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THE NIGHTMARE OF DREAM ADVERTISING

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ABSTRACT

Advertisers are attempting to market to us while we dream. This is not science fiction, but rather a troubling new reality. Using a technique dubbed “targeted dream incubation” (TDI), companies have begun inserting commercial messages into people’s dreams. Roughly, TDI works by: (1) creating an association during waking life using sensory cues (for example, a pairing of sounds, visuals, or

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scents); and (2) as the subject is drifting off to sleep, the association is again introduced with the goal of triggering related dreams with related subject matter. Based on a 2021 American Marketing Association survey, 77 percent of 400 companies surveyed plan to experiment with dream advertising—or what this Article calls “branding dreams”—by 2025.

As a therapeutic technique, TDI is being found by sleep and dream researchers to have various benefits such as improving sleep quality, stimulating creativity, and treating addiction. However, when advertisers hijack TDI for commercial purposes, serious harms emerge. These harms are most apparent when the practice of branding dreams is employed in connection with addictive products. But health, privacy, liberty, economic, and cultural concerns also exist more broadly. In fact, dozens of sleep and dream researchers have signed an open letter calling for “new protective policies” regarding dream advertising, lest “dreams become just another playground for corporate advertisers.”

Such specifically tailored regulations may be welcome and helpful. However, this Article suggests that—at least in certain instances—the practice of branding dreams might already run afoul of existing advertising regulations. To this end, the Article advances two claims. First, dream advertising appears to fit the definition of subliminal messaging: advertisements “existing or functioning below the threshold of consciousness.” Second, particularly if dream advertising is considered a novel method of subliminal advertising, some forms of dream advertising may be ripe for enforcement as “deceptive acts or practices” under Section 5 of the Federal Trade Commission (FTC) Act.

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INTRODUCTION

[T]he marketplace ... encumbers the whole movements of our mind, and over our noblest faculties is spreading a nightmare sleep.

- Thomas Carlyle¹

Advertisers are attempting to market to us while we dream.² This is not the science fiction of the film *Inception*,³ the show *Black Mirror*,⁴ or a Philip K. Dick novel,⁵ but rather a troubling new commercial reality.⁶ To begin, consider three recent examples of dream

1. Thomas Carlyle, *Signs of the Times*, 49 EDINBURGH REV. 439, 457 (1829).

2. See Robert Stickgold, Antonio Zadra & AJH Haar, *Advertising in Dreams is Coming: Now What?*, DREAM ENGINEERING (June 7, 2021), <https://dx.doi.org/10.1002/dream.1234> [hereinafter *Now What?*]; Adam Haar Horowitz, Robert Stickgold & Antonio Zadra, *Inside Your Dreamscape*, AEON (Nov. 19, 2021), <https://aeon.co/essays/dreams-are-a-precious-resource-dont-let-advertisers-hack-them> [https://perma.cc/3Q6L-T9FU] [hereinafter *Dreamscape*]; Sofia Moutinho, *Advertisers Could Come For Your Dreams, Researchers Warn*, 372 SCIENCE 1380 (June 25, 2021), <https://www.science.org/doi/10.1126/science.372.6549.1380> [https://perma.cc/ZM85-EBXP]; cf. Deirdre Barrett, *Dream Incubation . . . and Adventures in Ad Land*, MEDIUM (Feb. 4, 2021), <https://deidrebarrettdreams.medium.com/dream-incubation-and-adventures-in-ad-land-4f2ca7057ffd> [https://perma.cc/HVE6-Q3GU] (arguing that dream advertisements “present an opportunity for education about dreaming—ideally within the ad campaign itself, but more often via the resulting news features where we can respond with more information about dream incubation.”).

3. INCEPTION (Warner Bros. 2010).

4. BLACK MIRROR (Netflix 2016).

5. Philip K. Dick’s science fiction writings often involve intrusive, manipulated realities frequently touching on themes such as artificial intelligence, targeted advertising, altered states of consciousness, and the nature of reality. See, e.g., Philip K. Dick, *The Minority Report*, FANTASTIC UNIVERSE, Jan. 1956, at 4, (adapted into movie MINORITY REPORT (20th Century Fox 2002)); PHILIP K. DICK, DO ANDROIDS DREAM OF ELECTRIC SHEEP? (adapted into BLADE RUNNER (The Ladd Company 1982)); PHILIP K. DICK, *Sales Pitch*, FUTURE SCIENCE FICTION, June 1954, at 71, *reprinted in* 3 THE COLLECTED STORIES OF PHILLIP K. DICK 211 (2012).

6. For examples of press the issue has received, see Avery Hurt, *The Ethics and Tech of Dream Seeding*, DISCOVER (June 7, 2023, 8:00 PM), <https://www.discovermagazine.com/technology/the-ethics-and-tech-of-dream-seeding> [https://perma.cc/NHN9-EFQE]; Ananya Singh, *Tech is Commodifying Sleep. Will the Future of Sleep Put Our Dreams on Sale?*, THE SWADDLE (May 14, 2023), <https://theswaddle.com/tech-is-commodifying-sleep-will-the-future-of-sleep-put-our-dreams-on-sale/> [https://perma.cc/7RQ8-NB7W]; Caroline Delbert, *Advertisers Are Hijacking Your Dreams, Scientists Say*, POPULAR MECHS. (July 8, 2021), <https://www.popularmechanics.com/technology/a36719140/sleep-ads-dream-implantation/> [https://perma.cc/KZB7-6U3P]; Adam Gabbatt, *Nightmare Scenario: Alarm as Advertisers Seek to Plug into*

advertising, or what this Article also refers to as the practice of “branding dreams”⁷:

1. Molson Coors ran an experiment in connection with its 2021 Super Bowl advertising campaign— #CoorsBigGameDream.⁸ In a downtown Los Angeles building, eighteen in-person participants (including celebrity singer Zayn Malik), along with thousands of social media users who participated online in exchange for free beer, were instructed to watch a dream “stimulus film, that when paired with a curated eight-hour soundscape, induces relaxing, refreshing images including waterfalls, mountains, and of course, Coors.”⁹ About 30 percent of the in-person participants (five of eighteen) reported that their dreams were influenced as a result.¹⁰

2. For the 2020 launch of its Xbox Series X video game console, Microsoft partnered with dream scientists and the McCann World-group marketing agency to create “Made From Dreams.”¹¹ The

Our Dreams, THE GUARDIAN (July 5, 2021, 4:00 AM), <https://www.theguardian.com/media/2021/jul/05/advertisers-targeted-dream-incubation> [<https://perma.cc/WA2J-AQ5V>]; Zachary Crockett, *Are Advertisers Going to Infiltrate Our Dreams?*, THE HUSTLE (Mar. 18, 2022), <https://thehustle.co/are-advertisers-going-to-infiltrate-our-dreams/> [<https://perma.cc/958Z-FEME>]; Ross Pomeroy, *Dream Hacking: Is This the Dystopian Future of Advertising*, BIGTHINK.COM (updated June 5, 2023), <https://bigthink.com/the-future/dream-advertising-hacking/> [<https://perma.cc/XP4R-5883>]; Julia Orsini & David Rice, *Sweet Dreams or Nightmares: The Future of Advertising in Dreams*, FUT. MKTG. INST. (Dec. 24, 2021), <https://futureofmarketinginstitute.com/sweet-dreams-or-nightmares-the-future-of-advertising-in-dreams/> [<https://perma.cc/7PA5-JNH7>]; cf. Shoshana Wodinsky, *No, Brands Can't Target Ads at Your Dreams*, GIZMODO (June 16, 2021), <https://gizmodo.com/no-brands-cant-target-ads-at-your-dreams-1847113888> [<https://perma.cc/S2TP-PRKY>].

7. For the source of the “branding dreams” label, see Dustin Marlan, *Branding Dreams*, PETRIE-FLOM CTR. HARV. L. SCH. BILL OF HEALTH BLOG (Oct. 4, 2022), <https://blog.petrieflom.law.harvard.edu/2022/10/04/branding-dreams/> [<https://perma.cc/QKF4-68P7>]. Other terms sometimes referenced include “dream incubation advertising” and “TDI-advertising.” See *id.*

8. See Alec Stern, *Coors Light Big Game 2021 Dream Film*, VIMEO (Feb. 16, 2021), <https://vimeo.com/513024541> [<https://perma.cc/VN69-MAQM>].

9. Press Release, Molson Coors Beverage Company, *Spend Saturday Night Dreaming with Zayn Malik*, (Feb. 4, 2021), reposted at GLOBE AND MAIL (Feb. 4, 2021), <https://www.theglobeandmail.com/investing/markets/stocks/BIO-CN/pressreleases/3965949> [<https://perma.cc/EN8E-HWCT>].

10. Coors Light, *Big Game Commercial Dream Experiment | Coors Light*, YOUTUBE (Jan. 27, 2021), https://www.youtube.com/watch?v=tU_0jU0mMLw [<https://perma.cc/DQ29-T9D4>].

11. See David Griner, *What Do You Dream After Playing the New Xbox? This Experiment Brings Them to Life*, ADWEEK (Dec. 7, 2020), <https://www.adweek.com/convergent-tv/what-do-you-dream-after-playing-the-new-xbox-this-lab-experiment-brought-the-results-to-life/>

project involved participants (professional gamers) who were asked to play the video game console for the first time directly before going to sleep.¹² When the participants entered *hypnagogia*—the semi-lucid period between wake and sleep—marketing researchers successfully used a dream recording technology to induce participants to lucid dream about their Xbox video gaming experiences.¹³

3. For its 2018 Halloween promotion, Burger King introduced a hamburger called the “Nightmare King.”¹⁴ Featuring fried chicken, beef, bacon, cheese, and a green bun, Burger King claimed that the burger was “clinically proven to induce nightmares” in those who ate it.¹⁵ To prove it, Burger King partnered with a sleep lab to run a clinical trial with 100 participants (half who ate the burger and half who did not).¹⁶ Results indicated that those who ate the burger and then went to sleep had nightmares at a rate 3.5 times higher than those who did not.¹⁷ Burger King attributed this to the “unique combination of proteins and cheese” as disruptive of rapid eye movement (REM) sleep.¹⁸

These nascent examples of dream advertising are based on a technique called *dream incubation*—“techniques employed during wakefulness to help a person dream about a specific topic.”¹⁹ For instance, surrealist artist Salvador Dali would nap with a heavy key

[<https://perma.cc/23QG-H34R>].

12. *See id.*

13. *See id.*

14. *See, e.g.*, Dave Williams, *BK “Nightmare King” Burger*, AP NEWS (Oct. 26, 2018), <https://apnews.com/article/948ab83ef171493690cf7d13161aebc0> [<https://perma.cc/5GPX-WDMH>]; Lucy Handley, *Burger King Creates ‘Nightmare Burger’ with Green Bun—and Says it Will Actually Give People Bad Dreams*, CNBC (Oct. 18, 2018), <https://www.cnbc.com/2018/10/18/burger-king-creates-nightmare-burger-with-green-bun.html> [<https://perma.cc/K7NA-6JMU>].

15. *See, e.g.*, Amy Reiter, *Burger King Says New Burger is ‘Clinically Proven to Induce Nightmares’*, FOOD NETWORK (Oct. 2018, 8:39 AM), <https://www.foodnetwork.com/fn-dish/news/2018/10/burger-king-says-new-burger-is-clinically-proven-to-induce-night> [<https://perma.cc/F2QH-TR8U>].

16. Stephanie Pappas, *Can Burger King’s ‘Nightmare King’ Really Give You Bad Dreams?*, LIVESCIENCE (Oct. 17, 2018), <https://www.livescience.com/63856-burger-king-nightmare-science.html> [<https://perma.cc/Q5VD-ZMEF>] (noting that seven people who ate the sandwich had a nightmare compared to two people who did not).

17. *See id.*

18. Williams, *supra* note 14.

19. *Now What?*, *supra* note 2.

in his hand, which would fall to the floor when he drifted off to sleep.²⁰ The sound of the key hitting a plate on the floor would startle Dali into wakefulness, where he could then capture the surreal imagery of his semi-lucid altered state.²¹ More broadly, as an Indigenous practice, dream incubation has been utilized by myriad cultures for thousands of years for spiritual, creative, and practical purposes.²²

In recent years, science has produced a more exacting form of dream incubation called “targeted dream incubation” (TDI).²³ TDI is a dream engineering technology that works to guide dreams toward certain themes and ideas by taking advantage of the *hypnagogic* (sleep onset) period.²⁴ Roughly, TDI works by: (1) creating a certain mental association during waking life (for example, a pairing of video clips, audio tracks, or scents); and (2) during hypnagogia, the association is reintroduced in hopes of triggering related dreams.²⁵ TDI originated as a therapeutic technique and has been found by sleep and dream experts to have various potential benefits, such as improving sleep quality, stimulating creativity, facilitating sleep-related learning, and treating addiction.²⁶ In one noteworthy study, for example, the targeted delivery of odors during sleep helped participants with cigarette addiction—sixty-six participants were exposed during their sleep to the odor of cigarettes coupled with the odor of rotten eggs, and this unconscious “olfactory conditioning”

20. SALVADOR DALI, 50 SECRETS OF MAGIC CRAFTSMANSHIP 35-38 (1948).

21. *Id.*

22. *See, e.g.,* Henry Reed, *Dream Incubation: A Reconstruction of a Ritual in Contemporary Form*, 16 J. HUMANISTIC PSYCH. 53, 53-54 (1976) (“Incubation rituals have existed in most older cultures and, having been employed for both guidance and healing, may be one source of the therapeutic arts.”).

23. *See e.g.,* Michelle Carr, Adam Haar, Judith Amores, Pedro Lopes, Guillermo Bernal, Tomás Vega, Oscar Rosello, Abhinandan Jain & Pattie Maes, *Dream Engineering: Simulating Worlds Through Sensory Stimulation*, 83 CONSCIOUSNESS & COGNITION 1, 5 (2020) (“Targeted Dream Incubation creatively combines components of targeted reactivation with intentional incubation at the hypnagogic border between sleep and wake.”).

24. *Dreamscape, supra* note 2.

25. *See id.*

26. *See* Adam Haar Horowitz, Kathleen Esfahany, Tomás Vega Gálvez, Pattie Maes & Robert Stickgold, *Targeted Dream Incubation at Sleep Onset Increases Post-Sleep Creative Performance*, 13 NATURE SC. REPS. 7319 (2023), *available through Project Targeted Dream Incubation*, MIT MEDIA LAB, <https://www.media.mit.edu/projects/targeted-dream-incubation/> [<https://perma.cc/KDS7-UZEM>]; *Now What?*, *supra* note 2.

was found to decrease smoking behavior significantly over the following week.²⁷

However, as the Molson Coors, Xbox, and Burger King scenarios illustrate, TDI can also be hijacked by advertisers and marketers. This practice of branding dreams can be defined as the *intentional* targeting of the consumer sleep cycle for commercial purposes. According to a 2021 American Marketing Association “Future of Marketing” survey, a shocking 77 percent of 400 companies surveyed plan to experiment with dream advertising by 2025.²⁸

Branding dreams has the potential to lead to serious individual and societal harms, this Article will argue. These concerns are most obvious when dream advertising is employed in connection with addictive products—such as alcohol (Molson Coors), video games (Xbox), or fast food (Burger King). But privacy, liberty, economic, and cultural concerns exist more broadly, and from a health standpoint, it is not yet known in what ways branding dreams may interfere with the natural sleep cycle.²⁹ To these ends, dozens of sleep and dream researchers have signed an open letter in protest of dream advertising, lest dreams “become just another playground for corporate advertisers.”³⁰ The letter, written by leading sleep and dream experts Robert Stickgold, Antonio Zadra, and Adam Haar, calls for “proactive action and new protective policies” around dream advertising.³¹ Such policies, the researchers claim, are “urgently needed to keep advertisers from manipulating one of the last refuges of our already beleaguered conscious and unconscious minds: Our dreams.”³²

27. Anat Arzi, Yael Holtzman, Perry Samnon, Neetai Eshel, Edo Harel & Noam Sobel, *Olfactory Aversive Conditioning During Sleep Reduces Cigarette-Smoking Behavior*, 34 J. NEUROSCI. 15382, 15387-89 (2014).

28. See CRAIG CHARNEY & RYAN KAWLES, DID COVID KILL THE TECHLASH? FUTURE OF MARKETING STUDY 7 (2021), available through *Did the Techlash Survive COVID?*, AMA NEW YORK, <https://www.amanewyork.org/landing/techlash/> [<https://perma.cc/X98Z-7CDU>] (surveying “506 consumers and 411 marketers around the United States to explore their attitudes towards trends in technology, marketing, or otherwise”). Notably, marketers express more interest in dream-tech advertising than in the Internet of Things or smart speaker advertising. See *id.* at 6-7.

29. See *infra* Part III.A.1.

30. Now *What?*, *supra* note 2.

31. *Id.*

32. *Id.*

Indeed, it has been estimated that U.S. citizens already encounter over three thousand advertisements each waking day.³³ The practice of branding dreams—even when done voluntarily—can be seen to represent the crossing of a boundary into around-the-clock capitalism and an unprecedented intrusion into the unconscious mind.³⁴ And while previous uses of dream advertising require active participation on the part of research subjects, in the future it is not hard to “envision a world in which smart speakers—[forty] million Americans currently have them in their bedrooms—become instruments of passive, unconscious overnight advertising, with or without our permission.”³⁵ Dream advertising, Stickgold, Zadra, and Haar argue, “set[s] the stage for a corporate assault of our very sense of who we are.”³⁶

Thus, specifically tailored regulations on dream advertising may be welcome and helpful. However, this Article claims that the practice of branding dreams—at least in certain instances—may already run afoul of *existing* advertising regulations. In support of this thesis, the Article advances two claims.

First, given that it targets the unconscious mind below the threshold of awareness, dream advertising should be considered a novel form of subliminal advertising—a classification of manipulative advertisements “existing or functioning below the threshold of consciousness.”³⁷ For instance, consider the Federal Communication Commission’s (FCC) broad definition of subliminal messaging: “*Any technique* whereby an attempt is made to convey information to the viewer by transmitting messages *below the threshold of normal awareness*.”³⁸ Like other forms of subliminal messaging, dream advertising has the potential to manipulate consumer

33. MARK BARTHOLOMEW, ADCREEP: THE CASE AGAINST MODERN MARKETING 2 (2017).

34. See *infra* Part III.A.5.

35. *Now What?*, *supra* note 2.

36. *Id.*

37. *Subliminal*, MERRIAM-WEBSTER, <https://www.merriam-webster.com/dictionary/subliminal> [<https://perma.cc/A8MN-GBWZ>].

38. Public Notice Concerning the Broadcast of Information by Means of “Subliminal Perception” Techniques, 44 F.C.C.2d 1016, 1017 (1974) (emphasis added); NAT’L ASS’N BROADS., TELEVISION CODE 5 (5th ed. 1959) (“The use of the television medium to transmit information of any kind by the use of the process called ‘subliminal perception,’ or by the use of any similar technique whereby an attempt is made to convey information to the viewer by transmitting messages below the threshold of normal awareness, is not permitted.”).

behavior—individuals subject to it are not able to make an autonomous, conscious choice in receiving, interpreting, and/or acting on the unconscious influences.³⁹

Second, the Article claims that, particularly given their subliminal nature, at least some forms of dream advertising might be considered “deceptive acts or practices” for purposes of Federal Trade Commission (FTC) enforcement.⁴⁰ Subliminal advertising is prohibited in several countries, including the United Kingdom and Australia.⁴¹ In the United States, while not banned per se, subliminal advertising is ripe for enforcement by the FTC under Section 5 of the FTC Act, which prohibits “unfair or deceptive acts or practices in or affecting commerce.”⁴² In fact, the FTC has noted in its *Advertising FAQ’s: A Guide for Small Business*: “It would be deceptive for marketers to embed ads with so-called subliminal messages that could affect consumer behavior. However, most consumer behavior experts have concluded that such methods aren’t effective.”⁴³

Until now, perhaps.⁴⁴ Considering its potential for efficacy and the resulting outcry by sleep and dream experts, the practice of branding dreams provides a timely opportunity to revisit long-dormant policies surrounding subliminal messaging and their connection to materially deceptive trade practices.

