

What's So Natural about Sleep?

Matthew Wolf-Meyer

I remember in 7th grade not being able to stay awake in school. There was one class in particular—it was math class—[where] I began to uncontrollably fall asleep in class. I just thought it was the subject; I thought it was the teacher, because he was very boring and monotone, and I didn't think anything of it. But then, from then on, in every grade and then in high school it was almost every single class that I was falling asleep.

I interviewed Timothy, a white, middle-aged man, as part of a larger ethnography on sleep in the contemporary United States.ⁱ Timothy had confronted feelings of intense sleepiness throughout his life, stretching back to his youth. "In high school I was a big coffee drinker in the morning," he told me. "I actually used to take No Doz—they're just caffeine pills, I believe. In high school, I started popping No Doz and drinking a couple cups of coffee before I left for school."

Although he had never been definitively diagnosed with a specific sleep disorder, Timothy might be described as a "disorderly sleeper" who was unable to meet the everyday demands of everyday US life. Timothy's struggles with sleep revealed a common

narrative I encountered when talking to people in the United States about sleep patterns: namely the dependence upon self-medication through caffeine (whether coffee, soda, or in pill form) that people resorted to in order to meet cultural expectations about proper sleep. In Timothy's case, he struggled to stay awake in school. But throughout US social life, caffeine before, during, and after work and school is regarded as a normal way of getting through the day awake.

US expectations of time and bodies are different from those of other societies. For many societies, such as China, Taiwan, India and throughout southern Europe and Latin America, a midday nap is accepted as part of the school and workday. This pattern is changing, however, as norms about nightly sleep become globalized alongside ideas about efficiency and productivity. For most societies, it is normal and desirable for parents and children to share a bed, often from infancy until children are in elementary school. Part of why Americans sleep as they do is related to the structure of our daily lives: we have long school and work days, and there's little time or place for sleep. But we also sleep as we do because of single-family homes (no free elder care for children), long commutes from home to

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work and school, and ideas about healthy and natural sleep, not all of which are grounded in science. The combination of consolidated sleep, exhausting social life, and the chemicals to support them—both stimulants and sedatives—combine to make a new human nature, one crafted by and for the demands of US capitalism.

A Short History of Sleep in the United States

By all accounts, before the industrial period (roughly 1820–1880 in the United States), Americans slept in two or more periods throughout a 24-hour day. Before industrialization, many Americans worked on family farms or in small trades wherein they knew—if were not related to—their employers. With the mass migration to the cities along with industrialization, many Americans were exposed for the first time in their lives to communities of total strangers, and found themselves governed by managers who were anonymous to them. Where they might once have been able to take a nap during a long day of work, or show up late after sleeping in, now the time clock ruled their workdays, and there were always workers waiting to replace them if they should fail to make it to work on time or sneak off for a nap. Whereas it was once normal for people to retire to bed around sundown, sleep for a few hours, wake up for an hour or more in the middle of the night, and then return to bed for a few more hours—or, alternatively, to sleep for only a few hours at night and to supplement it with a significant nap during the day—as a result of the indus-

trial workday workers were forced to consolidate their sleep. This consolidation was possible because they were exhausted after working a 12 to 14 hour workday, as their managers attempted to squeeze every minute of natural light out of the sun.

During the industrial period, books written by doctors often mentioned the need for workers to skip their “second sleep” or “second nap,” and what they’re referring to is the second period of nightly rest that some people would take. Instead, doctors suggested that people stay out of bed after their “first sleep” and stay up through the day, thereby insuring that they would be suitably exhausted by the time they finally got to bed that night, and then they would sleep through eight or more consolidated hours of sleep. To shore up their claims, doctors associated all sorts of ill health to those who would sleep in biphasic or non-consolidated ways—which can now be seen as baseless scaremongering. But it was necessary, as, simultaneously, they began to see insomnia as being experienced not solely by elites, but by the working classes as well. The need to control sleep, in other words, became intensely important alongside the need to manage the industrial working population, and although pharmaceuticals

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didn't yet exist to fix these emerging problems, human behaviors could be modified to meet the same end by focusing on "sleep hygiene"—practices like not eating heavy meals or exercising strenuously before bed, not drinking too much alcohol or caffeine, and not sleeping in "dangerous" situations (including, but not limited to, sleeping in poorly ventilated spaces, with strangers, or on soft mattresses).

It's important to remember that Thomas Edison's light bulb, which promised cheap electric light to the masses, wasn't perfected until the end of the 19th century, and it wasn't until the turn of the 20th century that many Americans had reliable electric light available to them 24 hours each day. Many scientists and scholars often like to vilify electric lighting as the sole cause for changes in sleep patterns, but electric light is far newer than the industrial consolidation of time. People are often tempted to blame the advent of electric light because it allows them to displace their critiques: it's the bad habits of individuals that lead to bad sleep, not the machines of capitalism. But this is a smokescreen, protecting the forces that comprise our economic lives from criticism; the reality is that we sleep as we are obligated to, not as we need to.

