The Art and Science of Thought Suppression

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Try to pose for yourself this task: not to think of a polar bear, and you will see that the cursed thing will come to mind every minute.

Fyodor Dostoyevsky (1863)
*Winter Notes on Summer Impressions*
Dostoyevsky’s Challenge
As you say your thoughts aloud, please try not to think of a white bear—but mention it or ring the bell if you do.

Wegner, Schneider, Carter, & White (1987)  
Paradoxical effects of thought suppression
Bell Rings Per Minute During Intentional Thinking

Minute

Post-suppression  Pre-suppression

Wegner, Schneider, Carter, & White (1987)  Paradoxical effects of thought suppression
The Science of Thought Suppression
In the analysis of the examples a counter-will can regularly be recognized which opposes the intention without putting an end to it.

Sigmund Freud (1914): *The Psychopathology of Everyday Life*
The strongest tendencies to automatic activity in the nerves often run most counter to the selective pressure of consciousness.

William James (1879): *Are We Automata?*
Ironic Process Theory

An intentional operating process searches for mental contents to create the desired mental state

- Effortful
- Conscious
- Interruptible

An ironic monitoring process searches for mental contents that signal the failure of mental control

- Automatic
- Unconscious
- Uninterruptible

Wegner (1994): Ironic processes of mental control
Attention

What color is the word?

Red

Blue

Wegner, Erber, & Zanakos (1993): *Ironic processes in the mental control of mood and mood-related thought*
During color naming…

Participants suppress or think about target word

Low load trials (Intentional operating process continues uninterrupted)

High load trials (Intentional operating process interrupted, ironic monitoring process continues)

Wegner, Erber, & Zanakos (1993): *Ironic processes in the mental control of mood and mood-related thought*
Wegner, Erber, & Zanakos (1993): Ironic processes in the mental control of mood and mood-related thought

Color-naming Reaction Times (msec)

- NONTARGET WORD
- TARGET WORD

Wegner, Erber, & Zanakos (1993): Ironic processes in the mental control of mood and mood-related thought
We stand upon the brink of a precipice. We peer into the abyss--we grow sick and dizzy. . . . And because our reason violently deters us from the brink, therefore do we the most impetuously approach it.

Edgar Allan Poe (1845): *The Imp of the Perverse*
Motion

*The putt and the pendulum: Ironic effects of the mental control of action*
Don’t Move It
This Way
Perception

“Try not to see the duck” vs. Try to see the rabbit”

“Try not to see the cat” vs. Try to see the swan”

Slesar & Mack (2005): Perversible figures: An ironic process in perception
Wegner, Shortt, Blake, & Page (1990)

The suppression of exciting thoughts

Arousal

SCL deviation from baseline (microSiemens)

Thought Topic

-0.6 -0.4 -0.2 0 0.2 0.4 0.6 0.8

Sex Dancing

Suppress

Think

Wegner, Shortt, Blake, & Page (1990)
The suppression of exciting thoughts
Trying to relax…

Progressive relaxation for anxiety

Adler, Kraske, & Barlow (1987):
Relaxation-induced panic

Panic-prone participants are likely to experience panic attacks during relaxation therapy.

Anxiety
Wegner, Broome, & Blumberg (1997)

**Ironic effects of trying to relax under stress**
Sexual Arousal

Instruction Groups

- Relax (watch erotic films)
- Inhibit (watch films, paid for lack of erection)
- Fantasy (no films, paid for erection)

Results

“With two drinks, the ability of many subjects to inhibit their sexual response voluntarily was impaired”

“Three drinks of alcohol typically impaired the ability of subjects to voluntarily produce fantasy arousal”

Rubin and Henson (1976): *Effects of alcohol on male sexual responding*
Attraction

Wegner, Lane, & Dimitri (1994)
*The allure of secret relationships*
Attraction

Wegner, Lane, & Dimitri (1994)
The allure of secret relationships
Sleep [is like] a dove which has landed near one’s hand and stays there as long as one does not pay attention to it; if one attempts to grab it, it quickly flies away.