39. *Compare* Vance v. Judas Priest, No. 86-5844, 1990 WL 130920, at *25 (Nev. Dist. Ct. Aug. 24, 1990) (“[Subliminals] do not convey ideas or information to be processed by the listener so that he or she can make an individual determination about its value. They do not enable an individual to further his personal autonomy. Instead, they are intended to influence and manipulate the behavior of the listener without his knowledge.”), with Crockett, *supra* note 6 (“When you’re awake, you have a whole collection of filters and mechanisms to evaluate information and filter out ads.... Your sleeping brain can’t do that. It assumes that whatever is activated during sleep is being activated internally, not by outside forces.”) (quoting Robert Stickgold).

40. 15 U.S.C. § 45 (Section 5(a) of the FTC Act).

41. THIJSS VERWIJMEREN, THE WORKING AND LIMITS OF SUBLIMINAL ADVERTISING 49 (2014).

42. 15 U.S.C. § 45(a).

43. *Advertising FAQ’s: A Guide for Small Business*, FED. TRADE COMM’N (emphasis added), <https://www.ftc.gov/business-guidance/resources/advertising-faqs-guide-small-business> [<https://perma.cc/Z9GG-3FND>].

44. *The Advertising in Dreams is Coming: Now What?* open letter, written by three prominent sleep and dream researchers and signed by an additional thirty-five signatories in the field—while not all “consumer behavior experts” per se—expresses serious concerns given that “the kind of dream incubation until recently assumed to be the pure science fiction of movies like *Inception* is now becoming reality.” *Now What?*, *supra* note 2.

Beyond this Introduction, the Article proceeds in four Parts. Part I provides background on dream incubation, the therapeutic benefits of TDI, and then its application in the advertising and marketing context—that is, dream advertising. Part II offers a historical overview of subliminal advertising and its longstanding connection to dreams and the psychoanalytic movement, and then makes the case that branding dreams thus constitutes a novel, but still recognizable, form of subliminal advertising. Part III articulates individual and societal harms associated with dream advertising in the contexts of health, privacy, cognitive liberty, economics, and culture. This Part also explores the issue of whether, as an issue of first impression, consent to commodifying one’s dreamscape should be allowed and, if so, what level of consent on the part of the subject should be required to do so. Part IV argues that branding dreams, as a potentially potent form of subliminal advertising, should constitute a deceptive practice under Section 5 of the FTC Act and thus certain instances of it may—at least in the future—be enforceable by the FTC. Part V concludes.

I. BRANDING DREAMS

*You know that place between sleep and awake? That place where
you still remember dreaming? ... That's where I'll be waiting.*
- Tinkerbell, *Hook*⁴⁵

This Part first provides background on dream incubation and dream engineering techniques and then discusses their application in the advertising and marketing context. This use of targeted dream incubation (TDI) principles in the commercial setting enables the possibility of dream advertising.

A. *Dream Incubation*

Dreams are altered states of unconsciousness—emotional, irrational, and often misleading experiences. Most dictionaries define a dream as something like “a series of thoughts, images, or emotions

45. HOOK (Tristar Pictures 1991) (Screenplay by Jim V. Hart and Malia Scotch Marmo).

occurring during sleep.”⁴⁶ However, the concept of dreams can refer not just to sleep mentation (that is, what is experienced during sleep), but also to mental activity recalled during awakening.⁴⁷ Though the questions of what dreams are and why we dream remain metaphysical mysteries,⁴⁸ recent research sheds light on dreams’ importance to physical and mental health.⁴⁹

For many dream researchers, dreams—far from mere cognitive gibberish⁵⁰—are now considered to be a meaningful and creative product of the imagination and an important means of emotional outlet. Dream content tends to relate to events from the prior day as well as older memories.⁵¹ According to sleep and dream researchers Erin Wamsley and Robert Stickgold:

During sleep, when attention to sensory input is at a minimum, the mind continues to process information, using memory fragments to create the images, thoughts, and narratives that we commonly call “dreaming.” Far from being a random or meaningless distraction, spontaneous cognition during states of sleep and resting wakefulness appears to serve important

46. ANTONIO ZADRA & ROBERT STICKGOLD, WHEN BRAINS DREAM: UNDERSTANDING THE SCIENCE AND MYSTERY OF OUR DREAMING MINDS 1 (2021). However, it is important to point out that a single definition of dreaming is likely not possible “given the wide spectrum of fields engaged in the study of dreaming, and the diversity in currently applied definitions.” J.F. Pagel, M. Blagrove, R. Levin, B. States, B. Stickgold & S. White, *Definitions of Dream: A Paradigm for Comparing Field Descriptive Specific Studies of Dream*, 11 DREAMING 195, 195 (2001).

47. See ZADRA & STICKGOLD, *supra* note 46, at 11.

48. *E.g.*, Perrine M. Ruby, *Experimental Research on Dreaming: State of the Art and Neuropsychanalytic Perspectives*, FRONTIERS PSYCH., Nov. 18, 2011 at 1, 1 (remarking that “[d]reaming is still a mystery of human cognition, although it has been studied experimentally for more than a century.”); Jessica D. Payne & Lynn Nadel, *Sleep, Dreams, and Memory Consolidation: The Role of the Stress Hormone Cortisol*, 11 LEARNING & MEMORY 671, 671 (2004) (“There is currently no convincing explanation for why we dream or what we dream about.”).

49. *Now What?*, *supra* note 2.

50. See generally J.A. Hobson & R.W. McCarley, *The Brain as a Dream State Generator: An Activation Synthesis Hypothesis of the Dream Process*, 134 AM. J. PSYCHIATRY 1335 (1977).

51. See Erin J. Wamsley & Robert Stickgold, *Dreaming and Offline Memory Processing*, 20 CURRENT BIOLOGY 1010, 1010 (2010) (“There is now substantial empirical evidence to suggest that, during sleep, the neural-level ‘replay’ of recent experience plays a critical role in the consolidation and evolution of memory, helping us to process our past experiences and prepare for future events.”).

functions relating to processing past memories and planning for the future.⁵²

Dreams are also important wellsprings of creativity. Sleep and dreams can “enhance our creativity, either indirectly—making creative discoveries more likely after we wake up—or directly in the content of our dreams.”⁵³ And for many, dreams are of sacred, spiritual, and religious significance.⁵⁴ For these reasons, various cultures have engaged in dream incubation techniques.⁵⁵ These are practices used in the waking world to influence the content of dreams, based on the simple tenet that “dream content is very likely to reflect recent learning experiences.”⁵⁶ Broadly, dream incubation refers “to the practices, rituals, techniques, and efforts that an individual applies to intentionally evoke helpful dreams.”⁵⁷

Records of dream incubation date back nearly five thousand years, having been used by Indigenous peoples for millennia.⁵⁸ Instances of dream incubation are numerous across cultures. In ancient Greece for example, those who were ill would go forth to dream in oracular temples, where the Greek god Asklepios was thought to perform symbolic operations.⁵⁹ And among Native American tribes, youths of the Ojibwa of the Great Lakes, for instance,

52. *Id.*

53. *Dreamscape*, *supra* note 2.

54. See generally Patrick McNamara & Kelly Bulkeley, *Dreams as a Source of Supernatural Agent Concepts*, FRONTIERS PSYCH. (Mar. 19, 2015); Mohamed O. Salem, Teresa L. DeCicco, Mohamed A. Ragab, Said Yousif, Anthony Murkar & Mamta Vaswani, *Spiritual and Religious Imagery in Dreams: A Cross Cultural Analysis*, 6 INT’L J. DREAM RSRCH. 94 (2013).

55. See T. Nielsen, *Dream Incubation: Ancient Techniques of Dream Influence*, WWW.DREAMSCIENCE.CA 1, 1 (2012), <https://www.dreamscience.ca/en/documents/New%20content/incubation/Incubation%20overview%20for%20website%20updated.pdf> [<https://perma.cc/8ABG-MHCL>]. The term derives from the Greek “enkoimesis” (meaning a dream-like state of induced sleep), Helen Askitopoulou, *Sleep and Dreams: From Myth to Medicine in Ancient Greece*, 1 J. ANESTHESIA HIST. 70, 70 (2015), and the Latin “incubare” (to lie on a bed); Nielsen, *supra* note 55, at 1.

56. Wamsley & Stickgold, *supra* note 51, at 1011.

57. Nielsen, *supra* note 55, at 1.

58. See generally McNamara & Bulkeley, *supra* note 54; Salem et al., *supra* note 54.

59. Henry Reed, *Dream Incubation: A Reconstruction of a Ritual in Contemporary Form*, 16 J. HUMANISTIC PSYCH. 53, 53 (1976).

would go into the wilderness and prepare “ritual nest[s],” where they would stay, fasting until receiving anticipated dreams.⁶⁰

More modern forms of dream incubation similarly focus on the intention to develop dreams for specific purposes, though not always in a sacred context. In his 1948 book *50 Secrets of Magic Craftsmanship*, surrealist artist Salvador Dali described a technique where he would nap with a heavy key in his hand, which would fall to the floor when he drifted off to sleep, startling him awake so he could immediately recollect his unconscious imagery.⁶¹ And a well-known 1993 study by prominent dream researcher Deirdre Barrett involved asking seventy-six participants to choose a problem of personal or academic significance, write it down, and contemplate it each night for a week directly before going to sleep.⁶² Nearly half of the students reported having dreams relating to the problem.⁶³

As these illustrations indicate, the first stage of sleep called hypnagogia (or NREM1) is typically integral to dream incubation methods.⁶⁴ Hypnagogia is the twilight period before sleep, “where thoughts slip free of conscious control.”⁶⁵

This sleep onset period typically “lasts several minutes, and occurs in stages of descent into unconsciousness.”⁶⁶ During hypnagogia, we experience “hypnagogic imagery,” referring to the dream-like pictures and ideas flowing through our minds during this liminal state between wake and sleep.⁶⁷ As Adam Haar puts it, “[d]ropping off to sleep is often accompanied by imagery, sounds and

60. *Id.* at 54.

61. DALI, *supra* note 20, at 35-38.

62. Deirdre Barrett, *The “Committee of Sleep”: A Study of Dream Incubation for Problem Solving*, 3 DREAMING 115, 117 (1993).

63. *Id.* at 118.

64. Adam Jedidiah Haar Horowitz, *Incubating Dreams: Awakening Creativity* (Aug. 2019) (M.S. thesis, Massachusetts Institute of Technology), at 1, available at *Incubating Dreams: Awakening Creativity*, DSPACE@MIT, <https://hdl.handle.net/1721.1/124208> [<https://perma.cc/7ZSL-VC85>] (“The dreaming experience at sleep onset [is] called hypnagogia ... these first minutes of sleep provide ideal conditions for incubating specific dream content and recalling it after awakening.”).

65. Michael W. Clune, *Night Shifts: Can Technology Shape Our Dreams?*, HARPER’S MAG. (Apr. 2022), <https://harpers.org/archive/2022/04/night-shifts-dream-incubation-technology-sleep-research/> [<https://perma.cc/T8A2-FJGQ>].

66. Haar Horowitz, *supra* note 64, at 23.

67. DEIRDRE BARRETT, *THE COMMITTEE OF SLEEP: HOW ARTISTS, SCIENTISTS, AND ATHLETES USE DREAMS FOR CREATIVE PROBLEM-SOLVING 2* (2001).

narrative so surprising, confusing, and bizarre that many subjects describe them as coming from outside of them.”⁶⁸

What makes hypnagogia so important to dream incubation is that thoughts, images, and emotions experienced during the hypnagogic period are given a sort of *preferencing* by the mind and brain. That is, hypnagogia “is a time of day that evolution has designated for reviewing the day’s events in order to identify and tag those memories that require subsequent processing during sleep.”⁶⁹ For at least this reason, dream research studies support the recognition that stimuli experienced during the hypnagogic period are particularly correlated with dream content.⁷⁰ Moreover, “[e]xperimentally inserting thoughts into this [hypnagogic] period can ... give these thoughts priority in subsequent memory processing that night.”⁷¹ The act of doing so with scientific precision serves as the basis of targeted dream incubation (TDI), a dream engineering technology designed by sleep and dream researchers in recent years.⁷²

A more exacting form of dream incubation, TDI is a technique used by sleep and dream researchers “for reactivating memories during sleep in a manner that leads to incorporation of the targeted

68. Haar Horowitz, *supra* note 64, at 24.

69. *Dreamscape*, *supra* note 2.

70. See generally Robert Stickgold, April Malia, Denise Maguire, David Roddenberry & Margaret O’Connor, *Replaying the Game: Hypnagogic Images in Normals and Amnesics*, 290 SCIENCE 350 (2000) (discussing the “Tetris Effect” study involving several participants who played Tetris for an extended period and reported at least one dream with clear Tetris-related imagery during the hypnagogic period on the nights following play, even in cases where they did not remember playing in the first place); Erin J. Wamsley, Karen Perry, Ina Djonlagic, Laura Babkes Reaven & Robert Stickgold, *Cognitive Replay of Visuomotor Learning at Sleep Onset: Temporal Dynamics and Relationship to Task Performance*, 33 SLEEP 59, 66-67 (2010); Claudia Picard-Deland, Maude Pastor, Elizaveta Solomonova, Tyna Paquette & Tore Nielsen, *Flying Dreams Stimulated by an Immersive Virtual Reality Task*, 83 CONSCIOUS. COGN. 1, 9 (2020).

71. *Dreamscape*, *supra* note 2.

72. See, e.g., Michelle Carr, Adam Haar Horowitz, Judith Amores & Pattie Maes, *Towards Engineering Dreams*, 85 CONSCIOUS. COGN. Oct. 2020, at 2 (“[D]ream engineering inspires technological devices and protocols that go beyond design for daytime to interface across levels of consciousness and interact with the human mind as it truly exists—thinking on a 24 [hour] cycle.”); Carr et al., *supra* note 23, at 7-13 (compiling a theoretical review of novel dream engineering technologies); Adam Haar Horowitz, Tony J. Cunningham, Pattie Maes & Robert Stickgold, *Dormio: A Targeted Dream Incubation Device*, 83 CONSCIOUS. COGN. 1, 3-4 (2020) (describing a device used for “Targeted Dream Incubation,” which is worn during the hypnagogic state to enable targeted direction of dream content).

memory, or related memories, into dream content.”⁷³ Using technological mechanisms, it is easier to gauge the sleep cycle and influence it at a particular targeted threshold below awareness.⁷⁴ To this end, TDI targets the hypnagogic period, or other aspects of the sleep cycle, using scientific tools including “sensors to determine when an individual’s sleeping brain is receptive to external stimuli and, at these times, introduce smells, sounds, flashing lights or even speech to influence the content of our dreams.”⁷⁵

One recent dream engineering device, called Dormio, provides digitized feedback on sleep stage transitions, thus allowing researchers to record, analyze, and influence the dream content of subjects.⁷⁶ According to one description:

The device connects to a website where you can record a voice message to yourself—[for example,] “think about trees”—that will play as you begin to fall asleep. Dormio detects when you enter hypnagogia, waits a short period, then awakens you and prompts you to describe what you’re experiencing, and sends the recording to your hard drive. You can also alter the parameters of awakening, which enables you to enter deeper or shallower levels of sleep.⁷⁷

What is the motivation of researchers seeking to usurp dreams in this way? As previously mentioned, dreaming has ties to well-being.⁷⁸ As famed author John Steinbeck expressed: “It is a common experience that a problem difficult at night is resolved in the morning after the *committee of sleep* has worked on it.”⁷⁹

More literally, through dreaming, “the brain shapes the memories that together create our autobiographical past, our sense of who we are now, and our understanding of how best to live our lives in the future.”⁸⁰ Hence, TDI techniques are being found by sleep and

73. Haar Horwitz et al., *supra* note 72, at 3.

74. *Now What?*, *supra* note 2.

75. *Id.*

76. See Haar Horwitz et al., *supra* note 72, at 3-4.

77. Clune, *supra* note 65.

78. *Now What?*, *supra* note 2.

79. BARRETT, *supra* note 67, at ix (quoting John Steinbeck’s 1954 book *Sweet Thursday*, and adding emphasis).

80. *Now What?*, *supra* note 2.

dream researchers to have various therapeutic benefits.⁸¹ These benefits include an improved understanding of what gives rise to dream experiences across the sleep cycle, improvements in sleep quality, stimulating creativity, facilitating sleep-related learning, understanding memory retention, and treating conditions such as addiction and PTSD nightmares.⁸² One noteworthy study involved exposing participants who were cigarette smokers to two odors simultaneously while asleep: rotten eggs and cigarettes.⁸³ The participants reported smoking significantly fewer cigarettes the week following the study, even though they had no knowledge of having been exposed to the two smells simultaneously.⁸⁴ These results indicate that TDI appears to have great promise therapeutically, at least in the context of treating addiction.⁸⁵

Given its potential for effectiveness, however, TDI is ripe for commercial manipulation. Consider that in one study, for instance, participants were exposed to a brand name—M&M's or Skittles—which would play repeatedly while they slept.⁸⁶ The researchers found that several participants were willing to pay more for either M&M's or Skittles if that was the brand name that was played repeatedly during sleep (but not if it was played while they were awake).⁸⁷ According to the authors of the study, “sleep likely represents a unique period during which preferences and choices that are otherwise stable can be selectively modified by external cues.”⁸⁸

The effectiveness of sleep cuing as a marketing mechanism sets the stage for the dystopia of dream advertising—the practice of branding dreams.

81. *Id.*

82. *Id.*

83. *See generally* Arzi et al., *supra* note 27, at 15382.

84. *Id.* at 15384.

85. *Id.* at 15390.

86. Sizhi Ai, Yunlu Yin, Yu Chen, Cong Wang, Yan Sun, Xiangdong Tang, Lin Lu, Lusha Zhu & Jie Shi, *Promoting Subjective Preferences in Simple Economic Choices During Nap*, 7 *eLIFE* 1, 3-4 (2018), <https://elifesciences.org/articles/40583> [<https://perma.cc/TM8H-G4CL>].

87. *Id.* at 3-5.

88. *Id.* at 11.

B. Dream Advertising

Corporations are attempting to use the TDI techniques explored in the previous subpart as part of their advertising and marketing campaigns. Dream advertising can be defined as the *intentional* targeting of the consumer sleep cycle for commercial purposes.⁸⁹ This is not just a matter of the few isolated instances thus far described in the Introduction. Rather, the American Marketing Association's (AMA) 2021 "Future of Marketing" survey found that of more than 400 advertisers from U.S. companies, 77 percent planned to use dream-based technologies to influence consumer behavior by 2025.⁹⁰ While these numbers may well be inflated, sleep and dream researchers are now being contacted by large corporate advertising teams, "seeking help on commercially driven dream-incubation projects."⁹¹

Thus, while branding dreams is still in the experimental stage, sleep and dream researchers are "highly concerned by the current efforts to exploit people's sleep and dreams, as highlighted by Molson Coors' attempt to use TDI to sell an addictive substance."⁹² According to the researchers, "TDI-advertising is not some fun gimmick, but a slippery slope with real consequences. Planting dreams in people's minds for the purpose of selling products, not to mention addictive substances, raises important ethical questions."⁹³ As such, in June 2021, nearly forty sleep and dream researchers signed an open letter warning against dream advertising. The letter, titled "*Advertising in Dreams is Coming: Now What?*" points to several current and potential uses of commercial dream engineering that raise strong concerns about the intrusive and deceptive nature of branding dreams.⁹⁴

The main example the letter concentrates on as especially disturbing is the Molson Coors's Superbowl ad mentioned in the

89. See *Dreamscape*, *supra* note 2.

90. *Id.*

91. *Id.* (noting also that "the core principles and methods behind TDI and other techniques designed to influence dream content aren't that difficult to understand and implement. A time will come soon when the help of sleep scientists is not needed.")