Changing Human Nature

By the beginning of the 20th century, the assumption that sleep should occur in one roughly 8-hour consolidated period had attained the level of scientific truth. Mention of biphasic sleep had almost entirely disappeared from the medical literature. Some-

thing profound had happened: alongside the science of sleep, a new understanding of human nature developed. Instead of there being a flexible norm against which individuals were evaluated—and rarely judged as pathological sleepers—consolidated sleep created a static baseline to gauge what was wrong with one's sleep. The possibilities for human sleep were narrowed, and the various forms it took were perceived not as variations, but as diseases.

In the experiments of Nathaniel Kleitman at the University of Chicago, napping was disallowed as part of standard protocol, and consolidated sleep was the model of sleep that he embraced. When he and a graduate student descended into Mammoth Cave in northern Kentucky to ascertain the effects of a longer day, they still tried to sleep in consolidated fashion—even though, for Kleitman, it was a difficult schedule to maintain. For Kleitman and those following him, this seemed clear evidence that our circadian rhythms are inflexible and that we have evolved to be consolidated, nightly sleepers. And this would lay the basis for sleep medicine, which would develop under William Dement, one of Kleitman's students, in the 1970s. The tension between the scientific and medical understanding of sleep and its everyday lived experience is nowhere better exemplified than in the lives of disorderly sleepers.

Andi, in the following interview excerpt, recalls how her sleepiness in school was accepted by those around her as her "wanting attention"—clearly a behavioral decision. In her youth she had been diagnosed with infectious mononucleosis ("mono"), which, in hindsight, she concluded, may have inter-

ferred with an earlier diagnosis of her sleep disorder, namely narcolepsy with mild cataplexy.

I missed a lot of school and I slept through a lot of school. It's kind of funny—I would need a nap right then and there, and I was out of commission. A lot of it they said had to do with wanting attention. . . . My mother got me up when I was younger, and I was always able to get to school—as a kid. Also, through college, I would try and avoid morning classes because I had trouble getting to them. I could short myself through the week and catch up on the weekend, but I'm not that young and flexible anymore.

Once she aged out of the rigid schedule of public elementary and secondary schools, Andi was able to arrange her school days in such a way as to meet her desires for sleep. Andi perceived her body as being flexible, allowing her to short herself of sleep through the week in response to the institutional demands of school, and repay the deficit over the weekend. Andi's story shows how American institutions have come to expect individual human biology to bend to industrial routines. The individual who fails to remain awake through class is somehow deficient, and might then be treated as an unruly subject.

Regarding sleepy classroom behaviors as somehow the fault of the individual student—as if they will bad behavior as a reaction to situations that fail to be engaging—is a common theme I encountered in my research. Kat, a narcoleptic young mother,

laments her bad behavior to explain her “issues in school,” but recognizes that her classroom performance may have had more to do with her desire to sleep than her desire to learn or be attentive in school:

Was I just lazy? Or not paying attention? Or was it because of that [my sleepiness], I really don't know. I had issues in school, and I guess it was around the time that it started that I was always a good student and did really well and was in the top of my class, and then in high school it just—I found it really hard to concentrate. . . . I did fine in classes, but if the grade was based on homework it just wasn't happening. I would also sit in class and zone out, and not remember most of the class. Looking back on it now I realize that it [the beginning of narcolepsy symptoms] probably was around the same time that my grades started to suffer, but I guess at the time I didn't realize—I just thought I was not into it, y'know?

Many individuals measure themselves against unrealistic US cultural expectations of sleep and tend to regard their sleep patterns as a form of bad behavior. Irregular sleepers think of themselves as different, possibly pathological. Students who remain undiagnosed throughout their schooling often rely upon non-regulated stimulants—caffeine in its many forms—to achieve some semblance of normalcy and ease them through their daily obligations. This self-treatment, however, further obscures the interactions that lead to ongoing institutional problems.

Sleep in the 21st Century

At the end of the 20th century, many scholars noted a changing form of global capitalism predicated on a turn toward “flexible accumulation.” The need for flexibility in terms of accumulation strategies, which involved innovative modes of production and distribution, as well as intensified models of consumption, also required individuals and institutions to adopt flexible strategies. Work days stretched beyond eight hours, work weeks expanded beyond Fridays; employees required retraining and adopted the need to be “flexible” themselves, adapting to ever-new demands in the workplace. This was not the approach adopted by all “capitalist” societies around the world, but rather those in which discourses of “flexibility” resonated, particularly the United States.

