

# ***FORENSIC SLEEP MEDICINE: SLEEP, SEX AND MURDER***

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# Goals:

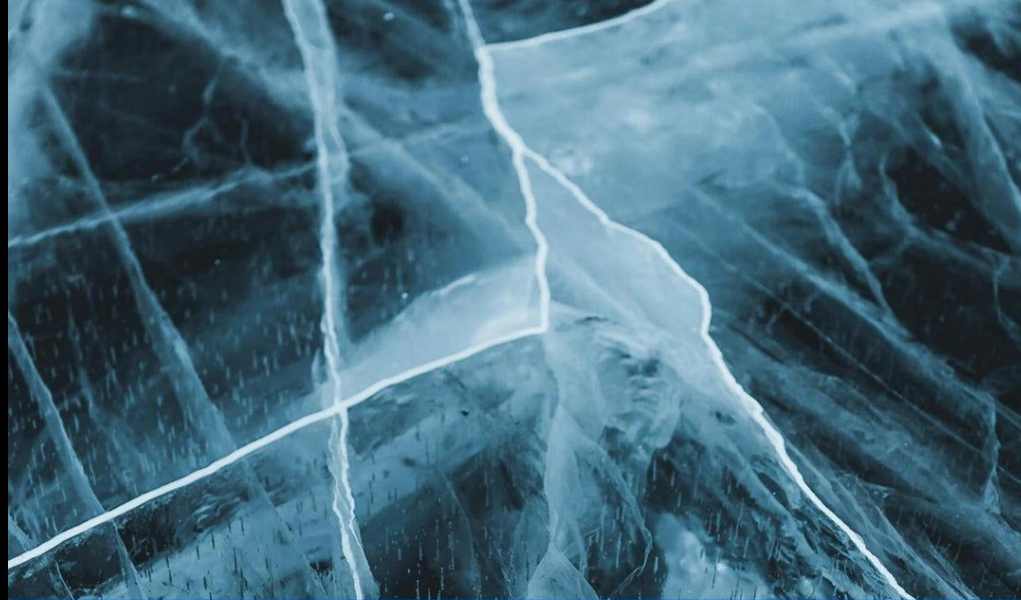
- ▣ Explain realms of consciousness and how they can overlap.
- ▣ Discuss types of sleep-related behaviors.
- ▣ Review the approach to determining legal culpability and liability when harm to other persons and property occurs.

SLEEPWALKING,  
CRIMINAL BEHAVIOR,  
and RELIABLE  
SCIENTIFIC EVIDENCE

A Guide for Expert Witnesses



MARK R. PRESSMAN



## THE SUPREME COURT'S ACTUAL INNOCENCE PROBLEM

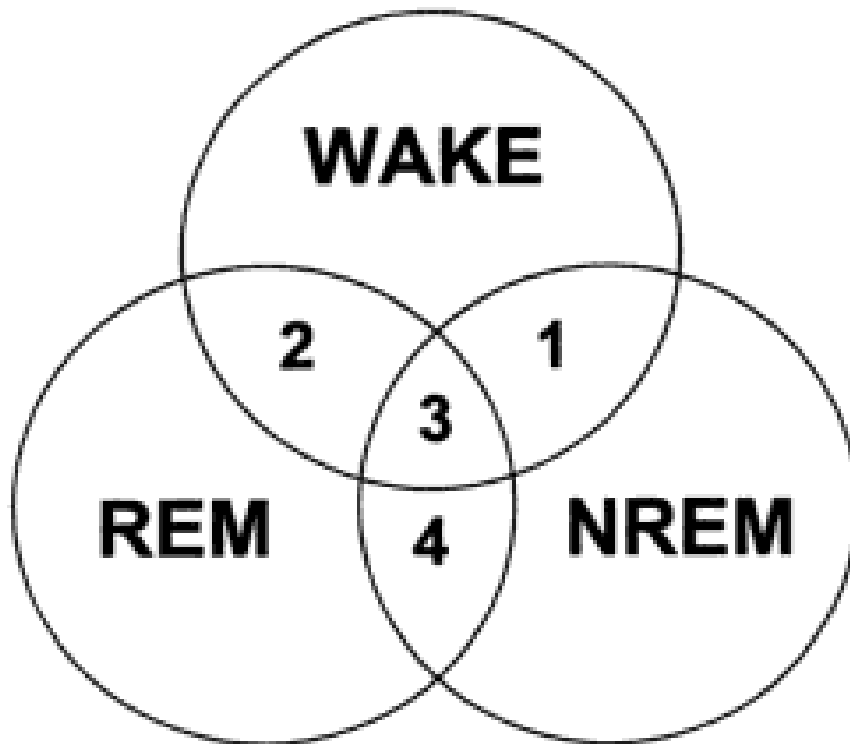
*How the Supreme Court of the United States  
Has Failed to Reduce Wrongful Convictions*