92. *Id.*

93. *Now What?*, *supra* note 2, at 4.

94. See generally *id.*

Introduction.⁹⁵ In connection with the January 2021 Superbowl, Molson Coors pioneered “the world’s largest dream study.”⁹⁶ The company took an unconventional approach to advertising its beer products—Coors Light and Coors Seltzer—because it was unable to get airtime during the actual televised game itself due to an exclusivity pact the NFL has with its competitor, Anheuser-Busch (Budweiser brand).⁹⁷ To conduct the experimental advertisement, Molson Coors enlisted the help of Harvard psychologist and dream expert Deirdre Barrett.⁹⁸ Together with Barrett, Molson Coors developed a short film and soundtrack that uses audio-visual stimuli during the hypnagogic (sleep onset) period to trigger related dreams.⁹⁹ As Molson Coors put it, “we ran our commercial in the one place there are no rules—your dreams.”¹⁰⁰

The experimental advertisement took a two-tiered approach: eighteen in-person participants slept in a laboratory where they were hooked up to tracking devices to monitor their sleep, but the film and soundscape were also available on social media for remote participation.¹⁰¹ The 90-second film featured a translucent avatar flying through surreal-looking Coors brand trademarks, as well as snow-capped mountains, tranquil streams, and a talking fish holding a Coors Light can.¹⁰² Participants watched the film multiple times and then went to sleep.¹⁰³ While sleeping, they listened to an eight-hour overnight electronic soundscape that mirrored the audio from

95. See *supra* notes 8-10 and accompanying text.

96. Elaine Li, *Coors—Big Dream Case Study*, VIMEO (Dec. 21, 2021, 2:53 AM), https://vimeo.com/655247852?embedded=true&source=vimeo_logo&owner=5481624 [<https://perma.cc/SS22-VQDA>].

97. *Coors Big Game Commercial of Your Dreams*, ELAINE LI, <http://www.elaine.li/coors-dream/> [<https://perma.cc/8Q2H-SYL7>].

98. *Id.* Dr. Barrett is a prominent Harvard sleep and dream researcher. Her books include *Pandemic Dreams* (2020), *Supernormal Stimuli* (2010), *The Committee of Sleep* (2001), and *Trauma and Dreams* (1996). Deirdre Barrett, GOOGLE SCHOLAR, https://scholar.google.com/citations?hl=en&user=oMxNrKgAAAAJ&view_op=list_works&sortby=pubdate [<https://perma.cc/3UKZ-U952>].

99. Li, *supra* note 96.

100. Li, *supra* note 97.

101. Noor Al-Sibai, *Woman Says Coors Paid Her \$1,000 to Successfully Inject Advertisements into Her Dreams*, NEOSCOPE (Mar. 23, 2022), <https://futurism.com/neoscope/coors-dream-ads> [<https://perma.cc/N7BY-44X4>]; Molson Coors Beverage Co., *supra* note 9.

102. Stern, *supra* note 8; Molson Coors Beverage Co., *supra* note 9.

103. Molson Coors Beverage Co., *supra* note 9.

the film.¹⁰⁴ In-person participants' sleep was tracked according to TDI protocols.¹⁰⁵

Among the in-person participants was celebrity singer-songwriter Zayn Malik, who promoted the study widely on social media.¹⁰⁶ In a press release for the project, Malik announced, "When Coors asked me if they could induce a refreshing dream while I sleep for you all to watch on Instagram Live, I thought ... well that IS very strange. So of course, I said yes."¹⁰⁷ Malik admitted that placing Coors advertisements into someone's dreams "is kind of messed up."¹⁰⁸ However, he added: "It's supposed to make you wake up feeling refreshed so we're going to give that a go and see if it works!"¹⁰⁹ Indeed, five out of eighteen in-person participants—about 30 percent—reported dreaming of Coors-related content.¹¹⁰ According to Bobbi Gould, who claimed that Molson Coors paid her one thousand dollars to participate, "I had one [dream] where I was on a pogo stick jumping around with Coors products.... In another one I was on a plane dropping Coors cans on people and they were cheering for me."¹¹¹

And thousands of viewers participated online in exchange for free or discounted beer. Remote participants were instructed to "watch the dream inducing film three times, play the soundscape, go to sleep," and then, rather than worrying about the Covid-19 pandemic, "have a refreshing dream using the science of guiding dreams."¹¹² According to Molson Coors, the advertising content was extraordinarily effective—having been displayed 1.4 billion times and leading to a 3,000 percent increase in social engagement and an 8 percent increase in sales.¹¹³

104. *Id.*

105. Coors Light, *supra* note 10.

106. Molson Coors Beverage Co., *supra* note 9.

107. Emily Kirkpatrick, *Zayn Malik Has Invited Everyone to Watch Him Sleep This Weekend*, VANITY FAIR (Feb. 5, 2021), <https://www.vanityfair.com/style/2021/02/zayn-malik-sleeping-on-instagram-live-coors-beer-super-bowl-ad> [<https://perma.cc/Q7X3-T2UA>].

108. *Id.*

109. *Id.*

110. Crockett, *supra* note 6 ("Shockingly, it seemed to work. Around [30 percent] of the participants reported that Coors products made an appearance in their dreams.")

111. Al-Sibai, *supra* note 101.

112. See Molson Coors Beverage Co., *supra* note 9.

113. LI, *supra* note 97.

While ostensibly the most evolved scenario so far, Molson Coors was not the first corporation to exploit TDI practices. In 2020, Microsoft Xbox also engaged cooperative subjects in a dream advertising experiment, where participants—experienced video game players—played videogames on the Xbox Series X console before going to sleep.¹¹⁴ Researchers employed TDI to see if participants would continue their gaming experiences as lucid dreams—the state where a subject becomes aware that they are dreaming.¹¹⁵ Xbox partnered with advertising agency McCann Worldwide and used a dream recording technology—a headband called Hypnodyne—to explore participants’ dreams following their gameplay.¹¹⁶ According to a member of Xbox’s marketing team:

Using the most advanced dream recording technology, dream scientists conducted lucid dreaming experiments, capturing and decoding the real dreams of gamers after they experienced Xbox Series X. We then partnered with world renowned artists and creators, who took inspiration from the dream data to bring these gamers’ dreams to life through a content series we’re calling, “Made from Dreams.”¹¹⁷

For several gamers, the experiment worked, and they experienced lucid dreams related to the gameplay.¹¹⁸ Participant dream mentations, as recalled upon waking, were then turned into video game animations, serving as further advertisements for the Xbox console.¹¹⁹ To justify its advertising experiment, Microsoft defended against criticism by claiming that exposing people to dream advertising is a net positive when “so much already feels like a chaotic waking dream.”¹²⁰ Yet “[m]ounting neurological evidence suggests

114. Xbox, Xbox Series X—Made from Dreams, YOUTUBE (Dec. 7, 2020), <https://www.youtube.com/watch?v=dQldgaMtdNg> [<https://perma.cc/9UY5-URZ2>].

115. See *id.*; Xbox: Made From Dreams by McCann Worldgroup, DRUM (Dec. 2020), <https://www.thedrum.com/creative-works/project/mccann-worldgroup-xbox-made-dreams> [<https://perma.cc/UXZ4-32DA>].

116. Griner, *supra* note 11.

117. Josh Munsee, *Powering the Dreams of Gamers with Xbox*, XBOX WIRE (Dec. 7, 2020, 6:00 AM), <https://news.xbox.com/en-us/2020/12/07/powering-the-dreams-of-gamers-with-xbox/> [<https://perma.cc/837B-SJN5>].

118. Xbox, *supra* note 114.

119. *Id.*

120. Angela Natividad, *Xbox Looks Deep Into Gamers’ Lucid Dreams Right After They Play*,

that video games may act like traditional substances of abuse” such as alcohol.¹²¹ Lucid dreaming about video games may thus exacerbate addictive tendencies among gamers.

Burger King too has experimented with TDI techniques in its marketing. In 2018, Burger King partnered with Goldforest Branding to create a new burger for Halloween called the “Nightmare King,” featuring a green sesame bun, grilled beef, fried chicken, bacon, and American cheese.¹²² According to the company’s press release, Burger King conducted its own “scientific study over 10 nights with 100 participants (or should we say victims?) who ate the Nightmare King before they went to bed.”¹²³ The “study” suggested that the green bun sandwich, when eaten before sleep, contributed to disruptions in participants’ REM sleep, and thus to their nightmares.¹²⁴ One participant recalled that “[s]omeone ... transformed into the figure of a snake.”¹²⁵ Another reported that “aliens attack[ed]” the boat he was on in the dreamscape.¹²⁶ Burger King claimed that subjects experienced a 3.5-times increase in nightmares during the ten-day study period.¹²⁷ Like alcohol and video games, fast food too has been found to be potentially addictive.¹²⁸

MUSE BY CLIO (Dec. 9, 2020, 10:45 AM), <https://musebyclio.io/gaming/xbox-looks-deep-gamers-lucid-dreams-right-after-they-play> [<https://perma.cc/7KL9-EBBH>].

121. Mark Zastrow, *Is Video Game Addiction Really an Addiction?*, 114 PROCEEDINGS NAT’L ACAD. SC. U.S. 4268, 4268 (2017) (noting that “[a]dding video gaming to the list of recognized behavioral addictions could help millions [but] [i]t could also pathologize a normal behavior and create a new stigma.”).

122. See, e.g., Lucy Handley, *Burger King Creates ‘Nightmare’ Burger with Green Bun—and Says It Will Actually Give People Bad Dreams*, CNBC (Oct. 18, 2018, 8:44 AM), <https://www.cnbc.com/2018/10/18/burger-king-creates-nightmare-burger-with-green-bun.html> [<https://perma.cc/VQ8W-2THC>].

123. Kelly Tyko, *Burger King Says Its New Halloween Creation ‘Nightmare King’ Can Induce Nightmares*, USA TODAY (Oct. 17, 2018, 9:49 AM), <https://www.usatoday.com/story/money/2018/10/17/burger-king-nightmare-king-halloween/1661125002/> [<https://perma.cc/7CJM-UAKX>].

124. Burger King, *The Burger King Brand Creates a Halloween Sandwich Clinically Proven to Induce Nightmares*, BUS. WIRE (Oct. 17, 2018, 9:02 AM), <https://www.businesswire.com/news/home/20181017005208/en/The-BURGER-KING-Brand-Creates-a-Halloween-Sandwich-Clinically-Proven-to-Induce-Nightmares> [<https://perma.cc/3CU6-RQDT>].

125. *Id.*

126. *Id.*

127. *Id.*

128. See generally Andrea K. Garber & Robert H. Lustig, *Is Fast Food Addictive?*, 4 CURRENT DRUG ABUSE REVS. 146 (2011) (finding that fast food is a potentially addictive substance most likely to create dependence in vulnerable populations).

The Molson Coors, Xbox, and Burger King examples, while nascent, are perhaps the tip of a future dystopian iceberg where dream incubation is paired with other technology—wearable watches, smart speakers, et cetera—to enhance surveillance capitalism.¹²⁹ Antonio Zadra writes that “using [TDI] techniques, even in half-jest to ultimately increase corporate profits places us on a dangerous and very slippery slope.”¹³⁰ The National Law Review blog speculates on such a future reality:

Imagine the Amazon Echo or Google Nest in your room purring a low level of dream inducing commercial messaging for eight hours while you sleep, or even building the messages into your white-noise rain pattern that you use to stay asleep. We know, for example, that advertisements on smart televisions emit noises in frequencies people can't hear to register connection with the other electronic devices like your phone, tablet [or] PC. Why couldn't those same devices send signals designed to drive you to Taco Bell in your dreams? The combination of dream tech and always-on home devices may define the future of advertising.¹³¹

Similarly, sleep and dream researchers theorize about a fully realized commodification of the sleep cycle:

Tech giants such as Amazon, Apple and Google have all developed smart devices designed to monitor people's sleep ([e.g.], Amazon's upcoming radar sensor, Apple's iPhone and Apple Watch, Google's Fitbit and Nest Hub). While these technologies and the data they collect are ostensibly geared to improve people's sleep, it is not hard to envision a world in which our phones and smart speakers—now widely present in people's

129. See generally SHOSHANA ZUBOFF, *THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER* (2019) (conceptualizing surveillance capitalism as a capitalist colonization of our minds).

130. Professor Zadra, under the username @antoniozadra6439, wrote the above as a comment to Coors Light's YouTube video. See Coors Light, *supra* note 10.

131. Theodore F. Claypoole, *To Sleep, Perchance to Dream of Coors Beer and Halo 2*, NAT'L L. REV. (Oct. 19, 2021), <https://www.natlawreview.com/article/to-sleep-perchance-to-dream-coors-beer-and-halo-2> [<https://perma.cc/JUZ7-56CP>].

bedrooms—become instruments of overnight advertising, with or without our knowledge.¹³²

The new mobile app game Pokémon Sleep could be an early instance.¹³³ It involves tracking the amount of time someone sleeps using an accelerator device accessory and then communicating the data to the subject’s mobile phone to affect gameplay.¹³⁴ Through the production of sleep into capital for the owners and shareholders of the game, Pokémon Sleep promises to “turn sleeping into entertainment.”¹³⁵ And more broadly, scholars call attention to fast-paced neurotechnology developments—mind-reading devices and brain-machine interfaces.¹³⁶ Elon Musk’s “Neuralink” is a prominent

132. *Dreamscape*, *supra* note 2; *see also* Gabbatt, *supra* note 6 (“Something like 30 million people have these listening, Alexa-type devices in their bedroom. And those devices can play anything they want whenever they want and advertisers could buy advertising time, [for advertisements] they want played at [2:30] in the morning.... You could have this sort of 1984 situation where advertisers buy advertising time on these devices, and nobody ever knows they’re hearing them.”) (quoting Robert Stickgold).

133. *See* POKÉMON SLEEP, <https://www.pokemonsleep.net/en/> [<https://perma.cc/P3SF-RFJD>]; *see also* Zackerie Fairfax, *Pokémon Sleep Patent Reignites Fan Enthusiasm After Three Years*, DEXERTO (Jan. 29, 2023, 1:19 PM), <https://www.dexerto.com/pokemon/pokemon-sleep-patent-reignites-fan-enthusiasm-after-three-years-2046049/> [<https://perma.cc/2YXH-2ELD>].

134. *Pokémon Sleep*, POKÉMON <https://www.pokemon.com/us/app/pokemon-sleep/> [<https://perma.cc/ATV7-JTYB>] (Playing this game is simple.... Place your smartphone by your pillow when you go to bed to record and measure your sleep. The longer you sleep, the higher your score in the morning.... Your night of sleep will be classified as one of three sleep styles.”); Gareth Damian Martin, *How ‘Pokémon Sleep’ Promises to Commodify Our Dreams*, FRIEZE (June 13, 2019), <https://www.frieze.com/article/how-pokemon-sleep-promises-commodify-our-dreams> [<https://perma.cc/AU76-CCWC>] (“[W]hat we will be producing, through our sleep cycles and opportunistic naps, is actual capital for the owners and shareholders of the game.”).

135. *See, e.g.*, Patrick Lum, *Pokémon Sleep: Game Unveiled That ‘Turns Sleeping into Entertainment’*, GUARDIAN (May 29, 2019), <https://www.theguardian.com/games/2019/may/29/pokemon-sleep-game-unveiled-that-turns-sleeping-into-entertainment> [<https://perma.cc/NWH8-QN3G>]; Ben Sledge, *Is Pokemon Sleep Finally Waking Up?*, GAMER (Jan. 5, 2022), <https://www.thegamer.com/pokemon-sleep-waking-up/> [<https://perma.cc/3XD4-D6QP>]; ZUBOFF, *supra* note 129, at 8 (describing predecessor augmented reality game *Pokemon Go* as a deceptively dangerous example of surveillance capitalism given its seemingly innocent and colorful harvesting of consumer data leading to behavior modification for profit); Andrew Otton, *Pokemon Sleep Is More Sinister Than You Think*, TECHRAPTOR (July 31, 2023, 11:04 AM), <https://techraptor.net/gaming/features/pokemon-sleep-is-more-sinister-than-you-think> [<https://perma.cc/5DS9-5TEP>] (“It’s difficult not to picture some executive twirling their mustache—exalting their genius—after scheming up a way to monetize our sleep. Why only try to exploit people for 16-18 hours a day when you can go for the full 24?”).

136. *See, e.g.*, Matthew B. Lawrence, *Addiction and Liberty*, 108 CORNELL L. REV. 260, 272-73 (2023).

example.¹³⁷ Given such advances in neurotechnology, companies may someday have access to our dreams just as easily as they have access to our waking attention, assuming the unconscious mind is similarly mappable as compared to the conscious one.¹³⁸

Further, dream advertising could plausibly be employed by state—rather than private—actors for propagandic or mind control purposes. Authoritarian regimes are increasingly using artificial intelligence, deep fakes, and other sophisticated technologies as forms of government control.¹³⁹ Thus, it does not seem far-fetched for overreaching government actors to use the hypnagogic period to incubate symbols, mantras, and disinformation campaigns for citizens or prisoners, perhaps even mandating their use prior to sleep with threats of punishment.

Branding dreams may not always manifest in a readily identifiable form, either. According to one marketing strategist who is being persuaded simply to run her advertisements later at night: “We are already beginning to see marketers and advertisers take advantage of consumers’ sleep cycles by running ads and publishing content during later times in the evening.”¹⁴⁰ She continues, “I am

137. *Breakthrough Technology for the Brain*, NEURALINK, <https://neuralink.com/> [<https://perma.cc/NTP8-YTM5>]; see also Mike Snider, *Elon Musk’s Neuralink Has FDA Approval to Put Chips in Humans’ Brains. Here’s What’s Next.*, USA TODAY (June 9, 2023, 7:53 AM), <https://www.usatoday.com/story/tech/2023/06/09/musk-neuralink-brain-chips-fda-human-trials/70299875007/> [<https://perma.cc/WX8G-7MTU>].

138. Sigal Samuel, *Brain-Reading Tech Is Coming. The Law Is Not Ready to Protect Us*, VOX (Dec. 20, 2019), <https://www.vox.com/2019/8/30/20835137/facebook-zuckerberg-elon-musk-brain-mind-reading-neuroethics> [<https://perma.cc/C6N7-JCDW>]; see Daniel Van Boom, *Helmets That Measure Your Emotional State? China Is on It*, CNET (Apr. 30, 2018, 9:09 PM), <https://www.cnet.com/culture/helmets-that-measure-your-emotional-state-china-brain-activity/> [<https://perma.cc/HLK4-ND5J>] (“Companies in China use helmets that measure the brain signals of workers to gauge their emotional state, allowing managers to shift workload appropriately.”).

139. *E.g.*, *Open Hearing on Worldwide Threats: Hearing Before the Select Comm. on Intel.*, 115th Cong. (2018), <https://www.govinfo.gov/content/pkg/CHRG-115shrg28947/html/CHRG-115shrg28947.htm> [<https://perma.cc/G968-YFCV>]; Noor Ibrahim, *‘We Are not Prepared’: Russia Uses Artificial Intelligence, Deep Fakes in Propaganda Warfare*, GLOBAL NEWS (Mar. 30, 2022), <https://globalnews.ca/news/8716443/russia-artificial-intelligence-deep-fakes-propaganda-war/> [<https://perma.cc/8J5M-LGF4>].

