain:

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