NATHAN GOETTING

# States of Being

- ▣ Wake
- ▣ REM sleep
- ▣ Non-REM sleep

# States of Being



1. Wake / NREM combinations
  - A. Disorders of arousal (sleepwalking, sleep terrors, confusional arousals)
  - B. Psychogenic dissociations
2. Wake / REM combinations
  - A. Cataplexy, hypnagogic hallucinations, sleep paralysis
  - B. REM sleep behavior disorder
  - C. Lucid dreaming ( out-of-body experiences)
  - D. Delirium (hallucinations - drug-induced, peduncular)
3. Wake / NREM / REM combinations
  - A. Status dissociatus
  - B. "Parasomnia overlap" syndromes
4. NREM / REM combinations

Theoretically possible, but not accompanied by conscious awareness

# State Boundary Leaks

- ▣ Thin vs. stable
  - Boundary Questionnaire
- ▣ Cataplexy
- ▣ Transitional hallucinations
- ▣ Sleep paralysis
- ▣ Dream recall
- ▣ Lucid dreaming

# Delusional Confusion of Dreaming and Reality in Narcolepsy

Erin Wamsley, PhD<sup>1,2,3</sup>; Claire E.H.M. Donjacour, MD<sup>4</sup>; Thomas E. Scammell, MD<sup>5,6</sup>; Gert Jan Lammers, MD, PhD<sup>4,7</sup>; Robert Stickgold, PhD<sup>1,2</sup>

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**Study Objectives:** We investigated a generally unappreciated feature of the sleep disorder narcolepsy, in which patients mistake the memory of a dream for a real experience and form sustained delusions about significant events.

**Design:** We interviewed patients with narcolepsy and healthy controls to establish the prevalence of this complaint and identify its predictors.

**Setting:** Academic medical centers in Boston, Massachusetts and Leiden, The Netherlands.

**Participants:** Patients (n = 46) with a diagnosis of narcolepsy with cataplexy, and age-matched healthy healthy controls (n = 41).