140. Evan Santiago, *Companies Want to Put Ads in Your Dreams. A Charlotte Marketing Strategist Explains Why*, CHARLOTTE OBSERVER (July 12, 2022, 11:13 AM) (quoting marketing strategist Megan Miller), <https://www.charlotteobserver.com/software-business/article260088550.html> [<https://perma.cc/JE5D-3Z4D>].

being suggested to post my ads and content between the hours of 10 p.m. and 1 a.m. which is right before a consumer goes to sleep.”¹⁴¹

As a literary metaphor to illustrate the dystopia of branding dreams, the paranoid science fiction of Philip K. Dick is useful.¹⁴² Branding dreams amounts to an intrusive manipulated reality along the lines of that which Dick conjured in such works as *Do Androids Dream of Electric Sheep?*, *Sales Pitch*, and *Minority Report*.¹⁴³ In the Phildickian sense, reality (the dream, in this case) is replaced with a virtual or simulated image of it (here, the dream-incubated advertisement).¹⁴⁴ Dick’s work features relevant themes including artificial intelligence, personalized advertising, altered states of consciousness, and the nature of reality.¹⁴⁵ As Mark Bartholomew explains in *Adcreep: The Case Against Modern Marketing*, Dick’s work “predicted a world where advertising had become more personalized, more insistent, and more effective ... a future where advertising doubles as a surveillance tool.”¹⁴⁶

141. *Id.*

142. Privacy problems—surveillance, big data, and targeted advertisements—are frequently analogized to dystopian literary works. See, e.g., Margaret Hu, *Orwell’s 1984 and a Fourth Amendment Cybersurveillance Nonintrusion Test*, 92 WASH. L. REV. 1819 (2017) (examining the recurrence of judicial references to George Orwell’s novel, 1984, in the context of modern surveillance methods); Daniel J. Solove, *Privacy and Power: Computer Databases and Metaphors for Information Privacy*, 53 STAN. L. REV. 1393, 1398, 1439 (2001) (explaining that the database problem is more Kafkaesque than Orwellian given the mindless, rather than sinister, bureaucracy at the center of it); Dustin Marlan, *The Dystopian Right of Publicity*, 37 BERKELEY TECH. L.J. 803, 806, 828 (2022) (likening the voluntary transfer of publicity (in other words, identity) rights on social media to the consensual identity loss experienced by World State citizens in Aldous Huxley’s *Brave New World*).

143. See *supra* note 5 and accompanying text.

144. See DARREN ALLEN, 33 MYTHS OF THE SYSTEM 2 (2021) (describing a Phildickian dystopia as “replacing reality with an abstract, ersatz virtual image of it (aka the spectacle)”). Dick’s dystopian vision is echoed in a disturbing film by Studio Smack, entitled *Branded Dreams: The Future of Advertising*. The prophetic 2016 film consists of a dreamscape intruded upon by the Coca-Cola brand. What is perhaps most chilling about the branded dream is its organic nature and beauty (if slightly grotesque), leading to the positive impression of Coca Cola it would presumably leave upon the subject, and thus its effectiveness as a tool for commercial manipulation. See Vlad Savov, *Watch the Beautiful Nightmare of Ads Invading Your Dreams*, VERGE (Jan. 20, 2016, 7:14 AM), <https://www.theverge.com/2016/1/20/10796916/branded-dreams-by-studio-smack-animated-short-film> [<https://perma.cc/WMK7-MBR3>].

145. See Marc J. Blitz, *The Right to an Artificial Reality? Freedom of Thought and the Fiction of Philip K. Dick*, 27 MICH. TECH. L. REV. 377, 397 (2021) (“If Dick’s stories emphasize how artificial realities might enrich and sustain life, they also illustrate how they can lead to nightmarish disorientation or subjugation.”).

146. BARTHOLOMEW, *supra* note 33, at 1. Aldous Huxley’s *Brave New World*, where the

II. THE SUBLIMINAL NATURE OF BRANDING DREAMS

The interpretation of dreams is the royal road to a knowledge of the unconscious activities of the mind.

- Sigmund Freud, *The Interpretation of Dreams*¹⁴⁷

Dream advertising might seem like an unprecedented phenomenon, but marketers have long employed techniques seeking to target consumers below the threshold of conscious awareness. This Part provides a historic overview of subliminal advertising and then makes the case that branding dreams is, as advertising company Wunderman Thompson puts it, “the next wave of subliminal marketing.”¹⁴⁸ The issue is relevant because subliminal advertising is banned in several countries, including the United Kingdom and Australia.¹⁴⁹ In the United States, while not prohibited legislatively, the term “subliminal” carries legal weight, having long provoked legal responses by courts and regulators given the deceptive nature of the practice.¹⁵⁰

A. Subliminal Advertising

Subliminal advertising has long been one of advertising’s most controversial issues. Subliminal messages are those designed to operate below the threshold of conscious awareness.¹⁵¹ The word “subliminal” literally means “below threshold.”¹⁵² Subliminal advertising can thus be defined, for our purposes, by the dictionary definition:

World State government uses hypnopedia (that is, sleep learning) techniques to brainwash its population, could also serve as apt literary metaphor, particularly where government use of dream incubation techniques is concerned. *See* Marlan, *supra* note 142, at 826.

147. SIGMUND FREUD, *THE INTERPRETATION OF DREAMS* 604 (James Strachey trans., Basic Books 2010) (1900).

148. *See* Trend #39 From Wunderman Thompson’s Future 100 Trends 2022: *Dreamvertising*, WUNDERMAN THOMPSON, <https://www.wundermanthompson.com/campaign/trend-39-from-100-wunderman-thompsons-future-100-trends-2022> [<https://perma.cc/TW5L-SPK8>].

149. *See* VERWIJMEREN, *supra* note 41, at 49.

150. *See infra* Part IV.

151. LEONARD MLODINOW, *SUBLIMINAL: HOW YOUR UNCONSCIOUS MIND RULES YOUR BEHAVIOR* 14-15 (2012) (explaining that “[p]sychologists employ the term to mean below the threshold of consciousness”).

152. *Id.* at 14.

advertisements “existing or functioning below the threshold of consciousness.”¹⁵³

The prototypical methods of subliminal advertising have involved: (1) the *subvisual*—visual messages flashed by the subject so quickly or dimly that they are not noticed at the conscious level; (2) the *subaudible*—vocal messages played at sound levels too low to be heard at the threshold of consciousness; and (3) the *embedded* or *masked*—images hidden on the edges of drawings or photos.¹⁵⁴ The efficacy of these traditional methods of implementing subliminals is still hotly debated.¹⁵⁵

But subliminal advertising also has longstanding ties to dreams and even to dream incubation. While forms of subliminal perception techniques have been documented as early as 400 B.C.,¹⁵⁶ the advent of subliminal *advertising and marketing* can be traced to the early 1900s and the psychoanalytic movement.¹⁵⁷ It was during this time period that Sigmund Freud’s contemporary, Otto Poetzl, pioneered a unique subliminal perception study.¹⁵⁸ Poetzl theorized that dream content was comprised of stimuli that were perceived subliminally or unconsciously.¹⁵⁹ Using a technique echoing both dream incubation and subliminal methods, Poetzl showed that when subjects were exposed to a certain stimuli (such as an image

153. *Subliminal*, *supra* note 37.

154. See, e.g., Thomas Albert Bliss, *Subliminal Projection: History and Analysis*, 5 HASTINGS COMM. & ENT. L.J. 419, 421 (1983) (discussing subaudible and subvisual methods); VERWIJMEREN, *supra* note 41, at 11 (discussing embedded/masked methods).

155. Compare Timothy E. Moore, *The Case Against Subliminal Manipulation*, 5 PSYCH. & MKTG., 297, 297 (1988) (“[T]here continues to be no evidence that subliminal messages can influence motivation or complex behavior.”), and Anthony R. Pratkanis & Anthony G. Greenwald, *Recent Perspectives on Unconscious Processing: Still No Marketing Applications*, 5 PSYCH. & MKTG. 337, 339-42 (1988), with Thijs Verwijmeren, Johan C. Karremans, Wolfgang Stroebe & Daniël H.J. Wigboldus, *The Workings and Limits of Subliminal Advertising: The Role of Habits*, 21 J. CONSUMER PSYCH. 206, 206 (2010) (“[I]f goal-relevant, subliminal advertising can be feasible.”).

156. See Olivia Goodkin & Maureen Ann Phillips, *The Subconscious Taken Captive: A Social, Ethical, and Legal Analysis of Subliminal Communication Technology*, 54 S. CAL. L. REV. 1077, 1079 (1981) (citing NORMAN DIXON, *SUBLIMINAL PERCEPTION—THE NATURE OF A CONTROVERSY* (1971)).

157. Jef I. Richards & Richard D. Zakia, *Pictures: An Advertiser’s Expressway Through FTC Regulation*, 16 GA. L. REV. 77, 94-97 (1981).

158. Howard Shevrin, *Subliminal Perception and Dreaming*, 7 J. MIND & BEHAVIOR 379, 380 (1986).

159. ALAN F. WESTIN, *PRIVACY AND FREEDOM* 288-89 (1970).

or sound) without conscious knowledge for a very brief period, subliminal message tended to appear in the subject's dreams days or weeks after the initial exposure.¹⁶⁰

Influenced by this "Poetzl phenomenon," Freud's nephew, Edward Bernays, sought to apply it to consumer marketing. Bernays's most influential work, the 1928 book *Propaganda*, marked the intersection of public relations, the social sciences, and psychoanalysis.¹⁶¹ In *Propaganda*, Bernays wrote: "A single factory ... cannot afford to wait until the public asks for its product; it must maintain constant touch, through *advertising and propaganda*, with the vast public in order to assure itself the continuous demand which alone will make its costly plant profitable."¹⁶² To accomplish such "mass persuasion," Bernays demanded that "subconscious and conscious motivations in public thought" be researched and utilized.¹⁶³ And in support of his goal of "engineering consent" from the public, Bernays advocated for a First Amendment "right of persuasion."¹⁶⁴

Bernays's theories paved the way for advertising's royal road to the unconscious mind. In the decades following Bernays's work, marketing researchers sought to "uncover and redirect the unconscious desires of consumers."¹⁶⁵ According to one seminal advertising text:

[B]y 1940 a major goal of those who feared the possibility of increasing public skepticism was to develop advertising to the point where, according to advertising theorists, it could circumvent conscious reasoning processes by seizing hold directly on the [subject's] emotions. To arouse one's reason or to stimulate one's intellectual comprehension of the appeal was to risk the possibility of resistance to it and resentment of it.¹⁶⁶

160. See, e.g., Sydney E. Pulver & Bennett Eppes, *The Poetzl Phenomenon: Some Further Evidence*, 136 J. NERVOUS & MENTAL DISEASE 527, 527 (1963).

161. See generally EDWARD L. BERNAYS, PROPAGANDA (1928). Bernays's other well-known books include *Crystalizing Public Opinion* (1923) and *A Public Relations Counsel* (1927).

162. BERNAYS, *supra* note 161, at 63 (emphasis added).

163. Edward L. Bernays, *The Engineering of Consent*, 250 ANNALS AM. ACAD. POL. & SOC. SCI. 113, 118-19 (1947).

164. *Id.*

165. *Dreamscape*, *supra* note 2.

166. OTIS PEASE, THE RESPONSIBILITIES OF AMERICAN ADVERTISING 175 (1975).

In this manner, psychoanalytic theories provided the advertising industry with the tools necessary to sell by associating aesthetics and desire with goods and services as applicable here, Molson Coors's linkage of beer with refreshing imagery, Burger King's use of horror themes in its advertising, or Xbox's association of video games with dreams.¹⁶⁷ Dream advertising is therefore a natural evolution—perhaps the full-fledged realization—of advertising's longtime goal of bypassing conscious rationality through use of irrational and emotional appeals.¹⁶⁸

Although the concept of marketing to the unconscious mind was no longer new, the term subliminal advertising came to widespread recognition only following an infamous 1957 experiment by James Vicary. At a press conference that year, Vicary publicized a method of unconscious advertising that came to be known as subliminal advertising.¹⁶⁹ Vicary claimed that his company, Subliminal Projection Co., had successfully conducted an experiment where moviegoers at a New Jersey theater were shown split second flashes of the phrases "DRINK COCA-COLA" and "HUNGRY? EAT POPCORN" at a movie screen at 1/3000th of a second every five seconds during the film.¹⁷⁰ According to Vicary, flashing the phrases on the screen increased the sales of popcorn by 58 percent and Coke by 18 percent on the days the subliminal messages were shown on the screen.¹⁷¹

Vicary's method was later proven to be fraudulent, but it caused quite a stir. Lawmakers and the public at large were outraged, leading to responses including by the Federal Communications Commission (FCC).¹⁷² As one scathing write-up put it: "The subconscious mind is the most delicate part of the most delicate apparatus to the entire universe. It is not to be smudged, sullied, or twisted in order to boost the sales of popcorn or anything else."¹⁷³ As a result, the Television Board of the National Association of Broadcasters (NAB)

167. See *supra* notes 8-18 and accompanying text.

168. See *infra* note 218 and accompanying text.

169. WESTIN, *supra* note 159, at 279.

170. Harry Schiller, Note, *First Amendment Dialogue and Subliminal Messages*, 11 N.Y.U. REV. L. & SOC. CHANGE 331, 332 (1983).

171. WESTIN, *supra* note 159, at 279.

172. See, e.g., "Subliminal" Advertising and Its Relationship to Section 317 of the Communications Act (1957), 40 F.C.C. 7 (1965).

173. Norman Cousins, *Smudging the Subconscious*, SATURDAY REV., Oct. 5, 1957, at 20.

amended the Television Code in 1958 to include the following representation:

The use of the television medium to transmit information of any kind by the use of the process called “subliminal perception,” or by the use of any similar technique whereby an attempt is made to convey information to the viewer *by transmitting messages below the threshold of awareness* is not permitted.¹⁷⁴

And legislation aimed at prohibiting subliminal messaging was introduced in Congress during the late 1950s and early 1960s, though the bills ultimately never passed. For instance, Congressman James Wright of Texas sponsored a bill forbidding any device “designed to advertise a product or indoctrinate the public by means of making an impression on the subconscious mind.”¹⁷⁵ And the FCC and federal courts issued pivotal rulings regarding subliminal advertising during this time period, finding subliminal advertising to be manipulative speech “relatively unprotected by the [F]irst [A]mendment when the public health is threatened.”¹⁷⁶

In 1973, citizens complained to the FCC and FTC about the subliminal advertising message, “Get It”, directed at children in a commercial for the game “Husker-Du.”¹⁷⁷ As a result, the FCC issued a public warning, noting the practice to be deceptive and warning broadcasters not to employ it.¹⁷⁸ In that Policy Statement, the FCC defined subliminal advertising broadly as: “*Any technique*

174. *The Legal Status of Subliminal Communication in America*, PROGRESSIVE AWARENESS RSCH. (2022) (emphasis added), https://www.progressiveawareness.org/research_desk_reference/legal_status_of_subliminal_communication.html [<https://perma.cc/3T5H-AEZD>]; see also NAT'L ASS'N BROADS., *supra* note 38, at 5 (reflecting the updated language).

175. H.R. 10802, 85th Cong. (2d Sess. 1958) (bill sponsored by Congressman Wright of Texas). Similar bills included H.R. 11363, 85th Cong. (2d Sess. 1958) (bill sponsored by Congressman Hosmer of California); H.R. 1998, 86th Cong. (1st Sess. 1959) (bill sponsored by Congressman Wright of Texas).

176. Yusef Al-Jarani, *All Fun and (Mind) Games? Protecting Consumers from the Manipulative Harms of Interactive Virtual Reality*, 2019 U. ILL. J.L. TECH. & POL'Y 299, 330 (alteration in original); see also Schiller, *supra* note 170, at 342.

177. Nicole Grattan Pearson, *Subliminal Speech: Is It Worthy of First Amendment Protection?*, 4 S. CAL. INTERDISC. L.J. 775, 778 (1995).

178. 16 FCC Rcd. 7644, 7644 (2001) (quoting FED. COMM'NS COMM'N, CONCERNING THE BROADCAST OF INFORMATION BY MEANS OF “SUBLIMINAL PERCEPTION” TECHNIQUES, 44 F.C.C.2d 1016, 1017 (1974)).

whereby an attempt is made to convey information to the viewer by the transmitting of messages *below the threshold of awareness*.”¹⁷⁹

While some have argued that the FCC’s Policy Statement amounts to a mere warning without teeth,¹⁸⁰ the Commission’s Enforcement Bureau has enforced its rule against subliminal advertising on multiple occasions.¹⁸¹ In 1987, a radio station in Dallas, Texas, received a warning by the FCC for repeated transmission of subliminal messages during an American Cancer Society anti-smoking broadcast.¹⁸² And during the 2000 presidential campaign, the Republican National Committee used subliminals during a televised political ad, displaying the word “RATS” (as in, focusing on the last four letters of the word “bureaucrats”) for only one-thirtieth of a second in attacking Vice President Al Gore’s prescription drug proposal.¹⁸³ In response, the FCC Enforcement Bureau sent inquiries to 217 television stations as to the circumstances surrounding the decision to air the ad.¹⁸⁴ Ultimately, the Enforcement Bureau concluded that “no further action [was] warranted,” though the example speaks to the FCC’s 1974 policy statement as “explicitly proscrib[ing] the broadcast of material that constitutes subliminal advertising.”¹⁸⁵

Beyond advertising, subliminal messaging has been employed in various contexts such as in efforts to promote safe driving and weight loss control, prevent shoplifting, increase workplace productivity, induce hypnosis, and as a part of artwork and music,¹⁸⁶ especially in darker-themed works such as horror and heavy metal music.¹⁸⁷ In particular, the use of subliminal lyrics in the heavy

179. In Re Pub. Notice Concerning the Broadcast of Information by Means of “Subliminal Perception” Techniques, 44 F.C.C.2d 1016, 1017 (emphases added).

180. See Press Statement, Comm’r Harold Furchtgott-Roth, FCC, The FCC’s Investigation of “Subliminal Techniques:” From the Sublime to the Absurd (Sept. 19, 2000), https://transition.fcc.gov/Speeches/Furchtgott_Roth/2000/sphfr011.html [<https://perma.cc/K48T-G5BD>].

181. See Press Statement, Comm’r Gloria Tristani, FCC (Mar. 9, 2001), <https://transition.fcc.gov/Speeches/Tristani/Statements/2001/stgt123.html> [<https://perma.cc/3EAF-LSWH>].

182. Press Statement, Comm’r Harold Furchtgott-Roth, *supra* note 180.

183. Press Statement, Comm’r Gloria Tristani, *supra* note 181.

184. *Id.*

185. *Id.*

186. Pearson, *supra* note 177, at 778-79.

187. Schiller, *supra* note 170, at 333 (“It is in horror films ... that subliminals have thus far found their niche.”).

metal music genre has spawned multiple litigations.¹⁸⁸ The most prominent case involving subliminal messaging is *Vance v. Judas Priest* (1990).¹⁸⁹ The disturbing facts involved two teenagers, James Vance, who attempted, and Raymond Belknap, who died by, suicide after hearing British heavy metal band Judas Priest's album "Stained Class."¹⁹⁰ In particular, the song "Better by You, Better than Me" contained the subliminal phrase "do it."¹⁹¹ The plaintiffs claimed that "do it" referred to suicide and, considering the teenagers already had suicidal tendencies, "constituted one of the factors which caused the deaths of" Belknap and Vance (who, severely disfigured from the suicide attempt, later died following a coma from a suspected drug overdose).¹⁹²

Among other issues, Judge Jerry Carr Whitehead, ruled that subliminal messages—even ones constituting artistic, rather than commercial, expression—are incapable of being protected speech under the First Amendment.¹⁹³ This was at least in part because, by definition, subliminals are unnoticeable and thus cannot contribute to a dialogue, personal autonomy, the marketplace of ideas, or the pursuit of truth.¹⁹⁴ In holding that even expressive forms of subliminal messages are comfortably outside the scope of free speech protection, the *Vance* reasoning supports the conclusion that

188. *Vance v. Judas Priest*, No. 86-3939, 1990 WL 130920, at *1 (Nev. Dist. Ct. Aug. 24, 1990) (involving subliminal lyrics by Judas Priest allegedly influencing plaintiffs to commit suicide); *Waller v. Osbourne*, 763 F. Supp. 1144, 1145 (M.D. Ga. 1991), *aff'd*, 958 F.2d 1084 (11th Cir. 1992) (involving similar facts accusing Ozzy Osbourne of employing subliminal messages in his song "Suicide Solution").

