



A decade or so ago, pharmacology had scarcely envisioned a non-narcotic drug capable of alleviating depression, that "common spectre of mankind".

to appreciate the revolutionary possibilities it has created in psychosomatic medicine—after only seven years of clinical use in this peculiarly difficult field.

Steve Server //

Nicolas Rasmussen. *On Speed: The Many Lives of Amphetamine* (New York: New York University Press, 2008).

It is a principle of pharmacology that one can never have on-target, desired effects without some off-target side effects. Amphetamine is no exception to that rule. The drug leads to higher levels of dopamine and norepinephrine in the central nervous system and circulation, leading to effects as diverse as elevated mood, improved concentration, appetite suppression, and high heart rate and blood pressure. In various contexts, each of these effects may be desirable or unpleasant: in the treatment of pediatric ADHD, for example, pediatricians carefully monitor their patient's growth chart because stimulant medications (amphetamine and its cousins) may retard growth due to their suppressant effect on the appetite. For someone who has had significant difficulty losing weight, however, this effect is *desired*, supporting the prescription of a drug like Qsymia, a

blend of the stimulant phentermine and an anti-epileptic drug, topiramate, for patients with obesity.

It is for that reason that Nicolas Rasmussen's book, *On Speed: The Many Lives of Amphetamine*, carries an apt subtitle. As many effects as amphetamine has, the drug has had that many lives: that many different advertisements in medical journals or home magazines promising an end to depression, a svelte body, clear sinuses, or a successful child; that many swallowed Benzedrine cottons, that many text messages asking for some Addy, that many explosions in methamphetamine labs.

In his first and second chapters, Rasmussen describes the crucible of scientific optimism and financial ambition within which amphetamine was born. He discusses the work of biochemist Gordon Alles in the late 1920s and early 1930s in the search for amphetamine. Many of the first pages of the book focus on the internal politics within Big Pharma, especially the firm Smith, Klein, and French (SKF), and their "wonder drug" Benzedrine. It is at this point that we get the hint of a parallel story playing out beyond the laboratories of SKF. When applying for AMA approval to advertise in 1937, SKF was experiencing "publicity problems" related to Benzedrine: a May 1937 *Time* magazine discussed the popularity of the drug among students cramming for exams while taking the "powerful but poisonous brain stimulant" (31). Eventually, the AMA approved Benzedrine's use for the treatment of depression, making its mood elevating effects (rather than its effects on concentration or weight) the reason for prescription. Again, we see the hint of use outside of official channels when Rasmussen discusses the specter of addiction which concerned SKF in the late 1930s. But thanks to friendly research by the Assistant Surgeon General—and a "super libel lawyer" to stifle reports of addiction—SKF was able to silence that worry, at least for a while (48).

Indeed, Rasmussen's book is at its best when it richly describes the continuous—often contentious—pas de deux in which the pharmaceutical industry did its utmost to control the way society understood and used the drug, and average people either accepted or rejected the messaging coming from the medical establishment, in response to their own personal experiences with the substance. Take, for instance, Rasmussen's discussion in Chapter Three about the use of amphetamines during the Second World War and the ways in which the effects of the drug were useful to militaries in maximizing the fighting potential of their soldiers and lifting their morale. Rasmussen also offers a rich description in Chapter Four of the array of "bootleggers, beatniks, and Benzedrine benders" that challenged the prescriptions (pun intended) of the medical establishment in the post-War period. His discussion in Chapter Seven of Congress's various attempts to regulate amphetamines in the 1960s and 1970s offers a fascinating juxtaposition to the anti-amphetamine messaging of Allen Ginsburg and segments of the Hippie movement, whose "Speed Kills" campaign recruited the likes of rock stars Frank Zappa and Gracie Slick to record PSAs on the radio (188).