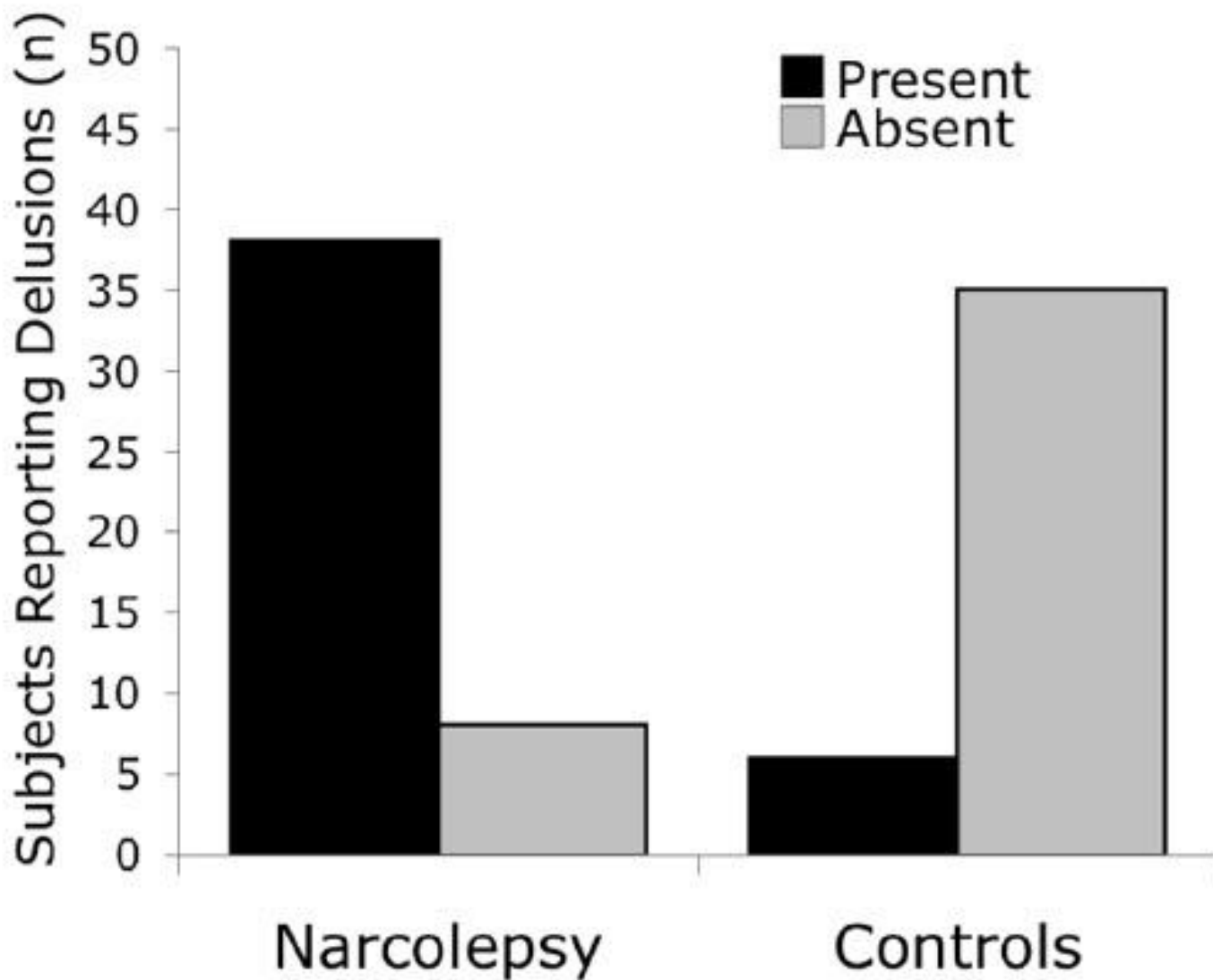
**Interventions:** N/A.

**Measurements and Results:** “Dream delusions” were surprisingly common in narcolepsy and were often striking in their severity. As opposed to fleeting hypnagogic and hypnopompic hallucinations of the sleep/wake transition, dream delusions were false memories induced by the experience of a vivid dream, which led to false beliefs that could persist for days or weeks.

**Conclusions:** The delusional confusion of dreamed events with reality is a prominent feature of narcolepsy, and suggests the possibility of source memory deficits in this disorder that have not yet been fully characterized.

**Keywords:** Dreaming, memory, narcolepsy

**Citation:** Wamsley E; Donjacour CE; Scammell TE; Lammers GJ; Stickgold R. Delusional confusion of dreaming and reality in narcolepsy. *SLEEP* 2014;37(2):419-422.



**Figure 1**—Prevalence of dream-reality confusion. Patients with narcolepsy were much more likely to report mistaking dream experiences as true memories, in comparison with age-matched healthy controls.

# 28 year old with nightmare disorder

- ▣ Selection of dream signs
- ▣ Reality checks
- ▣ Lucidity
- ▣ Dream intervention

# Sleepwalking Myth #1

- ▣ Sleepwalkers are acting out their dreams
  - Robust dream content tends to be REM
  - Sleepwalking tends to be non-REM

# Sleepwalking Myth #2

- ▣ Sleepwalkers enact dreams related to prior psychological trauma
  - No increased risk of psychopathology
  - Medications may provoke

# Sleepwalking Myth #3

- ▣ Sleepwalking is a kind of seizure
  - Brain activation pattern is different

# Sleepwalking Myth #4

- ▣ Alcohol can trigger sleepwalking
  - No evidence

# Sleepwalking Myth #5

- ▣ Medications cause sleepwalking
  - Uncertain
  - Often involved combinations of substances
  - Genetic predisposition and sleep deprivation

# Sleepwalking Myth #6

- ▣ Sleepwalkers forget what they did mostly but may have “islands of memory”
  - Never had memory
  - May have static image, not theme


# Sleepwalking Myth #7


- ▣ Sleepwalkers reenact behaviors or intents from prior wakelfulness
  - Unlikely


# Sleepwalking Myth #8


- ▣ Waking a sleepwalker can harm him or her
- ▣ No but...