189. See, e.g., Kory Grow, *Judas Priest's Subliminal Message Trial: Rob Halford Looks Back*, ROLLING STONE (Aug. 24, 2015), <https://www.rollingstone.com/music/music-features/judas-priests-subliminal-message-trial-rob-halford-looks-back-57552/> [<https://perma.cc/MB8D-LKH7>] ("Twenty five years after judge finds band not guilty of hiding phrases like 'let's be dead' in its songs, trial still resonates.").

190. *Vance*, 1990 WL 130920, at *1, *10.

191. *Id.* at *8.

192. *Id.* at *1-2, 13-14, 17; *Man Who Sued Rock Group Over Suicide Attempt Dies*, L.A. TIMES (Dec. 1, 1988), <https://latimes.com/archives/la-xpm-1988-12-01-mn-828-story.html> [<https://perma.cc/5S5R-D5SZ>].

193. *Vance*, 1990 WL 130920, at *25.

194. More fully, Judge Whitehead justified this conclusion on three grounds: "(A) subliminal communication does not advance any of the purposes of free speech; (B) an individual has a First Amendment right to be free from unwanted speech; and (C) the listener's right of privacy outweighs the speaker's right of free speech when subliminal speech is used." *Id.* at *23.

regulations on dream advertising or other forms of subliminal advertising would not encounter successful First Amendment challenges.¹⁹⁵ The First Amendment is thus at perhaps its lowest ebb in considering subliminal content. A documentary about the *Vance v. Judas Priest* case was released in 1992, fittingly titled, *Dream Deceivers*.¹⁹⁶

B. Dream Advertising as Subliminal

There is a strong case that dream advertising constitutes a novel form of subliminal advertising. As previously noted, the issue is relevant because subliminal advertising is banned in several countries, including the United Kingdom and Australia.¹⁹⁷ In the United States, while not banned per se, subliminal advertising is ripe for enforcement by the Federal Trade Commission under Section 5 of the FTC Act, which prohibits “unfair or deceptive acts or practices in or affecting commerce.”¹⁹⁸ And for First Amendment purposes, given its occurrence below the threshold of awareness, subliminal advertising is speech relatively unprotected by the First Amendment for regulatory or litigation purposes.¹⁹⁹ Thus, if dream advertising is held to be subliminal advertising, branding dreams is more likely to be met with legal consequences, including enforcement by the FTC, as will be analyzed in Part IV.

The definition of subliminal messaging varies, though, with some sources defining it broadly and others more narrowly. Broad definitions, ostensibly encompassing dream advertising, include the following: Merriam Webster’s dictionary defines “subliminal,” in part, as “existing or functioning below the threshold of consciousness”—the Latin word *limen* meaning “threshold.”²⁰⁰ Legal Scholars Jef Richards & Richard Zakia define subliminal as including “some element of persuasion designed to bypass the conscious perception

195. *See id.*

196. DREAM DECEIVERS (David Van Taylor 1992).

197. VERWIJMEREN, *supra* note 41, at 133.

198. 15 U.S.C. § 45(a)(1).

199. *See supra* notes 193-96 and accompanying text.

200. *Subliminal*, MERRIAM-WEBSTER, *supra* note 37 (appearing with another listed definition: “inadequate to produce a sensation or a perception”). This is one of the definitions, among several, cited in *Waller v. Osbourne*. 763 F. Supp. 1144, 1149 (M.D. Ga. 1991).

of the viewer and be received only by the subconscious.”²⁰¹ Social psychologist Thijs Verwijmeren defines subliminal advertising “as the use of stimuli that are presented outside of awareness with the intention to influence consumer behavior.”²⁰² The Cambridge Dictionary defines subliminal advertising as “advertising that uses images and sounds that the conscious mind is not aware of, in order to influence people and make them attracted to a product.”²⁰³ The FCC defined subliminal messaging in its 1974 Policy Statement as “[a]ny technique whereby an attempt is made to convey information to the viewer by transmitting messages below the threshold level of normal awareness.”²⁰⁴

Under these definitions, the specific techniques historically used to target the unconscious—for example, subvisual, subaudible, embedded—are not central to the core of subliminal messaging. That is, the key to a technique being subliminal (below threshold) is not the short duration of the visual or auditory messages—which represent a crude attempt at unconscious influence. What is most relevant, rather, is that the transmission of the advertisement is designed and intended to be perceived *unconsciously* instead of *consciously*. Consider a possible interpretation of the FCC’s definition broken into elements: (1) “Any technique” (2) “whereby an attempt is made to convey information” (3) “by transmitting messages” (4) “below the threshold of normal awareness.”²⁰⁵

First, the “any technique” element references that subliminals are not limited to the employment of a single technique (for example, subvisual or subaudible).²⁰⁶ Rather, *any* potential subliminal technique should be considered as running afoul of the FCC’s policy statement if the other elements are met. The act of branding dreams, via targeted dream incubation (TDI) methods, serves as the subliminal technique at issue in the case of dream advertising.

201. Richards & Zakia, *supra* note 157, at 107.

202. VERWIJMEREN, *supra* note 41, at 12.

203. *Subliminal Advertising*, CAMBRIDGE BUSINESS ENGLISH DICTIONARY (Cambridge University Press 2023).

204. Public Notice Concerning the Broadcast of Information by Means of ‘Subliminal Perception’ Techniques, 44 F.C.C. 2d 1016, 1017 (1974).

205. *Id.*

206. *See id.*

Second, the “whereby an attempt is made to convey information” element serves as an intent requirement.²⁰⁷ The FCC appears to be looking for an intentional, rather than negligent or reckless, effort on the part of the advertiser. Of course, any advertisement (say, a jingle) could be so catchy as to find its way into a consumer’s dream. By contrast, it is the explicit targeting of the hypnagogic period (or other parts of the sleep cycle) designed to entice consumers to dream about an advertiser’s products or services that should serve as the intent requirement in the context of branding dreams. Recall the earlier definition of branding dreams—the *intentional* targeting of the consumer sleep cycle for commercial purposes.²⁰⁸

Third, the “by transmitting messages” element infers that the intent requirement must manifest as some method of communication that impinges on the senses.²⁰⁹ In the context of branding dreams, the communication is the targeting of the hypnagogic period or other parts of the sleep cycle. This may manifest, for instance, through Molson Coors’s use of tranquil imagery before the onset of sleep coupled with its use of a soundscape throughout the night, Burger King’s having participants ingest a greasy burger at bedtime, or Xbox’s use of Hypnodyne technology to trigger lucid dreams in connection with its video game products.²¹⁰

Finally, the “below the threshold of normal awareness” element means that the message must reach the subject outside the scope of awareness. “Awareness” refers to the conscious state of wakefulness and where attention is focused. With prior forms of subliminal advertising, marketers attempted to reach the consumer unconscious during wakefulness. However, through TDI, marketers are trying to reach the unconscious during sleep, in dreams. Indeed, hypnagogia, as the first stage of the sleep cycle, is where “thoughts slip free from conscious control.”²¹¹ Moreover, sleep is definitionally a state where consciousness is lost or suspended.²¹² And cognitive

207. *See id.*

208. *See supra* notes 2-7 and accompanying text.

209. *See* Public Notice, 44 F.C.C. 2d at 1017.

210. *See supra* notes 8-18 and accompanying text.

211. Clune, *supra* note 65.

212. *Sleep*, MERRIAM-WEBSTER, <https://www.merriam-webster.com/dictionary/sleep> [<https://perma.cc/5D7R-92M3>] (“[T]he natural, easily reversible periodic state of many living things that is marked by the absence of wakefulness and by the loss of consciousness of one’s

psychology research has found, even prior to the advent of TDI, that “a subliminal stimulus registers and is recovered in dreams.”²¹³

To be sure, some definitions of subliminal messaging are narrower, and would seem to exclude dream advertising. These definitions focus on subliminal messaging as referring to the bypassing of consciousness purely during waking states and using specific methods for doing so. Some definitions along these lines include: Judge Whitehead in *Vance v. Judas Priest* defined subliminal advertising “as the projection of messages by light or sound so quickly or faintly that they are received by the listener below the level of conscious awareness.”²¹⁴ This definition alluded to the immediate subject matter at hand—lyrics that were recorded so faintly that they evaded conscious awareness. The Bureau of Alcohol, Tobacco and Firearms (ATF), in adopting restrictions on subliminal advertisements for alcohol, defined subliminals rather narrowly: “Subliminal or similar techniques, as used in this subpart, refers to any device or technique that is used to convey, or attempts to convey, a message to a person by means of images or sounds of a very brief nature that cannot be perceived at a normal level of awareness.”²¹⁵

Where subliminal advertising has been defined strictly according to prior subvisual, subaudible, and embedded techniques, it is possible that these authorities did not mean to intentionally cabin subliminal messaging to a narrow range of techniques on principle. Rather, perhaps they simply did not envision future methods of subliminal messaging such as TDI. Due to these limitations on technological foreseeability, subliminal advertising came to refer, in certain scenarios, only to the prior subaudible or subvisual practices.²¹⁶

But as discussed in the previous section, the practice of branding dreams is the natural evolution of these subliminal advertising techniques. As subliminal advertising’s psychoanalytic roots indicate, dream advertising is not conceptually separate from other forms of subliminal manipulation. Rather, it is simply a new technique spun from the same depth psychology fabric as predecessor

surroundings.”).

213. Shevrin, *supra* note 158, at 393.

214. *Vance*, 1990 WL 130920, at *5.

215. 27 C.F.R. § 5.235 (internal quotations omitted).

216. *But see* Simon Ruch, Marc Alain Züst & Katharina Henke, *Subliminal Messages Exert Long-term Effects on Decision-Making*, 2016 NEUROSCI. CONSCIOUS. 1, 1 (2016).

subliminal methods. Like other subliminals, dream advertising bypasses conscious awareness through “manipulation of the threshold of consciousness itself.”²¹⁷ Here, the threshold of consciousness is explicitly targeted not by subvisual, subaudible, or embedded means, but through exploitation of the hypnagogic period or other parts of the sleep cycle. According to sleep and dream researchers:

The use of our dreamscape as advertising space is essentially what people feared [prior methods of] subliminal marketing might be. Stimuli delivered during sleep can influence people without their being able to assess those stimuli. And it is far easier to deliver such information during sleep than during the milliseconds-long window that [subvisual and subaudible] subliminal stimuli must fit into.²¹⁸

While this Part has focused descriptively, from a normative perspective it also makes sense to define subliminal advertising broadly enough to encapsulate dream advertising, thus viewing branding dreams as an inherently deceptive practice targeting the unconscious mind. As will be discussed in the next Part, there are serious individual and societal harms associated with dream advertising including from the perspectives of health, privacy, liberty, economics, and culture.

III. THE HARMS OF BRANDING DREAMS

[N]ow a visual ad was forming; he winced, closed his eyes, but it did no good.

- Philip K. Dick, *Sales Pitch*²¹⁹

While it is tempting to write off previous instances of dream advertising as harmless fun, prominent sleep and dream researchers believe otherwise. As Robert Stickgold puts it: “They’re trying to push an addictive drug on people who are [naïve] to what’s being done to them. I don’t know if it can get much worse than that.”²²⁰

217. Schiller, *supra* note 170, at 338.

218. *Dreamscape*, *supra* note 2.

219. DICK, *Sales Pitch*, *supra* note 5, at 212.

220. Gabbatt, *supra* note 6 (quoting Robert Stickgold).

And as sleep researcher Sara Mednick frames the issue: “[D]reams are our last sacred space.... We’re super vulnerable during our sleep and we may not even know we’re being exposed to these techniques.”²²¹

This Part will identify several harms flowing from the practice of branding dreams—some dealing with current scenarios, and others relating to future, hypothetical possibilities. These include concerns relating to (1) health, (2) privacy, (3) liberty, (4) economics, and (5) cultural concerns. This Part also discusses the issue of whether one should be able to consent to commodification of their dreamscape and, if so, what degree of consent should be required. The main takeaway is that dream advertising—in any of its current or future forms—represents a disturbing commercial intrusion into the unconscious mind.

A. Harms

1. Health

The practice of branding dreams exploits human biological processes—dreams and sleep—for industrial and commercial gain. This comes with certain health-related risks, both physical and mental. To the extent addictive products are the subject of dream marketing, branding dreams could worsen addiction. Dream advertising also risks interfering with the natural sleep cycle. According to sleep and dream researchers, “dream hacking [is] a potential threat to our memories and [our] very sense of self—a sense defined in large part by the autobiographical memories that we stabl[ize] and integrate during sleep.”²²²

As to the addiction issue, consider that in the cigarette study referenced in Part I, participants exposed during their sleep to the odor of rotten eggs along with cigarettes smoked 30 percent fewer cigarettes during the next week.²²³ Thus, TDI has great promise as a treatment for addiction. While still untested, it is not much of a leap to conclude, on the one hand, that branding dreams could also

221. Crockett, *supra* note 6 (quoting Sara Mednick).

222. *Dreamscape*, *supra* note 2.

223. *Now What?*, *supra* note 2.

worsen addiction.²²⁴ In the cigarette study, “not only was the intervention effective in sleep (yet ineffective when the smells were presented during wakefulness), but participants reported no memory of being exposed to these smells in the morning.”²²⁵ This lack of reported memory of exposure to the addictive stimulus is of particular concern in the dream advertising context.²²⁶ Indeed, the Molson Coors study operated much like the inverse of the cigarette study. Rather than pairing cigarettes with an odor, the company paired beer with tranquil organic imagery.²²⁷ In this way, Molson Coors’s use of TDI could well harm abstinent alcoholics given that hypnagogic manipulation biases “the brain’s decisions toward whatever information was presented during sleep.”²²⁸ And research has demonstrated among those who are abstinent, but have used drugs in the past, that dreaming about drug use was correlated with higher levels of craving than those who did not dream about drug use.²²⁹ Likewise, the Xbox and Burger King dream advertisements may similarly contribute to participants’ possible addictions to video games or fast food.

In addition to potentially worsening addiction, dream researchers emphasize that dream marketing for profit may come at the expense of “interfering with our natural nocturnal memory processing.”²³⁰ The long-term consequences of intruding upon the sleep cycle in this way are not yet known. Moreover, this fear would be enhanced if dream advertising becomes paired with other technological devices, as theorized in Part I. For example, sleep data collected voluntarily or involuntarily could conceivably be offered to companies selling sleep aids or other pharmaceuticals. Imagine that after a restless night—perhaps having been fed nighttime distractions—one awakens to find targeted advertisements on their internet searches

224. *Id.* (“Researchers have not yet tested whether TDI can worsen addiction, but the Coors study, which paired images of beer cans not with odious smells but with images of clean mountain streams, may shine a disturbing light on this question.”).

225. *Id.*

226. *Id.* (“The potential for misuse of these technologies is as ominous as it is obvious.”).

227. *Id.*

228. *Id.*

229. See Hélène Tanguay, Antonio Zadra, Daniel Good & Francesco Leri, *Relationship Between Drug Dreams, Affect, and Craving During Treatment for Substance Dependence*, 9 J. ADDICTION MED. 123, 123 (2015).

230. *Now What?*, *supra* note 2.

for sleep medications such as Ambien or Lunesta.²³¹ And in such a scenario, because “sleep loss is known to increase risk-taking behavior, one might expect to be hit with targeted advertising for online gambling.”²³² Evidence links poor sleeping habits to sugar intake too, so advertisements for candy or sugary beverages could be triggered.²³³ Haar, Stickgold, and Zadra speculate as to this hypothetical manipulation:

[T]aking a cue from the research on changing candy preferences during naps [referenced in Part II.B], one can easily imagine a musician collaborating with the manufacturer of Skittles to offer an hour-long nap soundtrack that incubates psychedelic candy dreams. Consumers could get half-off on candy just for listening to a relaxing nap soundtrack, and there might be no legal requirement for clear informed consent about how the incubation could drive purchasing behavior.

Candy in hand, perhaps you would want to watch a show while you snack. A promotion with Netflix could mean your subscription comes with dream-incubation stimuli as well, enabling dreams related to the new show after you binge-watch until bedtime, all while measures of sleep quality—including changes in your breathing and heart rate during dreams—tell advertisers whether these stimuli were well received and how to target and tailor future advertisements. This would almost certainly *not* be what you thought you were agreeing to when you gave your consent for the recording of your sleep.²³⁴

2. Privacy

Dreams may be the final privacy frontier—a fallback refuge for privacy and autonomy in the age of informational capitalism.²³⁵ The practice of branding dreams represents an unprecedented intrusion

231. *Dreamscape*, *supra* note 2.

232. *Id.*

233. *Id.*

234. *Id.*

235. See, e.g., Ari Ezra Waldman, *Privacy Law's False Promise*, 97 WASH. U. L. REV. 773, 776 (2020) (explaining that despite increasing regulations, people's privacy is now in more danger than ever); Christopher Mims, *Privacy is Dead. Here's What Comes Next*, WALL ST. J. (May 6, 2018, 8:00 AM), <https://www.wsj.com/articles/privacy-is-dead-heres-what-comes-next-1525608001> [<https://perma.cc/Z97S-YQW8>].

into the mind of the consumer, being the first corporate technology to explicitly engineer the mind's inner space during sleep. As such, dream advertising represents surreal forms of *digital manipulation*—"the ability of data collectors to use information about individuals to manipulate them"²³⁶ and *surveillance capitalism*—"claim[ing] human experience as free raw material for translation into behavioral data."²³⁷

As explored in the last Part, dream advertising is ostensibly a form of subliminal advertising—"the use of stimuli that are presented outside of awareness with the intention to influence consumer behavior."²³⁸ Considering its unconscious transmission, dream advertising inevitably leads to the manipulation of consumer behavior. As with other forms of subliminal advertising, individuals subject to dream advertising are not able to make an autonomous, conscious choice in receiving, interpreting, and/or acting on the unconscious branded dreams.²³⁹ To make matters worse, "sleep likely represents a unique period during which preferences and choices that are otherwise stable can be selectively modified by external cues."²⁴⁰

In literally capitalizing on the vulnerability of sleep and especially the sleep onset period, the practice of branding dreams is a distinctive invasion of mental autonomy.²⁴¹ The right to privacy is broad enough to encompass mental privacy. Mental privacy protects

236. Daniel Sussler, Beate Roessler & Helen Nissenbaum, *Technology, Autonomy, and Manipulation*, 8 INTERNET POL'Y REV. 1 (2019); see Ryan Calo, *Digital Market Manipulation*, 82 GEO. WASH. L. REV. 995, 995 (2014) (explaining how technology companies purposely exploit the cognitive limitations of consumers).