Victor Frankl (1965): 
*The doctor and the soul*
Ironic effects of sleep urgency
Dreams

Why do we dream about…

Falling?

Being chased?

Strange and embarrassing events?
Dreams

Why do *students* dream about...

Waking up late for school?

Forgetting everything at the exam?
Dreams

Why do *professors* dream about...

Going totally blank during a lecture?

Losing the toilet paper while we have a box on our head?
Wishes suppressed during the day assert themselves in dreams

Sigmund Freud (1900): *The Interpretation of Dreams*
Mean mentions of person in dream reports

Instructed thought suppression:

- Increases thoughts of smoking during quitting (Toll, Sobell, Wagner, & Sobell, 2001)
- Increases fear of dentists (Muris, Jongh, Merckelbach, Postema, & Vet, 1998)
- Reduces immune response (Petrie, Booth, & Pennebaker, 1998)
- Increases distress in rape survivors suffering from PTSD (Shipherd & Beck, 1999)
- Increases thoughts about pain and decreases pain tolerance (Cioffi & Holloway, 1993; Masedo & Esteve, in press)
Psychopathology

Dispositional thought suppression predicts:

- Depression, anxiety, and obsessive-compulsive disorder (Wegner & Zanakos, 1994)
- Poor coping in accident victims (Aaron, Zaglul, & Emery, 1999)
- Dissociative memory experiences following trauma (van den Hout, Merckelbach, & Pool, 1996)
- Intrusive suicidal thoughts (Pettit et al., 2008)
The Science of Thought Suppression

- Attention
- Perception
- Motion
- Arousal
- Anxiety
- Sexual Arousal
- Attraction
- Insomnia
- Dreams
- Psychopathology
The Art of Thought Suppression
Direct Suppression + Mental Load = Ironic Effects
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- Withdraw from load
  (e.g., cut back multitasking)
Direct Suppression + Mental Load = Ironic Effects

- Withdraw from load (e.g., cut back multitasking)
- Relax
Direct Suppression + Mental Load = Ironic Effects

- Withdraw from load (e.g., cut back multitasking)
- Relax
- Revise timelines or priorities
Direct Suppression + Mental Load = Ironic Effects

- Withdraw from load (e.g., cut back multitasking)
- Relax
- Revise timelines or priorities
- Ask for assistance
Direct Suppression + Mental Load = Ironic Effects

*Indirect* Suppression
Direct Suppression + Mental Load = Ironic Effects

*Indirect* Suppression

- Find an absorbing distracter

Wegner, Schneider, Carter, & White (1987)
*Paradoxical effects of thought suppression*
Direct Suppression + Mental Load = Ironic Effects

*Indirect* Suppression

- Find an absorbing distracter
- Hypnosis
Hypnotic Enhancement

Sentence Completions Relevant to Suppressed Thought

Hypnotic Susceptibility

Bryant & Wimalaweera (2007)
Direct Suppression + Mental Load = Ironic Effects

Indirect Suppression

- Find an absorbing distracter
- Hypnosis
- Mindfulness/Meditation
Direct Suppression + Mental Load = Ironic Effects

*Indirect* Suppression

- Find an absorbing distracter
- Hypnosis
- Mindfulness/Meditation
- Talking about it
Direct Suppression + Mental Load = Ironic Effects

**Indirect Suppression**

- Find an absorbing distracter
- Hypnosis
- Mindfulness/Meditation
- Talking about it
- Paradoxical approach: Acceptance
Now every kind of fear grows worse by not being looked at. The proper course is to think about it with great concentration until it has become completely familiar. In the end familiarity will blunt its terrors; the whole subject will become boring, and our thoughts will turn away from it, not, as formerly, by an effort of will, but through mere lack of interest in the topic. When you find yourself inclined to brood on anything, the best plan is always to think about it even more than you naturally would until at last its morbid fascination is worn off.

Bertrand Russell (1930): *The Conquest of Happiness*
With thanks to…

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