Posted on Wed, Jun. 24, 2009 11:07 PM


Buzz Up 

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## A tough way to wake up: Man stabbed while sleepwalking

What a wake-up call.

A 24-year-old Kansas City man suffered a stab wound to his face and shoulder Wednesday when his girlfriend allegedly tried to wake him from sleepwalking.

Police said the victim was intoxicated when he came home to his apartment. The girlfriend awoke about 1:30 a.m. and saw him urinating in the closet. She thought he was sleepwalking because he had done that in the past.

She tried to wake him up, but she said he pushed her out of his way. Scared he might hit her, she said, she grabbed a knife and held it up as he approached, cutting him. His injuries are believed to be non-life threatening.

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# Sleepwalking Myth #9

- ▣ Sleepwalkers seek out victims for revenge
  - No real support

# Sleepwalking Myth #10

- ▣ Sleepwalkers have their eyes closed
  - Nope

# Sleepwalking Myth #11

- ▣ A sleepwalking episode can wax and wane
  - No but often terminates in sleep drunkenness

# Sleepwalking Myth #12

- ▣ Sleepwalking episodes can last hours
  - Very rarely

# Sleepwalking Myth #13

- ▣ Sleepwalkers can accomplish meaningful tasks

# Sleepwalking Myth#14

- ▣ Sleepwalkers outgrow this condition
  - About 2% of adults sleepwalk
  - Some die
    - ▣ Pseudosuicide

# 3 Year Old Somnambulist

- ▣ Missing in the morning

# 60 Year Old Truck Driver

- ▣ Had a mandated PSG but felt fine
- ▣ A week later was to get a CPAP titration
- ▣ Two days before that he fell asleep at the wheel

# 62 Year Old Farmer

- ▣ Finished a PSG and seemed alert
- ▣ Had an accident

# Obese Boy With Dyspnea

- ▣ SOB during PSG
- ▣ Ran out of beta-agonist
- ▣ Assistance by his tech



# Sleepsex: Uncovered

MICHAEL MANGAN, PH.D.

# Sexsomnia

- ▣ Sexual actions during sleep
- ▣ Incidence: 11% men, 4% women
- ▣ Spectrum

# New Patient

- ▣ 22 year old arrested for sexual assault
- ▣ Charged with CSC III
- ▣ Sleepwalking defense

# 33 year old who fondles

- ▣ Repeated episodes of sexual fondling
- ▣ Both are asleep
- ▣ Adds to marital stress
- ▣ PSG shows hypersynchronous delta
- ▣ Treatment
  - Sleep extension
  - Clonazepam

# 31 year old woman with...

- ▣ Sexual arousal during sleep
- ▣ Partner disdain during sleep

**A MAN who claimed he was sleepwalking when he had sex with a woman has been convicted of rape.**

Darryl Kenneth Lotz, 35, a mechanical supervisor of Toowoomba, pleaded not guilty in the Queensland District Court to raping a woman.

Today, a jury of four women and eight men found him guilty after a day's deliberation.

Judge Nick Samios sentenced Lotz to five years jail with no recommendation for early release. He said he believed Lotz's claim that he had no memory of the rape had more to do with drunkenness than sleepwalking.

In my opinion, if you have no recall it is only because of self-induced intoxication," Justice Samios said.

On the night of the rape, Lotz had been out drinking with a friend and the friend's girlfriend. They were all staying at the friend's house on Brisbane's northside.

Lotz entered the couple's bedroom, climbed in between them in their double bed, and began having sex with the woman from behind, the court was told. When she heard someone snoring she turned around and realised it was not her boyfriend who was having sex with her.

**York | Archive | 2005 | December | 21**

## **Sleepwalk barman is cleared in rape case**

A BARMAN accused of raping a woman three times walked free from court after a jury accepted he had been sleepwalking.

A jury unanimously cleared the defendant after hearing how in extremely rare cases sleepwalkers could carry out violent acts without intending them.

York Crown Court heard Mr Bilton had suffered from somnambulism since he was a child, and carried on walking in his sleep even as an adult.