237. ZUBOFF, *supra* note 129, at 16; cf. JULIE E. COHEN, BETWEEN TRUTH AND POWER: THE LEGAL CONSTRUCTIONS OF INFORMATIONAL CAPITALISM 5-6 (2019) (quoting sociologist Manuel Castells, explaining that capitalism "'is oriented toward profit-maximizing, that is, toward increasing the amount of surplus appropriated by capital on the basis of the private control over the means of production and circulation,' while informationalism 'is oriented ... toward the accumulation of knowledge and toward higher levels of complexity in information processing'").

238. VERWIJMEREN, *supra* note 41, at 12.

239. See *supra* Part II.

240. Ai et al., *supra* note 86, at 11.

241. See *Vance v. Judas Priest*, No. 86-3939, 1990 WL 130920, at *32 (Nev. Dist. Ct. Aug. 24, 1990) (holding subliminal communication to be a violation of an individual's right of privacy); see also Eric L. Locke, *The Vance Decision: The Future of Subliminal Communication*, 15 L. & PSYCH. REV. 375, 391-92 (1991) ("Privacy is invaded when an individual no longer has the ability to avoid hearing or seeing the offending communication.").

mentation, including one's thoughts, perceptions, moods, and dreamscape.²⁴² Like other forms of subliminal messaging, branding dreams breaches mental privacy safeguards because it is designed to affect an individual's behavior without their conscious awareness, potentially subjecting them to thoughts that are unwanted or which they lack autonomous control over.²⁴³ This is certainly the case regarding passive overnight advertising without cooperative subjects. But even in cases where subjects consent in the waking world to dream advertising (as in the Molson Coors study), those individuals still have no control over their resulting dream content once in the hypnagogic or unconscious mental states.²⁴⁴

Consider that Bobbi Gould, one of the participants in the Molson Coors dream advertisement experiment, was paid one thousand dollars to participate.²⁴⁵ She later said, though, that her participation made her feel like a "lab rat" and felt that Molson Coors was "trying to implant Coors into our brains It just didn't really sit right."²⁴⁶ While Gould may have agreed to participate in the experiment, it is not clear that she was given proper informed consent or a follow-up check after doing so.²⁴⁷ And while Gould agreed to *receive* the dream advertisement, her conscious mind had little control in interpreting or acting upon the unconscious messaging.²⁴⁸

At least to the extent that dream advertising were to occur involuntarily, it would appear to be a violation of the intrusion on seclusion tort: "One who intentionally intrudes, *physically or otherwise*, upon the solitude or seclusion of another or his private affairs or concerns, is subject to liability to the other for invasion of his privacy, if the intrusion would be highly offensive to a reasonable person."²⁴⁹ Indeed, dream advertising, to the extent employed as an

242. *Rennie v. Klein*, 462 F. Supp. 1131, 1144 (D.N.J. 1978) ("The right of privacy is broad enough to include the right to protect one's mental processes from governmental interference.").

243. *See Vance*, 1990 WL 130920, at *30.

244. *See Clune*, *supra* note 65 (noting that "hypnagogia, the first stage of sleep, [is] where thoughts slip free of conscious control"); *Stern*, *supra* note 8.

245. *Al-Sibai*, *supra* note 101.

246. *Id.*

247. *See id.*

248. *See id.*

249. RESTATEMENT (SECOND) OF TORTS, § 652B (AM. L. INST. 1977) (emphasis added); *see Vance*, 1990 WL 130920, at *10 (explaining that a cause of action involving subliminal

unwanted but effective form of subliminal advertising, is “the ultimate invasion of a person’s privacy—[their] mind.”²⁵⁰

3. *Liberty*

Branding dreams may be thought of as a threat to liberty interests as well as to privacy. Cognitive liberty is the theorized right to mental self-determination.²⁵¹ As a matter of liberty, individuals should be able to govern their own “inner realm” and control their own mental functions.²⁵²

As Wrye Sententia and Richard Glen Boire define it, “the right of each individual to think independently and autonomously, to use the full power of his or her mind, and to engage in multiple modes of thought.”²⁵³ Cognitive liberty is perhaps a “penumbra right” of the freedom of thought, which the Supreme Court has noted is axiomatic and fundamental on multiple occasions.²⁵⁴

While cognitive liberty is often thought to be the right of an individual to be free from state mental interference (such as unjust

messaging “consists of the *intentional* interference with another’s interest in solitude or seclusion”); Bliss, *supra* note 154, at 427-29 (making out the elements of the privacy tort case for subliminals).

250. J.E. Gratz, *The Ethics of Subliminal Communication*, 3 J. BUS. ETHICS 181, 181 (1984).

251. See Jan-Christoph Bublitz, *My Mind is Mine!? Cognitive Liberty as a Legal Concept*, in COGNITIVE ENHANCEMENT: AN INTERDISCIPLINARY PERSPECTIVE 233, 236 (Elisabeth Hildt and Andreas Francke eds., 2013); Nita A. Farahany, *The Costs of Changing Our Minds*, 69 EMORY L.J. 75 (2019); see also Dustin Marlan, *Beyond Cannabis: Psychedelic Decriminalization and Social Justice*, 23 LEWIS & CLARK L. REV. 851, 880-84 (2019).

252. Jan Christoph Bublitz & Reinhard Merkel, *Crimes Against Minds: On Mental Manipulations, Harms and a Human Right to Mental Self-Determination*, 8 CRIM. L. & PHIL. 52, 60 (2014).

253. Derek Beres, *Scientists Urge UN to Add ‘Neuro-Rights’ to Universal Declaration of Human Rights*, BIG THINK (Dec. 9, 2020) (quoting Sententia and Boire), <https://bigthink.com/neuropsych/neuro-rights/> [<https://perma.cc/5HJT-XSQY>].

254. See *Palko v. Connecticut*, 302 U.S. 319, 326-27 (1937) (“[F]reedom of thought and speech ... is the matrix, the indispensable condition, of nearly every other form of freedom.”); *Stanley v. Georgia*, 394 U.S. 557, 565 (1969) (“Our whole constitutional heritage rebels at the thought of giving government the power to control men’s minds.”); *Ashcroft v. Free Speech Coalition*, 525 U.S. 234, 253 (2002) (“The right to think is the beginning of freedom, and speech must be protected from the government because speech is the beginning of thought.”); *Lawrence v. Texas*, 539 U.S. 558, 562 (2003) (“Liberty presumes an autonomy of self that includes freedom of thought, belief, expression, and certain intimate conduct.”).

government prohibitions on access to mind-altering substances),²⁵⁵ its principles have also been extended to dealing with mental intrusions by private actors as well. Jan Christoph Bublitz and Reinhard Merkel have proposed a criminal law punishing “interventions severely interfering with another’s mental integrity by undermining mental control or exploiting pre-existing mental weaknesses.”²⁵⁶ And Matthew Lawrence proposes a “right to freedom from addiction” as a facet of cognitive liberty, citing the addictive nature of private technologies like social media.²⁵⁷

The intrusion into dream states by corporations can be seen to represent a taking of the unconscious mind’s cognitive liberty. This is true, certainly, if the practice is thrust upon people involuntarily, overnight, passively, through technological devices. But even if “consented to”—as with Molson Coors, Xbox, and Burger King—the practice is still problematic. To the extent that people are allowed to volunteer to be subject to dream advertisements in exchange for money or free products, those who choose to do so are likely to be less affluent, less educated, and more addicted to the related products than those who have the luxury, privilege, or free will to refuse.²⁵⁸ In the context of technology that can decode brain activity, Nita Farahany notes along these lines, “I worry that we will voluntarily or involuntarily give up our last bastion of freedom, our mental privacy. That we will trade our brain activity for rebates or discounts on insurance, or free access to social media accounts, or even to keep our jobs.”²⁵⁹ In much the same sense, we might choose to sacrifice our dreams as mere commodities.

255. See generally Marlan, *supra* note 251.

256. Bublitz & Merkel, *supra* note 252, at 68.

257. Lawrence, *supra* note 136, at 259-60 (“We live in an era of psychological domination in which profound, pervasive threats to liberty work not through physical constraint but through mental compulsion.”).

258. See NITA A. FARAHANY, *THE BATTLE FOR YOUR BRAIN: DEFENDING THE RIGHT TO THINK FREELY IN THE AGE OF NEUROTECHNOLOGY* 166 (2023) (explaining that “when a person or entity tries to override our will by making it exceedingly difficult to act consistently with our desires, and they act with the intention to cause actual harm, they violate our freedom of action, and our right to cognitive liberty should be invoked as a reason to regulate their conduct”).

259. Nita Farahany, *When Technology Can Read Minds, How Will We Protect our Privacy?*, TED (Nov. 2018), https://www.ted.com/talks/nita_farahany_when_technology_can_read_minds_how_will_we_protect_our_privacy [<https://perma.cc/96TV-UJ3H>] (stating these concerns at the 05:22 mark).

4. *Economic*

Branding dreams also poses a problem from the perspective of the marketplace. The application of economics to the analysis of law is based on the “unifying principle” of rationality as achieving economic efficiency.²⁶⁰ Under this view, “truthful advertising is not anticompetitive, but rather an important tool for *enhancing* the competitive market.”²⁶¹ Dreams on the other hand, are inherently irrational given their lack of logic and coherence.²⁶² The bizarre nature of dreams renders dream advertising highly unreliable as a vehicle for making literal truthful claims for the purpose of advertising. Dreams are surreal in nature:

Dreams unfold. We walk, run, fly and float through strange landscapes. Characters appear and turn into different people. Objects are transformed. A rope becomes a snake. Uncle Harry turns into a Tibetan monk and it all makes sense in some screwy, dreamlike way.²⁶³

The unreliability of dream advertising is wholly inefficient. It is never clear how the advertiser’s hypnagogic prompt will translate to the subject’s dreams (that is, the real commercial), and what type of (dis)information will be the subject of their resulting dream mentation. And while the subject matter of the hypnagogic stimuli (for example, video clip or soundscape) can be tracked, its effect on hypnagogia and the unconscious mind is subjective and unpredictable. Indeed, dreams are bound to deceive.

Consumers may act on dream advertisements without even realizing they are doing so, making precise measurement impossible. Like other forms of subliminal messaging, dream advertising

260. Ellen R. Jordan & Paul H. Rubin, *An Economic Analysis of the Law of False Advertising*, 8 J. LEGAL STUD. 527, 527 (1979).

261. Jean Wegman Burns, *Confused Jurisprudence: False Advertising Under the Lanham Act*, 79 B.U. L. REV. 807, 823 (1999).

262. See Serena Scarpelli, Chiara Bartolacci, Aurora D’Atri, Maurizio Gorgoni & Luigi De Gennario, *The Functional Role of Dreaming in Emotional Processes*, FRONTIERS PSYCH., Mar. 2019, at 10, 11.

263. Sara Blakeslee, *Clues to the Irrational Nature of Dreams*, N.Y. TIMES (July 12, 1994), <https://www.nytimes.com/1994/07/12/science/clues-to-the-irrational-nature-of-dreams.html> [<https://perma.cc/2XT8-HPKH>].

“operate[s] on a level totally disconnected with the conscious message or perception of the advertisement. The rational marketplace ... is intentionally undermined.”²⁶⁴ It is for at least this reason that subliminal messaging is generally thought unentitled to First Amendment protection—as occurring below the threshold of consciousness, the practice can further no rational dialogue, economic or otherwise.

5. *Cultural*

In adopting the technique of dream incubation, branding dreams commodifies the once sacred space of dreams, potentially leading to the dilution of culture and of the subjective, conscious experience. Though Western popular culture is largely disenchanting by sleep and dreams, “[v]irtually every religious tradition throughout history has looked to dreams for revelations into the divine, for guidance from the gods, and for spiritual insights and values.”²⁶⁵ Not limited to organized religion, dreams can shape our conception of the cosmos, our understanding of death, and the intersection between the secular and divine.²⁶⁶ The images found in dreams transcend time and culture.²⁶⁷ These themes have been referred to as “religious,” “cosmic,” or “archetypal” symbols, or perhaps “root metaphors.”²⁶⁸ The act of branding dreams serves to commodify these sacred symbols and insights, potentially leading to the further fetishization of brands and the dilution of culture.²⁶⁹ Advertising symbols and messages take the place of, or disfigure, naturally occurring symbols of the unconscious. And given that dream incubation is an Indigenous practice, its use in furtherance of a surreal form of capitalism serves as a garish form of cultural appropriation.²⁷⁰

264. See Schiller, *supra* note 170, at 338.

265. Kelly Bulkley, *Dreams, Spirituality, and Root Metaphors*, 31 J. RELIGION & HEALTH 197, 197 (1992).

266. ZADRA & STICKGOLD, *supra* note 46, at 2.

267. MLODINOV, *supra* note 151, at 8.

268. Bulkley, *supra* note 265, at 197, 199.

269. Katya Assaf-Zakharov has written extensively on this topic in regard to brands generally. See Katya Assaf, *Brand Fetishism*, 43 CONN. L. REV. 83, 147-48 (2010); Katya Assaf, *Magical Thinking in Trademark Law*, 37 L. & SOC. INQUIRY 595, 596 (2012); Katya Assaf, *The Dilution of Culture and the Law of Trademarks*, 49 IDEA 1 (2008).

270. See *supra* notes 19, 54-56 and accompanying text.

Further, branding dreams represents the elimination of the last “natural barrier” to “24/7” capitalism—potentially replacing the natural state of sleep and dreams with an ersatz, consumption-focused simulacrum. As Jonathan Crary writes in his essay, *24/7: Late Capitalism and the Ends of Sleep*:

Sleep is an uncompromising interruption of the theft of time from us by capitalism. Most of the seemingly irreducible necessities of human life—hunger, thirst, sexual desire, and recently the need for friendship—have been remade into commodified or financialized forms. Sleep poses the idea of a human need and interval of time that cannot be colonized and harnessed to a massive engine of profitability.²⁷¹

Until now, it seems. In any of its current or future forms, it is this seeking of the elimination of the sleep-commerce barrier and intentional venture into around-the-clock commodification that is the true nightmare of dream advertising.

B. Power and Consent

Dream advertising appears to be the first time the issue has been considered as to whether dreams should be legally capable of commodification—referring to the social practice of turning things into products that can be bought, sold, or rented in the market.²⁷² If we do not explicitly prohibit the dreamscape from being commodified, the practice of branding dreams may continue to be legitimized through the seeking of consumers’ consent. For many aspects of life, consent legitimizes what was previously illegal and turns it into something legal. Heidi Hurd has referred to this as a sort of

271. JONATHAN CRARY, *24/7: LATE CAPITALISM AND THE ENDS OF SLEEP* 10-11 (2013).

272. Commodification has been categorized into two forms: (1) complete commodification where there are no restrictions; and (2) incomplete commodification where there are restrictions, often for “moral, social, economic, or political reasons.” David B. Resnik, *The Commodification of Human Reproductive Materials*, *J. MED. ETHICS* 388, 388 (1998). A wide variety of things fall under this second form such as, on the more controversial end, the sale of human beings including body parts or sexuality and reproductive capacity including sex work, baby-selling, and surrogacy. Yet on the other end, there is also discussion over the commodification of cultures, holidays, and well-being. See Margaret Jane Radin, *Market-Inalienability*, 100 *HARV. L. REV.* 1849, 1852 (1987).

“moral magic,” capable of turning “a trespass into a dinner party; a battery into a handshake; a theft into a gift; an invasion of privacy into an intimate moment; a commercial appropriation of name and likeness into a biography.”²⁷³

However, there are some things that are beyond consent. We are unable to consent to being enslaved, or to involuntary servitude, or to selling a child. We cannot consent to sex if in a coma or other unconscious state. We are not able to consent to being murdered, or to certain types of assault. Many substances, such as heroin for instance, are illegal no matter whether consent is offered for their purchase. Thus, as an issue of first impression, it should at least be an open question as to whether tampering with dreams by commercial actors should be legally allowed, even with the voluntary consent of subjects.

A major fear regarding dream advertising is that eventually it will occur passively and involuntarily, without our conscious knowing, through various technological advances. However, the previous instances have all involved voluntary subjects, who acquiesced to the advertising experiments in the case of Molson Coors, Burger King, and Xbox. Perhaps even these examples are problematic, though, given the venture into dream-based commerce. As Anita Allen notes, in certain instances, privacy—as a “foundational human good”—should be mandated: “[F]or the sake of foundational human goods, liberal societies properly constrain both government coercion and individual choice.”²⁷⁴ And Daniel Solove explains:

The law tolerates a widescale freedom in contracting, but it does not allow all transactions, even if consensual. Certain rights are inalienable. Contracts can be void for public policy when they involve certain immoral, troublesome, or dangerous acts. Privacy is not solely an individual interest; it has a social value and is an essential part of the fabric of a free and democratic society. This fact does not mean that privacy should be inalienable; but when one person’s choices affect others or cause damage to society, there is a societal interest that must be considered.²⁷⁵

273. Heidi M. Hurd, *The Moral Magic of Consent*, 2 LEGAL THEORY 121, 123 (1996).

274. ANITA L. ALLEN, UNPOPULAR PRIVACY: WHAT WE MUST HAVE 13 (2011).

275. Daniel J. Solove, *Murky Consent: An Approach to the Fictions of Consent in Privacy Law*, 104 B.U. L. REV. (forthcoming 2024) (manuscript at 48), <https://papers.ssrn.com/>

Prohibiting an act that has potential value to the individual or to society might be overly paternalistic in other contexts, such as certain facets of information privacy, where even staunch advocates of privacy generally admit that there really is social value to many forms of data collection and analysis.²⁷⁶ However, the social value of the practice of branding dreams is particularly low, and the dangers rather high. We do not yet understand the potential long-term consequences of commodifying the sleep cycle and dreamscape. Dream advertising might exacerbate addiction and addictive tendencies. The practice of branding dreams is highly manipulative and ethically dubious at best. It is culturally appropriative of Indigenous dream incubation techniques. Dream advertising represents a boundary crossing into a manipulative and surreal form of surveillance capitalism. It is not unreasonable to claim, therefore, that dream commodification is simply not a path society should go down and therefore should be prohibited regardless of consent. Consent in the case of highly manipulative technologies causing social harm, as Solove writes in playing on Hurd's analogy, operates as a sort of "dark magic; it is a mischievous sorcery that distorts and disrupts."²⁷⁷

We might then preserve the liberty of the collective mind to be free from unconscious advertisements as an absolute matter, even recognizing that we would admittedly be trading off the individual liberties of those individuals who truly desire to have their dreams branded by corporate entities. And for those individuals who might even prefer commercialized dreams to their organic nightmares, therapeutic rather than commercial uses of TDI are probably superior. There is likely more social and individual value in prohibiting dream advertising as a practice versus the autonomy gained by allowing consumers to consent to having their dreams branded by corporate actors.

sol3/papers.cfm?abstract_id=4333743 [https://perma.cc/6TJD-25LW].

276. Daniel J. Solove, *Introduction: Privacy Self-Management and the Consent Dilemma*, 126 HARV. L. REV. 1880, 1896 (2012) ("[T]here are social benefits to data analysis."). See generally ORLY LOBEL, *THE EQUALITY MACHINE: HARNESSING DIGITAL TECHNOLOGY FOR A BRIGHTER, MORE INCLUSIVE FUTURE* (2022) (discussing the upsides of digital technologies, including the collection of data).

277. Solove, *supra* note 275, at 6.

And troublingly, the public does not seem to be highly concerned by dream advertising, at least not yet. In the 2021 American Marketing Association “Future of Marketing” survey previously mentioned, of five hundred consumers surveyed, about 32 percent were opposed to the use of dream advertising, about 30 percent were unsure, and the remainder—about 38 percent—were in favor of it.²⁷⁸ This is perhaps reflective of a troubling reality where the public willingly accepts the exploitation of their dreams in exchange for discounts, attention, or otherwise. On this front, dream researchers Stickgold, Zadra, and Haar remark:

What have we lost when we become so collectively inured to invasions of our privacy and to exploitative economic practice that we would accept a 12-pack for the placement of beer advertising into our dreams? ... [it reflects] a diminished awareness of just how important sleep and dreams are—how they play a crucial, constructive role in our wellbeing and daytime behavior.²⁷⁹

Given such lack of awareness, the public appears particularly vulnerable to manipulation in this nascent area.