It is worth remembering that the book and its author are embedded within this complex interplay of perspectives. It is here where limitations arise. In the final chapters, Rasmussen's tone shifts away from historical critique and to personal jeremiad: the book builds to Chapter Eight, in which

he suggests that even today, years removed from the “speed epidemic” of the early 1970s, American society still functions on “speed.” Rasmussen evidently is well-meaning in adopting this attitude. The structural issues that Rasmussen rightly identifies—disparities in the prescription of ADHD drugs between white and black patients, the illicit use of amphetamines among those of lower socioeconomic status versus the socially-acceptable prescription of the same substance to the well-to-do, the outsize power of Big Pharma, etc.—serve as points well-taken. There are surely physicians who prescribe amphetamines to children promiscuously, without doing due diligence and completing the full diagnostic workup for ADHD, including the fairly-comprehensive Vanderbilt questionnaire. There is a nuanced conversation to have about the role of pharmaceuticals as “technologies of self” and about the appropriate role that medications play in mediating our social relations (253).

But the nuance of the early book evaporates by its end. Hammering away to score political points, Rasmussen ends up condemning those he claims to be protecting. Rasmussen unironically uses the pejorative term “speed freaks” to describe those with stimulant use disorder, ostensibly building toward his major point about the drugging of America. But it’s a fundamentally bad rhetorical move which stigmatizes and disempowers. In this way, he also does not offer much compassion to patients with ADHD. Rather than take seriously the idea that these substances help patients with a real problem—and indeed may help these patients avoid substance use disorders developed in the course of self-medication—Rasmussen’s implication is that the label of “speed freaks” applies for those on ADHD drugs, marked as these children and adults alike are with an “amphetamine benediction” from Big Pharma and doctors eager to pathologize “above-average distractability” (252, 258). Rasmussen does the very least in allowing that perhaps some people might be helped by amphetamines for ADHD, but he seems to suggest that many of those claiming benefit are members of an astroturf support community who “spread the word about how common and terrible the condition is, push for special benefits for sufferers, and try to make the drug more widely available” (233); he states without citation that these groups “are funded by the makers of medications” for ADHD (234). He seems to suggest that their problems are not really very significant, or at least not on a scale worth this level of treatment. Taking amphetamines for ADHD amounts to “turning to medicine in order to perform work at a grueling pace instead of resting more frequently and taking longer to do the job or else finding more inspiring and inherently rewarding work” (251). To Rasmussen’s mind, this amounts to “doubtful liberation” (254).

The stridency of his critique also seems to hamper his capacity for fair analysis at the book’s tail end. Rasmussen includes selective serotonin reuptake inhibitors (SSRIs) with amphetamine derivatives to prove the magnitude of the “speed” problem in the twenty-first century. His argument is that SSRI users should be included in his overall count of patients on “speed” because SSRIs supposedly “inherited amphetamine’s old psychiatric market,” offering patients subjective “zest” and weight loss (248). This move seems a dubious one: SSRIs don’t work on the same dopamine and norepinephrine pathways that amphetamine does and thus don’t have the potential for abuse. SSRIs also don’t cause weight loss with long-term use, but rather weight *gain*, despite his assertion to the contrary: in fact, concern about weight gain is often a barrier for

patients to begin treatment. It's one thing if Rasmussen wants to broadly critique prescriptions for problems of living. But by dubiously linking SSRIs to amphetamines, it simply appears that Rasmussen is padding the numbers of "speed" users in our contemporary moment to prove his point as vividly (or sensationally) as possible.

Overall, *On Speed* offers provocative insight into the lives that amphetamine, Big Pharma, and society have created through debate and experimentation, in labs, in schools, or on the streets. The extensive, often heavy-handed critiques presented by Rasmussen against "speed" toward the book's end serve as the best evidence of the way in which humans invest this collection of carbon, hydrogen, and nitrogen with meaning, using the molecule as a symbol of affirmation and acquiescence, rejection and rebellion.

Image: Figure 11, Rasmussen, *On Speed*.