The 22-year-old complainant went to Mr Bilton's home in Hope Street, York, for a drink after a night out in the city on March 22.

She said she slept in his bed, while Mr Bilton took the sofa - but woke up in the early hours to find him raping her.

The woman could not fight back because she "felt numb from her stomach to her legs", but the attack happened quickly and Mr Bilton then left the room.

# Man cleared of sex assault on young girl after experts tell court he was sleepwalking

By JAMES TOZER

Last updated at 3:59 AM on 01st January 2009

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A lorry driver who climbed into bed with a young girl and kissed her on the lips has been cleared of sexual assault after experts said he was sleepwalking at the time.

Alan Ball, 35, had fallen asleep on a sofa after drinking heavily at a house party but during the night he got into bed with the girl who was sleeping upstairs.

He was charged with sexual assault but experts who examined his history of sleepwalking concluded he had not known what he was doing and he was cleared by a judge.

Mr Ball, who has a daughter aged five, said the year-long ordeal had destroyed his life and told of his relief at being absolved of blame.

'I knew I was innocent but not a day went



# How could the man who 'raped' me be cleared because he was sleepwalking?

15th November 2008

A rape victim has hit out at the law after the man accused of attacking her was cleared because he was sleepwalking.

Jane McKenna, 33, was asleep at home when a friend's husband, who had been a guest at a barbecue, walked into the bedroom and started having sex with her.

Jason Jeal, a 37-year-old roofer with no medical history of sleepwalking, admitted sex had taken place. But he was cleared of rape after he insisted he had been asleep and had no idea what he was doing.



Mrs McKenna, a middle-class mother of one whose husband holds a respectable full-time position, said the acquittal in June had left her feeling 'shocked and degraded'.

# Drugs



# Drug Properties

- ▣ Amnesia
- ▣ Disinhibition

# 32 year old at Taco Bell

- ▣ Skipped dinner
- ▣ Gave dog insulin
- ▣ Became aware in jail

# 54 year old swiped car

- ▣ Chronic insomnia
- ▣ Bipolar disorder
- ▣ Became coherent in jail

# Pseudo-suicide

- ▣ 48 year old found taking entire bottle of OxyContin

53 year old with suspected  
break-ins

# Sleep Spending

# Take Home Message

- ▣ Warn patients about complex sleep behaviors
- ▣ Take hypnotic just before bed

# Sleep Violence

- ▣ 55 year old witch lived behind parents
- ▣ Recalled taking Ambien then going to bed
- ▣ First responders summoned

# REM Sleep Behavior Disorder

- ▣ Dream enactment
- ▣ Defensive and evasive actions
- ▣ Male > female
- ▣ Common in alpha-synucleinopathies

# REM Sleep Behavior Disorder

- ▣ Should be asked about
- ▣ Environmental safety
- ▣ Bed partner safety
- ▣ Treatment





# Murder

## THE BOSTON TRAGEDY.



### TIRRELL MURDERING MARIA A. BICKFORD,

WHILE IN A STATE OF SOMNAMULISM.

Fig. 4. One version of Bickford's death. (From The National Police Gazette, April 4, 1846. p. 264.)

## STEVEN STEINBERG CASE

In 1981 a Scottsdale, Arizona man named Steven Steinberg was accused of murdering his wife, Elena, with a kitchen knife. She was stabbed 26 times. The trial took place in Maricopa County Superior Court in 1982. Steinberg acknowledged the murder, claimed he did it while sleepwalking, and therefore was not sane at the time. Dr. Martin Blinder, a California psychiatrist, testified that the murder was committed under a scenario of "dissociative reaction," when Steinberg stabbed repeatedly stabbed his wife.

Steinberg didn't deny the fact that he had killed her, but he pleaded 'not guilty' because he claimed not to remember the crime. He was sleeping, and must have been sleepwalking at the time. Steinberg was found innocent by the jury, on the ground he was temporarily insane when he killed his wife. He walked away a free man.

## KENNETH PARKS CASE

Kenneth Parks, a 23-year-old Toronto man with a wife and infant daughter, was suffering from severe insomnia caused by joblessness and gambling debts. Early in the morning of May 23, 1987 he arose, got in his car and drove 23 kilometers to his in-laws' home. He stabbed to death his mother-in-law, whom he loved and who had once referred to him as "a gentle giant." Parks also assaulted his father in law, who survived the attack. He then drove to the police and said "I think I have killed some people . . . my hands," only then realizing he had severely cut his own hands. Under police arrest he was taken to the hospital where he underwent repair of several flexor tendons of both hands.