If dream advertising is not flatly prohibited, the issue then becomes the level of consent that should be required for advertising experiments, such as the Molson Coors Superbowl dream ad. Perhaps no adequate consent can even be given to dream advertising because the true dream advertisement, as distinct from the hypnagogic stimulus, is created during the dream itself. The commercialized dream output (in other words, sleep mentation) bypasses the brain’s conscious processes. This is so even if during waking hours the subject voluntarily consents to the input (in other words, the hypnagogic stimulus). Can the conscious mind consent for the unconscious mind? The answer to that question is not obvious given that the awake subject is “not *aware* of what is happening in the recesses of his or her mind.”²⁸⁰

278. See *Dreamscape*, *supra* note 2 (citing AMA Survey, CHARNEY & KAWLES, *supra* note 28).

279. *Id.*

280. Richards & Zakia, *supra* note 157, at 113; see also Laura R. Salpeter & Jennifer I. Swirsky, *Historical and Legal Implications of Subliminal Messaging in the Multimedia:*

At least then, a level of consent mirroring informed consent in the medical context should be required for dream advertising involving TDI techniques rather than the low level of express consent required in the information collection or consumer protection contexts.²⁸¹ This standard, mandated by the Office for Human Research Protections, would involve debriefing participants—whether in person or online—on such “elements” as: “[a] statement that the study involves [TDI] research”; “[a]n explanation of the purposes of the research”; “[t]he expected duration of the subject’s participation”; “[a] description of the procedures to be followed”; “[i]dentification of any procedures which are experimental”; “[a] description of any reasonably foreseeable risks or discomforts to the subject”; “[a] description of any benefits to the subject or to others which may reasonably be expected from the research”; and “[a]n explanation as to whether any compensation, and an explanation as to whether any medical treatments are available, if injury occurs, and, if so, what they consist of, or where further information may be obtained.”²⁸² It is not clear to what extent Molson Coors, Xbox, or Burger King followed such procedures, or the degree to which they followed up with any participants after the conclusion of the dream advertisements.

Unconscious Subjects, 36 NOVA. L. REV. 497, 518 (2012) (“Is there really a way to know if a person fully consents to a message when they do not know what it involves? Further, although an individual may consent to hearing the message, he or she has not consented to the effect the subliminal will have on his or her behavior in the future, or throughout his or her entire life.”).

281. See Jeffrey P. Spike, *Informed Consent is the Essence of Capacity Assessment*, 45 J.L. MED. & ETHICS 95, 95 (2017) (“Informed consent is the single most important concept for understanding decision-making capacity.”); Gary Burkhardt, Frederic Boy, Daniele Doneddu & Nick Hajli, *Privacy Behaviour: A Model for Online Informed Consent*, J. BUS. ETHICS 1, 1 (2022) (“Informed consent to personal data processing has its roots in and derives its core meaning from the domains of medicine and research.”).

282. Off. Hum. Rsch. Prots., *Informed Consent Checklist*, U.S. DEPT HEALTH & HUM. SERVS. (1998), <https://www.hhs.gov/ohrp/regulations-and-policy/guidance/checklists/index.html> [<https://perma.cc/8J42-XAYG>].

IV. THE DECEPTIVENESS OF BRANDING DREAMS

The real question is not: How many ads do we see? The real question is: What do we have to do to see no ads? And the answer is: go to sleep...

- James B. Twitchell²⁸³

Despite the increasingly intrusive reach of commercial persuasion,²⁸⁴ most advertising in the United States is not subject to exacting regulations.²⁸⁵ Deceptive and unfair acts or practices, including false advertisements, are an exception to this laissez-faire approach to advertising regulations under Sections 5 and 12 of the Federal Trade Commission (FTC) Act.²⁸⁶ This Part provides an overview of how, given its subliminal deceptiveness, at least certain prospective instances of dream advertising could (and should) be actionable by the FTC.

Some caveats are in order, and much will depend upon considerations of consent. Depending on whether voluntary consent by participants is deemed to render past instances of dream advertising non-deceptive and therefore legal, it may be that only hypothetical instances of dream advertising—involving passive, technology enabled overnight advertising—are subject to FTC enforcement. However, to the extent that consent (or a certain level of consent) to dream advertising practices is deemed insufficient, then even variations on the Molson Coors, Xbox, and Burger King examples could be the subject of enforcement by the FTC.

283. Quoted in the opening epigraph of *Branded Dreams—The Future of Advertising*, a short film by Studio Smack. See Savov, *supra* note 144.

284. See BARTHOLOMEW, *supra* note 33, at 4 (“[T]he insistent creep of invasive advertising is taken as a given in most quarters, a tax that has to be paid for life in the modern world.”).

285. Jennifer L. Lemanski, *Traditional and Emerging Ethical Concerns in Advertising*, ANNALES. ETHICS ECON. LIFE 21 (2018). This laissez-faire approach to advertising regulation has not long been the norm, however. See Ramsi A. Woodcock, *The Obsolescence of Advertising in the Information Age*, 127 YALE L.J. 2270, 2272 (2018) (“[A]s late as the 1970s the [FTC] viewed [even] non-false, non-misleading advertising as anticompetitive conduct capable of violating the antitrust laws.”).

286. See Federal Trade Commission (FTC) Act § 5, 15 U.S.C. § 45; FTC Act § 12, 15 U.S.C. § 52. In addition to the FTC Act, the Lanham Act also has provisions governing false advertising. See Lanham Act, § 43(a), 15 U.S.C. 1125(a).

Moreover, FTC enforcement is not intended to be the only possible remedy regarding the harms of dream advertising, to the extent its practice continues among marketers. The FTC's resources are limited, and the agency enforces against only a small number of unfair and deceptive acts and practices (though it threatens enforcement against far more entities). The harms of dream advertising articulated in the previous Part provide sound justifications for legislation regulating the branding of dreams, to the extent the practice continues.²⁸⁷ Novel and specific regulations on dream advertising may be welcome and helpful in taking notice of the harms that could result from exploitation of dreams by advertisers. These regulations could include, for example, a congressional bill explicitly prohibiting dream advertising or mandating an informed consent standard for branding dreams. Or, they could be part of the enactment of a broader right to cognitive liberty designed to protect mental processes against neurotechnology and artificial intelligence being designed to read "correlates of mental states including hidden intentions, visual experiences or even dreams."²⁸⁸

However, such novel regulations may not be politically feasible, especially considering current legislative gridlock and other inaction. But under the progressive stance taken by current Chairperson Lina Khan, the FTC has been receptive to taking on manipulative technologies.²⁸⁹ Given this political climate, this Part therefore focuses on FTC enforcement, arguing that branding dreams constitutes a subliminal technique, and thus a deceptive advertising practice under Section 5 of the FTC Act.

287. See *supra* Part III.A.

288. Marcello Ienca, *Do We Have a Right to Mental Privacy and Cognitive Liberty?*, SCIENTIFIC AMERICAN: OBSERVATIONS BLOG (May 4, 2017), <https://blogs.scientificamerican.com/observations/do-we-have-a-right-to-mental-privacy-and-cognitive-liberty/> [<https://perma.cc/PWG5-2RUG>] (citing T. Horikawa, M. Tamaki, Y. Miyawaki & Y. Kamitani, *Neural Decoding of Visual Imagery During Sleep*, 340 SCIENCE 639 (2013)).

289. Khan's progressive ideology is reflected in her "New Brandeisian" approach to antitrust. See Lina M. Khan, *Amazon's Antitrust Paradox*, 126 YALE L.J. 710 (2017). It is also reflected in the enforcement actions the FTC has undertaken recently. See, e.g., Press Release, *FTC Seeks to Block Virtual Reality Giant Meta's Acquisition of Popular App Creator Within*, FED. TRADE COMM'N (July 27, 2022), <https://www.ftc.gov/news-events/news/press-releases/2022/07/ftc-seeks-block-virtual-reality-giant-metas-acquisition-popular-app-creator-within> [<https://perma.cc/5LD7-LLPB>] (alleging that Meta and CEO Mark Zuckerberg are attempting illegal acquisition to expand virtual reality empire).

A. *FTC Deceptive Advertising Guidelines*

The FTC was established in 1914 through the Federal Trade Commission Act of 1914 (the “FTC Act”) as a vehicle for combating unfair competition and acts or practices affecting commerce.²⁹⁰ Its twin aims are to protect consumers and to promote competition.²⁹¹ The original text of Section 5 of the FTC Act provided that “unfair methods of competition in commerce are hereby declared unlawful.”²⁹² Pursuant to its Section 5 power, the FTC became responsible for regulating claims of unfair or deceptive advertising.

The 1938 Wheeler-Lea Amendment to Section 5 modified the Act’s language, bringing it closer to the modern articulation by adding in a prohibition not just on unfair but also deceptive methods: “Unfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices affecting commerce, are declared unlawful.”²⁹³ This amendment was intended to prohibit “false advertising”—advertisements which are deceptive or false or misleading in material aspects, apart from the general law of unfair competition.²⁹⁴ To this end, the Wheeler-Lea Act added several new sections to ensure the Commission could extend a “definite and specific” power to regulate the advertisement “for the purpose of inducing, or which is likely to induce, directly or indirectly, the purchase of food, drugs, devices, services, or cosmetics.”²⁹⁵

290. Federal Trade Commission Act of 1914, Ch. 311, Pub. L. No. 203, 38 Stat. 717 (current version at 15 U.S.C. § 45).

291. See, e.g., *FTC v. Raladam Co.*, 283 U.S. 643, 646-54 (1931) (explaining the competition rationale); *FTC v. Sperry & Hutchinson Co.*, 405 U.S. 233, 244 (1972) (explaining the consumer protection rationale).

292. Federal Trade Commission Act § 5.

293. Wheeler-Lea Act of 1938, Pub. L. No. 447, § 5(a), 52 Stat. 111 (current version at 15 U.S.C. § 45). See, e.g., *Sears, Roebuck & Co. v. FTC*, 258 F. 307, 311 (7th Cir. 1919) (“The commissioners, representing the government as *parens patriae*, are to exercise their common sense ... and stop all those trade practices that have a capacity or a tendency to injure competitors directly or through deception of purchasers.”).

294. 15 U.S.C. § 45(a) (“Unfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce, are declared unlawful.”); see also Jef I. Richards & Richard D. Zakia, *Pictures: An Advertiser’s Expressway Through FTC Regulation*, 16 GA. L. REV. 77, 86 (1981) (citing *Sci. Mfg. Co. v. Fed. Trade Comm’n*, 124 F.2d 640, 643 (3d Cir. 1941)).

295. ADDRESS OF HON. R. E. FREER, COMMISSIONER, FED. TRADE COMM’N, BEFORE THE ANNUAL CONVENTION OF THE PROPRIETARY ASSOCIATION 2 (1938), https://www.ftc.gov/system/files/documents/public_statements/676351/19380517_freer_whe_wheeler-lea_act.pdf [https://

Most relevantly, Section 12 was added, stating that it shall be unlawful to disseminate any false advertisement “for the purpose of inducing, or which is likely to induce, directly or indirectly, the purchase of food, drugs, devices, or cosmetics.”²⁹⁶ Such false advertisements shall be deemed “unfair or deceptive” within the meaning of Section 5.²⁹⁷ Under the FTC Act, false advertisement is defined as “an advertisement, other than labeling, which is misleading in a material respect,” and the Act notes that “in determining whether an advertisement is misleading,” the Commission must consider the net impression of the advertisement.²⁹⁸

The FTC, as the primary federal consumer protection agency responsible for regulating deceptive and unfair advertising, has the power to order a business engaging in such practices to cease and desist from doing so. Moreover, under its “Notice of Penalty Offenses” warnings, the FTC also threatens penalties of over \$40,000 per violation of its deceptive practices guidelines.²⁹⁹ This power has been used rather ubiquitously as of late. Since 2021, the FTC has sent out Notice of Penalty Offenses to over 700 companies over the use of endorsements and testimonials (such as by influencers), to over 1,000 companies over dubious “money-making opportunities,” and to 70 for-profit schools regarding job prospects and earnings claims.³⁰⁰ These are not enforcement proceedings, to be clear, but rather warnings of potential future enforcement if companies do not cease what the FTC views as deceptive or unfair

perma.cc/GAY5-NH2A].

296. 15 U.S.C. § 52(a).

297. *Id.* § 52(b).

298. *Id.* § 55(a)(1) (“[The Commission must consider] not only representations made or suggested by statement, word, design, device, sound, or any combination thereof, but also the extent to which the advertisement fails to reveal facts material in the light of such representations or material with respect to consequences which may result from the use of the commodity to which the advertisement relates under the conditions prescribed in such advertisement, or under such conditions as are customary or usual.”).

299. Lesley Fair, *Latest FTC Notice of Penalty Offenses Tells 700+ National Advertisers That Deceptive Endorsements Can Lead to Financial Penalties*, FTC BUS. BLOG (Oct. 13, 2021) <https://www.ftc.gov/business-guidance/blog/2021/10/latest-ftc-notice-penalty-offenses-tells-700-national-advertisers-deceptive-endorsements-can-lead> [https://perma.cc/5AWQ-KBDS]; Michael R. Justus, *FTC Goes on Penalty Offense, Warns of Hefty Fines for Deceptive Advertising*, NAT'L L. REV. (May 12, 2022), <https://www.natlawreview.com/article/ftc-goes-penalty-offense-warns-hefty-fines-deceptive-advertising> [https://perma.cc/9YL9-9K5Q].

300. *See* Justus, *supra* note 299.

conduct. What makes the threat of FTC enforcement such a powerful deterrent is not only the fines the agency can levy, but also the audit process that it can trigger. FTC audits require very precise administrative responses that can continue for decades.³⁰¹ To this end, were the FTC to make known its desire to enforce against companies who engage in dream advertising practices through use of its Notice of Penalty Offenses power, this possibility of enforcement might, even in the abstract, be enough to curb the practice.

Practices previously found by the FTC to be deceptive include misleading price claims, sales of hazardous or defective products, false representations, failing to live up to warranties, failure to perform promised services, failure to disclose information about pyramid sales,³⁰² and most recently, sharing consumers' sensitive health information for advertising purposes.³⁰³ As the next subpart will illustrate, the FTC similarly has the power to enforce against subliminal advertisement—including the practice of branding dreams—as deceptive, penalize those who engage in it, and enjoin them from doing so.³⁰⁴

B. Dream Advertising as Deceptive Advertising

Congress has never successfully passed a law restricting subliminal messages. However, multiple government agencies, including the FCC and FTC, have stated that the practice is inherently

301. Daniel J. Solove & Woodrow Hartzog, *The FTC and the New Common Law of Privacy*, 114 COLUM. L. REV. 583, 606 (2014).

302. *Id.* at 628.

303. *FTC Enforcement Action to Bar GoodRx from Sharing Consumers' Sensitive Health Info for Advertising*, FED. TRADE COMM'N (Feb. 1, 2023), <https://www.ftc.gov/news-events/news/press-releases/2023/02/ftc-enforcement-action-bar-goodrx-sharing-consumers-sensitive-health-info-advertising> [https://perma.cc/N8SH-32FL] (“Under proposed order, GoodRx will pay a \$1.5 million civil penalty for failing to report its unauthorized disclosure of consumer health data to Facebook, Google, and other companies.”).

304. *See Bliss, supra* note 154, at 433 (“Deception ... as defined by case law related to the Federal Trade Commission Act, does appear to encompass subliminal projection.”) (citing *Bockenstette v. FTC*, 134 F.2d 369, 371 (10th Cir. 1943) (“[I]t is sufficient to find that the natural and probable result of the challenged practices is to cause one to do that which he would not otherwise do.”)); *General Motors Corp. v. FTC*, 114 F.2d 33, 36 (2d Cir. 1940) (“The Commission ... thinks it best to insist upon a form of advertising clear enough so that, in the words of the prophet Isaiah, ‘wayfaring men, though fools, shall not err therein.’”).

deceptive and could result in enforcement.³⁰⁵ Why not focus on FCC enforcement instead then, given the agency's association with other forms of subliminal advertising? Because the FCC's power has waned. While the FCC could conceivably enforce against some instances of dream advertising should they occur on traditional media (for example, television or radio), it today has limited jurisdiction over modern forms of communication, including online content.³⁰⁶ The FTC, on the other hand, has a broader range of jurisdiction than does the FCC as it pertains to the interfacing of technology and media in the information age. And especially if dream advertising is seen as a form of subliminal advertising, it seems to run afoul of the FTC Act's Section 5.

Section 5(a) of the FTC Act prohibits "unfair or deceptive acts or practices in or affecting commerce," which are "declared unlawful."³⁰⁷ There is some ambiguity as to whether previous instances of branding dreams are advertisements per se, or whether they are more like experiments. For Section 5 purposes, the distinction is likely inconsequential—branding dreams fits comfortably into the abstract "act or practices" language. The "affecting commerce" language applies to all persons engaged in commerce, such as corporations engaging in dream advertising. In particular, the Molson Coors dream advertisement was touted as having been displayed 1.4 billion times and leading to a 3,000 percent increase in social engagement and an 8 percent increase in sales, thus having affected commerce.³⁰⁸ Having also received a great deal of commercial attention, the Burger King and Xbox scenarios appear to satisfy the "affecting commerce" language as well.

305. See *supra* notes 171-84 and accompanying text.

306. If seen as subliminal and deceptive, certain instances of dream advertising may be enforceable by other government agencies as well, including the FCC and Alcohol and Tobacco Tax and Trade Bureau (TTB). Subliminal communications are prohibited as "deceptive" in the advertising of distilled spirits, although the code defines subliminal techniques according to the "brief nature" definition. See *infra* note 318. The FCC's jurisdiction is ostensibly limited to "interstate and international communications by radio, television, wire, satellite and cable." *About the FCC*, FED. COMM'NS COMM'N, <https://www.fcc.gov/about/overview> [<https://perma.cc/MED6-QR4Q>]. In contrast, dream advertising seems to be occurring largely in connection with the internet and social media.

307. 15 U.S.C. § 45(a).

308. See *supra* note 113 and accompanying text.

Moreover, the products underlying these recent dream advertisements fall directly into the “false advertising” categories outlined in Section 12 and regulated by the FTC: it shall be unlawful to disseminate any false advertisement “for the purpose of inducing, or which is likely to induce, directly or indirectly, the purchase of food, drugs, devices, services, or cosmetics.”³⁰⁹ These include Molson Coors’s alcohol (drugs), Burger King’s hamburgers (food), and Xbox’s video games (devices). However, advertisements that do not fall into the Section 12 categories of food, drugs, devices, services, or cosmetics may be found unfair or deceptive purely under Section 5.³¹⁰ Conversely, advertisements that fit the Section 12 categories also fall under Section 5, as the dissemination of “any false advertisement” in relation to the purchase of food, drugs, devices, or cosmetics is seen as an “unfair or deceptive act or practice.”³¹¹

It is worth considering that Section 5 prohibits both “unfair or deceptive acts or practices in or affecting commerce.” While a case for dream advertising as “unfair” under the FTC’s guidelines is also plausible, this analysis will focus on deceptiveness given broad precedent describing other forms of subliminal advertising as deceptive and to avoid additional doctrinal hurdles necessary to show “unfair practices.”³¹²

The deceptiveness standard requires a representation that tends to mislead the public, including acts or practices—often advertisements—in the form of omissions of act, implied statements, or affirmative conduct.³¹³ Here, the representations at issue are TDI-

309. See 15 U.S.C. § 52(a)(1)-(2).

310. See, e.g., *Beneficial Corp. v. FTC*, 542 F.2d 611 (3d Cir. 1976) (bringing FTC action against false and misleading “Instant Tax Refund” advertising campaign under Section 5 despite it not involving food, drug, device, or cosmetic under Section 12).