A decade into the 21st century, we live with the legacy of this turn toward flexibility, and our schools, workplaces, and fami-

lies depend upon each individual to be flexible. What this means in everyday terms is that we turn to caffeine to stimulate us through a day’s labor and an evening’s social activities; we turn to sedatives to put ourselves to sleep at a reasonable time, whether they be alcohol, melatonin or Ambien. Rather than see this set of phenomena as medicalization, we’re better to see it as part of the ongoing shaping of the human body and its capacities that our diet and environment have always entailed. We have always been modifying our sleep with our consumption and everyday practices. Although we might be inclined to think of biphasic sleep as more natural than consolidated sleep, it too was subject to these controls and conventions. Biphasic sleep also fit into a social order and was itself subject to ideas about norms and its pathological variations. Our sleep has always been unnatural—it has always been social and cultural, economic and political—but these external-



Courtesy of Imperial War Museums

After lunch

ized demands have become intensified with the modernization of science and medicine and their intimate linking with the spatiotemporal expectations of American capitalism, which govern our individual, social and political lives.

Where once I would be worried at a night of insomnia, I've come to understand my nighttime experiences as part and parcel of life. Although I might dread waking up at 3 am, knowing that I might need to plan on a nap later that afternoon, I no longer have any anxiety about the cause of being awake. But not everyone is so lucky to be able to shape their day to their sleep needs; more often, as in the historical case of the shift to consolidated sleep during the industrial period, the relationship is inverted, and we sleep when we can—not when we want to. What would it take to make our institutions, our schools and our workplaces, more flexible and allow for human variations of sleep?

In the late 1990s, a broad attempt to confront US ideas about time and social obligations came in the form of the Take Back Your Time (TBYT) movement, a loose network of academics and activists who attempted to draw attention to the persistent overworking of US citizens. They took as their object of criticism the expansion of the US workday; to draw attention to the systematic overworking of people in the United States, they worked to establish a national holiday: October 24th, by their designs, should be designated as "Take Back Your Time Day." The symbolism of October 24th is important: measured against every industrialized nation in Western Europe, the amount of time that US people were overworked was the span between October 24th and December

31st. In the introduction to the TBYT manifesto, sociologist Juliet Schor argues that:

The average worker in 2000 could produce nearly twice as much as in 1969. Had we used that productivity dividend to reduce hours of work, the average American could be working only a little more than twenty hours a week.... Taking all productivity growth as leisure time would have led to a stable real level of income.

With this foundation other contributors to the TBYT manifesto argue for increased family time, greater vacation and sick leave from work, maternal and paternal leaves for new parents, and an overall reduction in work time. With all of these reductions in social obligations, one might assume that many US families would finally get the rest they need. But, as yet, the recommendations of Schor and TBYT more generally have yet to enter a more general dialogue in the United States.

Another, more direct, attempt to rectify some of the sleep deprivation endured by US citizens in the late 20th century was the insinuation into workplaces of both more attention to the powers of napping, as well as spaces for potential nappers to inhabit. This initiative was spearheaded by Alertness Solutions and the Napping Company, two consultancy firms who would visit a workplace to consult with employers and their employees on how napping might benefit both workers and the economic goals of the company; they also provided advice on how, where and when to nap. To overcome some of the derisions of nappers and napping behaviors, both consulting firms coded

their advice in the language of US capitalism; they provided extensive data on the economic benefits of napping for employers. So, while nappers might have felt as if they were the ones benefiting from the change in workplace policies regarding napping, it was actually employers who reaped the greatest benefit. The development of workplace napping was an extension of the flexible workday, an attempt lauded in the 1990s as a more humane way of arranging the workday, although this was not borne out by flextime as actually practiced. Moreover, in order to work flexible schedules, workers were often expected to make other workplace sacrifices, sometimes moving from full to part-time employment, increasing work hours, or accepting pay cuts. Finally, access to flexible work schedules was stratified based upon the kind of employment, with managers and those who work non-industrial jobs having access, with low-wage and traditional blue-collar jobs providing only limited or no access to flexible work schedules. Napping in the workplace, conversely, is potentially an activity available to everyone, and the possibility of insinuating it as a workplace option relies only upon overcoming cultural expectations of sleep and its proper times and places.

Although the US workday might incorporate flexible work schedules and workplace naps, by the turn of the 21st century neither of these options had managed to grossly restructure dominant spatiotemporal formations of US institutions. Instead, in the 21st century US work and school times align with historical and cultural models of productivity and respectability—the 9-to-5

workday, now supplemented with pharmaceuticals. Despite some workplaces formally accepting flextime and workplace napping, these are solitary experiments and have not been widely embraced, especially outside of white-collar work. A worker's revolution on the order of what the TBYT movement calls for is unlikely, but its promise lurks in the corners of contemporary US politics, offering the possibility of a new ordering of the everyday and a future unlike that imagined by any of the workers' movements of the 19th and 20th centuries.