Because he could not remember anything about the murder and assault, had no motive for the crime whatsoever, and did have a history of sleepwalking, his team of defense experts (psychiatrists, a psychologist, a neurologist and a sleep specialist) concluded Ken Parks was 'asleep' when he committed the crime, and therefore unaware of his actions. Parks' sleepwalking defense proved successful and on May 25, 1988, the jury rendered a verdict of not guilty. Subsequently Parks was also acquitted of the attempted murder of his father-in-law.

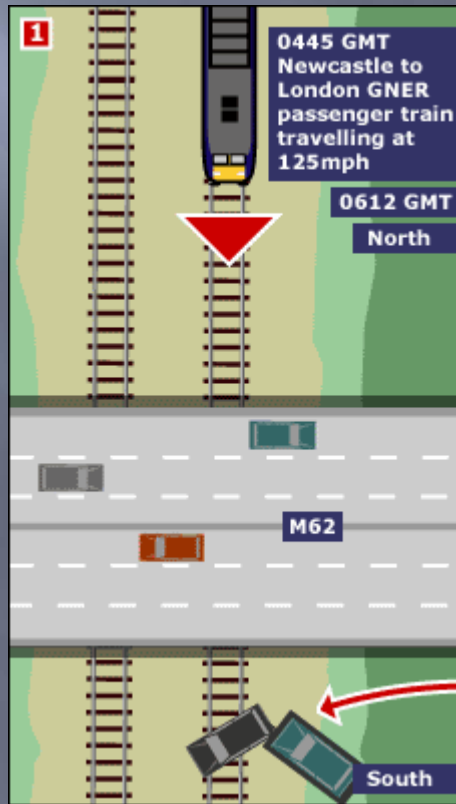
## SCOTT FALATER CASE

In 1997 another Phoenix man, 43-year-old Scott Falater, was accused of murdering his wife. On the night of January 16, 1997, neighbor Greg Koons saw Mr. Falater hold his wife's head under water. Not clear on what was going on, but having heard screaming, Koons called the police. The police arrived to a gruesome crime scene – a bloodied pool and Mrs. Falater dead with 44 stab wounds. Scott Falater, present at the crime scene, with blood on his neck and band-aids on his hands, was brought to the police station to undergo questioning. He denied any knowledge of the brutal murder and thus began his celebrated sleepwalking defense. Police video from the night of the murder shows Falater saying he is unaware why he is being questioned.

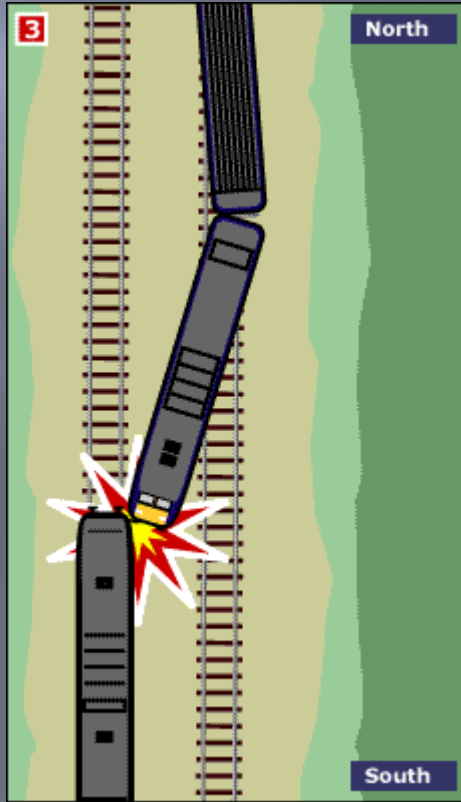
Like Steinberg before him, Falater claimed he had been sleepwalking at the time of the murder. Also like Steinberg, he acknowledged the murder, but said he remembered nothing about what happened; he was asleep at the time.

**Gary Hart:  
Feb, 2001  
Great Heck**











# Summary

- ▣ Sleep and wake are not mutually exclusive
- ▣ Complex behaviors with legal implications may result