311. See, e.g., *FTC v. Sterling Drug, Inc.*, 317 F.2d 669, 671 (2d Cir. 1963) (bringing FTC action for dissemination of false and misleading aspirin advertisement and noting case falls under both Sections 5 and 12 because it involved an unfair or deceptive practice affecting commerce (under Section 5) and specifically to drugs (under Section 12)).

312. See, e.g., *Am. Fin. Servs. Ass’n v. FTC*, 767 F.2d 957, 971 (D.C. Cir. 1985) (“To justify a finding of unfairness the injury must satisfy three tests. It must be substantial; it must not be outweighed by any countervailing benefits to consumers or competition that the practice produces; and it must be an injury that consumers themselves could not reasonably have avoided.”).

313. *FED. DEPOSIT INS. CORP., Unfair or Deceptive Acts or Practices by State-Chartered Banks* (Mar. 11, 2004), <https://www.fdic.gov/news/financial-institution-letters/2004/fil2604a.html> [<https://perma.cc/2JDZ-Q8FK>].

based advertisements—the deliberate targeting of consumer dreams or the sleep cycle for commercial gain. To enforce under Section 5, the Commission must find the legal action to be in the public interest. But actual deception or injury to the public need not be shown if the act or omission tends to deceive a “substantial” body of consumers.³¹⁴

Notably, the FTC has yet to enforce against instances of subliminal advertising, apparently because the agency does not believe previous methods work effectively. As the FTC has stated in its *Advertising FAQ's: A Guide for Small Businesses*: “It would be deceptive for marketers to embed ads with so-called subliminal messages that could affect consumer behavior. However, most consumer behavior experts have concluded that such methods *aren't effective*.”³¹⁵ Thus, the FTC appears convinced that subliminal advertising is an inherently deceptive practice, but not that the method is “material” to consumer purchasing decisions (that is, capable of causing real injury). The commercial exploitation of dreams and resulting concern from the scientific community (sleep and dream researchers), though, may shift this calculus such that the FTC would decide to enforce against dream advertisers.³¹⁶

314. FED. TRADE COMM'N, *FTC Policy Statement on Deception* (Oct. 14, 1983), <https://www.ftc.gov/legal-library/browse/ftc-policy-statement-deception> [<https://perma.cc/2HUL-PS2S>].

315. *Advertising FAQ's: A Guide for Small Business*, *supra* note 43 (emphasis added); see also Amy Pauli, Dalton Hughes, Emily Kappers, Raija Horstman & Roy Abernathy, *In Brief: Prohibited and Controlled Advertising in USA*, LEXOLOGY (Mar. 25, 2022), <https://www.lexology.com/library/detail.aspx?g=be04fd64-b899-49a0-987e-41231c842c61> [<https://perma.cc/3LJD-688T>] (“Although subliminal advertising is considered ineffective, it would be prohibited as deceptive.”).

316. *Now What?*, *supra* note 2 (“As sleep and dream researchers, we are deeply concerned about marketing plans aimed at generating profits at the cost of interfering with our natural nocturnal memory processing We believe that proactive action and new protective policies are urgently needed.”).

According to the FTC, a “representation, omission or practice” (here, the practice of branding dreams) is deceptive if it contains a statement or omission that: (1) “is likely to mislead consumers acting reasonably under the circumstances”; and (2) “is ‘material’—that is, important to a consumer’s decision to buy or use the product.”³¹⁷ Both elements—deception and materiality—will now be analyzed in the context of branding dreams.

1. *Deceptiveness*

As Part II claimed, dream advertising can convincingly be considered a subliminal practice. And what makes branding dreams deceptive—as with other forms of subliminal advertising—is that the effect is not recognizable to the conscious mind and, given its hidden and undetectable nature, is thus highly manipulative. And distinguishable from previous forms of subliminal advertising, people are highly susceptible to images and thoughts introduced during sleep. As dream expert Robert Stickgold puts it, “When you’re awake you have a whole collection of filters and mechanisms to evaluate information and filter out ads.... Your sleeping brain can’t do that. It assumes that whatever is activated during sleep is being activated internally, not by outside forces.”³¹⁸

Federal agencies, including the FTC, FCC, the Bureau of Alcohol, Tobacco, and Firearms (ATF), and the Tobacco, Tax, and Trade Bureau (TBB), as well as courts, have each described subliminal advertising as deceptive. Again, the FTC has noted, “*It would be deceptive* for marketers to embed ads with so-called subliminal messages that could affect consumer behavior.”³¹⁹ In 2001, following the Al Gore/RATS controversy mentioned in Part II.A, the FCC added the following to its Manual for Broadcasters in noting the inherent deceptiveness of subliminals: “Subliminal programming is

317. *Advertising FAQ’s: A Guide for Small Business*, *supra* note 43. Sometimes, the inquiry is broken out into three elements, with the first being that an act or practice itself exists: (1) there is “a representation, omission, or practice that (2) is likely to mislead consumers acting reasonably under the circumstances; and (3) the representation, omission, or practice is material.” *See, e.g.*, *FTC v. Verity Int’l, Ltd.*, 443 F.3d 48, 63 (2d Cir. 2006) (quoting *In re Cliffdale Assocs.*, 103 F.T.C. 110, 165 (1984)).

318. *Crockett*, *supra* note 6.

319. *Advertising FAQ’s: A Guide for Small Business*, *supra* note 43 (emphasis added).

designed to be perceived on a subconscious level only. Regardless of whether it is effective, the [use] of subliminal perception is inconsistent with a station's obligation to serve the public interest *because [the broadcast] is intended to be deceptive.*"³²⁰ Likewise, the TBB, under the heading "Deceptive advertising techniques," prohibits any "*subliminal or similar techniques.*"³²¹ The ATF has also adopted regulations on alcohol advertisements in which it labels subliminal advertising as deceptive: "*Deceptive advertising techniques.* Subliminal or similar techniques are prohibited."³²² The court in *Vance v. Judas Priest* also described subliminal messaging as being deceptive (despite not using the word "deceptive" itself) in holding the practice undeserving of First Amendment protection:

[Subliminals] do not convey ideas or information to be processed by the listener so that he or she can make an individual determination about its value. They do not enable an individual to further his personal autonomy. Instead, they are intended to influence and manipulate the behavior of the listener without his knowledge.³²³

These examples show that subliminal advertising is widely considered a deceptive practice. Even if dream advertising was not considered a form of subliminal messaging, however, it might well amount to a deceptive practice on its own merits. Indeed, dreams are bound to deceive, given their random, emotional, and bizarre nature.³²⁴ This illogical nature renders them inherently false and misleading. According to one dream report from Burger King's Nightmare King sleep study, for example: "someone in my dream turned into the burger.... The burger then transformed into the

320. FED. COMM'N COMM'N, THE PUBLIC AND BROADCASTING (revised Sept. 2021), https://www.fcc.gov/sites/default/files/public_and_broadcasting_0.pdf [<https://perma.cc/PA6E-V2JR>] (emphasis added).

321. 27 C.F.R. § 7.54(h) (2021) (defining "subliminal or similar techniques" as referring "to any device or technique that is used to convey, or attempts to convey, a message to a person by means of images or sounds of a very brief nature that cannot be perceived at a normal level of awareness.").

322. 27 C.F.R. § 4.64 (2021).

323. *Vance v. Judas Priest*, Nos. 86-5844, 86-3939, 1990 WL 130920, at *24 (Nev. Dist. Ct. Aug. 24, 1990).

324. *See supra* Part I.A.

figure of a snake.”³²⁵ Bobbi Gould, the participant in the Molson Coors study who remarked that she felt like a “lab ra[t],” had a “series of weird Coors dreams.”³²⁶ She told a journalist, “I had one where I was on a pogo stick jumping around with Coors products.... In another one, I was on a plane dropping Coors cans on people and they were cheering for me.”³²⁷

Indeed, the real commercial is not the hypnagogic stimulus, but the consumer’s irrational and misleading dream itself. David Lawson, a visual artist who worked on the Molson Coors ad, stated that “the idea was that we [would] try [to] place a surreal Coors ad into people’s subconscious.”³²⁸ Dream researcher Adam Haar too describes “[d]ropping off to sleep [a]s often accompanied by imagery, sounds and narrative so surprising, confusing, and bizarre that many subjects describe them as coming from outside of them.”³²⁹ There is no reliable product or service information that can be usefully conveyed to consumers through this sort of “dream logic”— “[t]he nonsensical logic one possesses while dreaming that makes perfect sense until he or she wakes up.”³³⁰ Dream advertisements are thus deceptive in that they are “likely to mislead consumers” even if they are “acting reasonably under the circumstances.”³³¹ Put differently, considering the irrational and misleading nature of dreams, there is no “reasonable dreamer.”³³²

2. Materiality

In addition to the FTC’s deceptiveness inquiry, it should also be demonstrated that a given deceptive practice is “material,” that is, important to a consumer’s decision to buy or use the product.³³³ As

325. Reiter, *supra* note 15.

326. Al-Sibai, *supra* note 101.

327. *Id.*

328. Coors Light, *supra* note 10.

329. Haar Horowitz, *supra* note 64, at 24.

330. John Cline, *Dream Logic*, PSYCH. TODAY: SLEEPLESS IN AM. (Sept. 27, 2020), <https://www.psychologytoday.com/us/blog/sleepless-in-america/202009/dream-logic> [<https://perma.cc/BFT9-5LBQ>].

331. *Advertising FAQ’s: A Guide for Small Business*, *supra* note 43.

332. Those who lucid dream, and are thus aware that they are dreaming, are perhaps an exception.

333. See Ivan L. Preston, *The Definition of Deceptiveness in Advertising and Other*

to this element, “[a] ‘material’ misrepresentation or practice is one which is likely to affect a consumer’s choice of or conduct regarding a product. In other words, it is information that is important to consumers.”³³⁴ Thus, “the probable effect which the advertiser’s handiwork will have upon the eye and mind of the [consumer]” may be relevant to the determination.³³⁵

Materiality is said to exist in cases where a consumer would have chosen differently but for the deceptive practice.³³⁶ But even where the consumer would have purchased the product regardless, materiality may, in certain cases, be said to occur given the capacity or likelihood of an ad to deceive, not whether actual deception occurred.³³⁷ Courts and regulators are given discretion to “implement a common-sense approach” to the analysis.³³⁸ Materiality might be presumed by the very nature of a deceptive practice—including ones jeopardizing health and safety,³³⁹ as TDI techniques might well do. There is also direct evidence that branding dreams might be material, including in ways that prior forms of subliminal messaging have not demonstrated.

First, dozens of sleep and dream experts signed on to the *Advertising in Dreams is Coming: Now What?* open letter because they are “deeply concerned” about branding dreams given that “[TDI] clearly influence[s] the choices our sleeping and dreaming brain make” and “bias[es] the brain’s decisions toward whatever

Commercial Speech, 39 CATH. U. L. REV. 1035, 1046 (1990).

334. FED. TRADE COMM’N, *supra* note 314.

335. *FTC v. Sterling Drug, Inc.*, 317 F.2d 669, 674 (2d Cir. 1963).

336. *Id.*; see also Hannibal Travis, *The Freedom of Influencing*, 77 U. MIAMI L. REV. 388, 473-74 (2023) (noting that in the context of advertising, “not every false or misleading statement induces actual or justifiable reliance on the part of its recipient.”).

337. See *id.* (citing *Beneficial Corp. v. FTC*, 542 F.2d 611, 617 (3d Cir. 1976)); see also Patricia P. Bailey & Michael Pertschuk, *The Law of Deception: The Past as Prologue*, 33 AM. U. L. REV. 849, 893 (1984).

338. Cody Corliss, *Truth in Advertising: Applying Commercial Speech Regulations to the Secondary Dissemination of Scientific Publications*, 90 ST. JOHN’S L. REV. 883, 898-99 (2016).

339. *Cliffdale Assocs., Inc.*, 103 F.T.C. 110, 174 (1984) (Oct. 14, 1983 letter from FTC Commissioner James C. Miller III to Representative John D. Dingell) (“The Commission also considers claims or omissions material if they significantly involve health, safety, or other areas with which the reasonable consumer would be concerned.”); *FTC v. Roca Labs, Inc.*, 345 F. Supp. 3d 1375, 1387 (M.D. Fla. 2018) (finding a traceable connection between company promoting a product and direct influence of “customers to believe that the claims were scientifically validated by the medical community.”).

information was presented during sleep.”³⁴⁰ This level of concern by experts stands in sharp contrast with current consumer behavior expert apathy toward prior forms of subliminal advertising.³⁴¹ As Stickgold, Zadra, and Haar explain: “It’s very likely that advertising in dreams would change behaviour, even in unknowing listeners and those who remember only some of their dreams.”³⁴² And as Deirdre Barrett, who consulted for Molson Coors as a dream incubation expert, puts it, “I have no idea if any other advertisers will choose to ask people to dream their ads ... but it certainly seems to work.”³⁴³

Second, while dreaming about brands does not mean that consumers will necessarily choose to purchase from them as a result, it appears more likely they would do so considering “[p]eople are particularly vulnerable [to suggestion] when asleep.”³⁴⁴ For example, recall the Skittles/M&M’s experiment—where unconscious suggestion succeeded in getting participants to favor one brand or the other where conscious suggestion had failed.³⁴⁵ Also recall the cigarette study, where participants—who were addicted to cigarettes—were exposed to the smell of cigarettes and rotten eggs and as a result smoked far fewer cigarettes the following week.³⁴⁶

Third, the dream advertisements by Molson Coors, Xbox, and Burger King tout their effectiveness at conveying the products in consumer dreams, and in helping sell their products. With Molson Coors, we see a roughly 30 percent success rate in Coors-related dreams among the in-person participants³⁴⁷ who entered the “world’s largest sleep study.”³⁴⁸ According to Molson Coors, the advertising content led to a 3,000 percent increase in social engagement and an 8 percent increase in sales.³⁴⁹ Burger King claims that nightmares were increased by 3.5 times among its 100 test

340. *Now What?*, *supra* note 2.

341. *Advertising FAQ’s: A Guide for Small Business*, *supra* note 43.

342. *Dreamscape*, *supra* note 2.

343. *Coors Light*, *supra* note 10.

344. *Moutinho*, *supra* note 2.

345. *See* Ai et al., *supra* note 86.

346. *See* Arzi et al., *supra* note 27.

347. Crockett, *supra* note 6 (“Shockingly, it seemed to work. Around 30 [percent] of the participants reported that Coors products made an appearance in their dreams.”).

348. Li, *supra* note 96.

349. *Id.*

subjects.³⁵⁰ And several Xbox “Made from Dreams” participants were able to describe their video game-related lucid dream experiences, with the company having turned them into animated montages as further marketing for its Xbox Series X console promotion.³⁵¹

Lastly, there is precedent for the materiality of dream advertising based on the effectiveness of dream incubation techniques. Historically, the practice has been utilized for thousands of years by peoples all over the world.³⁵² And today, TDI is being applied in modern day research settings.³⁵³ Numerous studies tout the efficacy of TDI for various therapeutic reasons—improved understanding of what gives rise to dream experiences across the stages of sleep, improvement of sleep quality, stimulating creativity, facilitating sleep-related learning, understanding memory retention, and treating conditions such as addiction and PTSD nightmares.³⁵⁴ Thus, unlike previous anachronistic modes of subliminal advertising, dream advertising could—now or at least in the future as its methods are refined—well affect consumer behavior. As such, the FTC might consider the practice of branding dreams as not just deceptive, but also material.

CONCLUSION

Welcome my son

Welcome to the machine

What did you dream?

It's alright we told you what to dream

- Pink Floyd, *Welcome to the Machine*³⁵⁵

Though it may feel like science fiction, a new reality has dawned where advertisements are targeted not just to waking life, but also to the dreamscape. While advertisers are beginning to utilize dream incubation techniques in their advertising campaigns, the public remains largely indifferent to or unaware of these methods. This

350. Williams, *supra* note 14.

351. See Griner, *supra* note 11.

352. See *supra* notes 58-60 and accompanying text.

353. See *supra* notes 72-88 and accompanying text.

354. See *supra* note 82 and accompanying text.

355. PINK FLOYD, *Wish You Were Here* (CBS 1975).

situation is reminiscent of a nightmarish Philip K. Dick dystopia, where the real (the dream) is passively replaced by a corrupted, intrusive, and synthetic version of itself (the branded dream).

This Article has explored the art and science of dream incubation, the practice and harms of dream advertising, and its potential illegality as a form of subliminal and deceptive advertising. Protecting against the invasion of dreams might be viewed as a fallback refuge for privacy advocates, as it appears too late to prevent the intrusiveness of targeted advertisements and other invasive forms of data collection as they take place in the waking world. There is still time, though, to prevent advertisers from branding dreams through the hijacking of dream incubation techniques. Novel regulations in this area may be welcome and helpful, but perhaps unnecessary, as there are existing legal avenues to explore.

As a method of combating the unethical practice of branding dreams, this Article focused largely on subliminal advertising policies coupled with the FTC Act's Section 5 power to regulate deceptive practices. But other legal possibilities exist in combating dream advertising to the extent that such practices continue, each of which begs future research. These potential paths include unfair practices also under FTC Act Section 5, the Lanham Act's false advertising cause of action (Section 43(a)),³⁵⁶ the privacy tort—intrusion on seclusion,³⁵⁷ state law Consumer Protection Acts ("Little FTC Acts"),³⁵⁸ and various other state and local regulations. Moreover, private ordering may be helpful. In recent years, strong public backlash in the form of protests and other nonviolent civil disobedience have proven effective in persuading corporations to

356. Lanham Act, 15 U.S.C. § 1125(a) (2018). For an analysis of how false advertising might work in the context of influencers, such as Zayn Malik in the Molson Coors ad, who participate in dream advertisements, see Alexandra J. Roberts, *False Influencing*, 109 GEO. L.J. 81, 99-101 (2020).

357. See *supra* note 249 and accompanying text.

358. Most states have passed State Consumer Protection Acts (CPAs) to protect consumers from deceptive or unfair business transactions, commonly referred to as "Little FTC Acts." These acts allow an individual to bring a private right of action, with some altering the requirements needed in comparison to Section 5 of the FTC Act. See, e.g., Jack E. Karns, *State Regulation of Deceptive Trade Practices Under "Little FTC Acts": Should Federal Standards Control?*, 94 DICK. L. REV. 373 (1990).

change their disparaging branding practices.³⁵⁹ To this end, dreamers, *awaken*.

359. See Deborah R. Gerhardt, *The Last Breakfast with Aunt Jemima and Its Impact on Trademark Theory*, 45 COLUM. J.L. & ARTS 231, 253-56 (2022) (understanding the shift away from racist imagery through the lens of consumer investment); Dustin Marlan, *Is the Word “Consumer” Biasing Trademark Law?*, 8 TEX. A&M L. REV. 367, 395 (2021) (noting that since the *Matal v. Tam* Supreme Court ruling, “the cancellation of racist and demeaning trademarks [is] by way of movement, not law”); Angela R. Riley & Sonia Katyal, *Aunt Jemima Is Gone, Can We Finally End All Racist Branding?*, N.Y. TIMES (June 19, 2020), <https://nytimes.com/2020/06/19/opinion/aunt-jemima-racist-branding.html> [<https://perma.cc/F9ML-33Z9>] (arguing that brands can no longer stand apart from social movements).