At the time I interviewed him in 2006, Ryan had been diagnosed with just about everything a disordered sleeper could be diagnosed with: narcolepsy, REM behavioral disorder, obstructive sleep apnea, shift-work sleep disorder, and a vague circadian rhythm disorder. Despite exhibiting symptoms since childhood, it was only at age 40 that he had decided something might be physiologically wrong. And it was only at 48 that he finally sought out diagnosis. At the time of our interview, in his mid-50s, and inching toward retirement, Ryan had some control of his sleep through a mixture of pharmaceuticals, CPAP technology, and social arrangements of his working time. "I work a 12-hour shift," he told me, "from six at night until six in the morning, or from six in the morning until six at night." He works for a large power company on the east coast, working to maintain the integrity of the power grid of a large metropolitan area. His workday consists of him sitting in front of a console for hours at a time, with little change in activity or object of focus. Dull work, but within his unionized labor force, a sought-after position since it involves not

actually handling any electrical equipment—hence, not life-endangering. Because of his host of sleep disorders—and workplace problems he’ll narrate presently—he takes Provigil, an alertness-promoting drug, at work. He went on to explain not only his work situation, but how it rendered his sleep as disorderly:

The longest one shift goes is four days, and then I shift to the nights. And I can have one day off in-between or eight days off in-between... And then there’s one week when you have to work relief, where you have to work four hours in the morning, then twelve hours that night, and twelve hours the next day, so my biggest problem is “when do I take my medication.” If I have to skip it, then I’m more of a zombie.... I took a letter from my neurologist that said that I need to take a midday nap on each shift, and they sent me home for three weeks without pay while they figured out what to do. They brought me back and said, “If you take a nap, you’re fired.” And this is a company with 12,000 employees. And then I took a letter in that said that if I continue to work without napping, I could endanger myself or others—and with that one they sent me home for three months.... I was on “crisis suspension,” so I got paid for that one.... My per-

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sonal feeling is that they don’t want anyone to have any kind of personal accommodation or anything because it will open up a can of worms. [My sleepiness was] troublesome when I was a kid, but the older I get, the harder it gets.

“How do you cope with it?” I asked. “Napping, and working an eight-hour shift. I think napping works. But my employer treats napping as a personal choice, so that means it’s a conduct issue. That’s what they believe right now.” This belief is the result of policies based, if only tacitly, upon the evolutionary and neo-Darwinian assumptions embedded in contemporary sleep science and American cultural notions of work, school, recreation, and family time. Rather than assuming that the desire to take a nap is a “personal choice” or a “conduct issue,” it might more accurately be regarded as a complex interaction of biology, culture, and society. Ryan need not be regarded as disorderly as his sleep seems at first—and if there were ways for him to nap, to alter his schedule based on his sleep needs, he might not be disorderly at all.

Making these kinds of shifts in work time and allowances for naps won’t solve every sleep problem—for example, conditions such as narcolepsy, REM behavioral disorder, sleep apnea, Klein-Levin Syndrome and others are more complex than a nap room or flextime will fix. But for individuals who experience these conditions, more social allowances for their sleeping patterns might mean that they can participate in school, work, family life, and recreation without having periods of sleepiness treated as pathological. As social and biological sci-

ences come to appreciate the normative variation of our species, we need a more inclusive politics organized around biology—a “multibiologism” rather than a multiculturalism. Recognizing biological diversity may become necessary to defray the burdens experienced by all of us throughout the life course to greater or lesser extents when our sleep comes into tension with our everyday obligations. Unless US capitalism and its institutions undergo a radical transformation, it seems that we’re stuck with the spatiotemporal organization of everyday life that we currently have; still we might work to lessen the burdens placed on individuals, and shift responsibility to the institutions that structure our everyday lives by attending to our biological desires and how they might be organized to our—and society’s—benefit.

Note

Between 2003–2007, I conducted research on the history and contemporary practice of sleep science and medicine in the United States, specifically in the Minneapolis and Chicago metropolitan areas. This comprised participant observation at one of the leading and oldest sleep clinics in the United States and the world, interviews with sleep physicians and researchers, and additional interviews with disordered sleepers and their family members. It also involved participating in support groups for disordered sleepers—local groups in Minneapolis and Chicago for obstructive sleep apnea and Restless Legs Syndrome, as well as national narcolepsy meetings. In addition, I conducted archival research on early modern sleep science and medicine (1780s–1880s) and the emergence of sleep sci-

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ence and medicine in the 20th century (1890–1960).

Suggestions for Further Reading

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