

FILM REVIEW ESSAY: COMPLICITY AND RESPONSIBILITY

Sam Coleman

The Wind Rises (*Kaze tachinu*). Directed by Miyazaki Hayo. 2013.

American audiences will have their hands full comprehending Miyazaki Hayao's multilayered farewell to feature-length animation. *The Wind Rises* tells the story of a Japanese aircraft designer living in an era spanning the Tokyo Earthquake of 1923, the Great Depression, and defeat in World War II. The main character falls deeply in love first with airplanes in childhood, and later, in young adulthood, with a young woman who is fatally afflicted with tuberculosis. His name, Horikoshi Jiro, belonged originally to the chief designer of the Imperial Navy's Mitsubishi Zero—one of the world's most advanced fighter planes at the dawn of the 1940s.

Japanese animation is renowned for its appeal to universal human themes, but this movie could pose an exception. Its treatment of Japanese prewar history and wartime aviation stands in stark contrast to the usual distant future or nebulous "somewhere else" of anime fiction, and that will surely influence perceptions of its message and the appraisal of its artistic merit. Miyazaki, now seventy-five years old, was still a young child when World War II ended, so he must have perceived the prewar and war years in his country through cultural osmosis. This much is known: he has infused many of his other works with a distinctive antiwar message by depicting senseless massive destruction, and *The Wind Rises* remains true to form, although his references to the violence and devastation of World War II in this movie may seem muted.

I claim no expertise in the aesthetics of animated film, much less matters such as plot structure or character development, so the fact that I liked this movie very much counts for little, and I am humbled by the task of commenting on Miyazaki's creation. As a student of Japanese science and technology, though, I can reflect on Miyazaki's depiction of the hearts and minds of Japanese engineers in the era of *The Wind Rises* as stage-setting for a fundamental issue: the dedication of creative talent to weapons R & D.¹

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Horikoshi himself wants nothing so much as to design airplanes. He is captivated by the beauty of a design both elegant and viable. Because so few of us live in the world of industrial design and production we fail to appreciate the discipline, rigor, and attention to detail that drive an engineer's dialogue with hard reality—in this case, gravity. The successful aeronautical product requires mastering a daunting combination of factors, from material stress to weight factors and curves versus straight lines. Inferior design in this business means crashes, and they fill Horikoshi's nightmares. The payoff for superior design is speed and agility for all to see. Its realization is exhilarating, and Miyazaki portrays that drama superbly. (As I left a preview screening someone behind me said, "My dad's an engineer—he'd love this movie." Be prepared, however, for artsy reviewers who complain about too many rivets.)

Left to his own preferences, the Horikoshi Jiro depicted in this movie would design passenger aircraft, but if the only available job is to design bombers and fighter planes, so be it. The yearning to make civilian aircraft seeps into his dreams and pokes out at the edges of his waking life. What a shame, he comments, that a magnificent observation room ends up as part of a bomber. Horikoshi responds to a panel of naval officers barking demands at him with the pat phrase, "I shall try my best." Afterward, in sharp contrast, he leads a voluntarily organized research group composed of enthusiastic fellow engineers tasked with fighter plane design. Confronting the problem of excess weight, he proposes a puckish solution: "If we don't mount machine guns we could get by." His teammates and section chief react with a hearty conspiratorial laugh. Miyazaki helps us choose the characters to like in this sequence, by the way, by giving the engineers smooth, earnest and attractive faces, in contrast to the coarse and angry faces of the naval officers, who resemble the bullies against whom Horikoshi had squared off as a child.²

Despite these signals that Horikoshi and some other engineers aren't enthusiastically wedded to the war mission, the question of moral culpability is bound to arise, and rightfully so. Isn't the movie romanticizing an agent of destruction? How many steps is Horikoshi Jiro the fighter plane designer actually removed from Japanese wartime atrocities? One could attempt to answer with a dollop of social psychology: the shop floor at Mitsubishi Heavy Industries, a beehive of teamwork, stands at an abstract remove from the scenes of violence, much as the subjects in the Milgram obedience experiments applied electrical shocks to stooges more willingly when the work was divvied up among several unquestioning actors and the victim was out of sight.³

The Wind Rises, however, provides more historical grist for understanding engineers' motivations. It accurately portrays the Japan of that time as a country out of work. Anxiety and insecurity permeate everyone's consciousness. On the train from Tokyo to his new position in Nagoya, Horikoshi sees homeless jobseekers swarming the tracks, and

the car ride to his destination slows for a panicked crowd converging on a failed bank—yet another, he learns. “Our company is having a hard time, too,” his longtime friend and engineer coworker Honjo observes. Honjo voices his own distaste for the government’s prodigious sums spent on developing warplanes while people go hungry. Nevertheless, caught in the contradiction of a poor country that wants airplanes, on one hand, and his ability to design them, on the other, he declares that he’s not about to waste the chance presented him.

State oppression factors into the motivational mix for participating in the war machine. In the midst of Horikoshi’s fighter plane design project, his boss Kurokawa spirits him out of his office and into hiding because a visit from the thought crimes unit of the secret police had inquired about him by name. Why? “Who knows?” is the answer—others have been singled out without explanation as well. Horikoshi gets qualified reassurance from Section Chief Hattori: “I’ll do what I can with the government higher-ups, and the company will do everything to protect you—as long as you’re useful.” If cynics dismiss this depiction of arbitrary threats as a postwar ploy calculated to deflect responsibility, they ignore the systematic intimidation and manipulation so thoroughly cultivated by Japan’s leadership.

Might we also consider what it feels like to know that one’s country is constantly struggling to advance out of an international backwater in science and technology? Japanese awareness of Western technological superiority began in the 1850s, and the technology gaps then posed an existential threat. (The struggle at that time centered on cannon casting technology.) Americans have forgotten our own technological and scientific inferiority at different times in history, whether it was to British manufacturing technology in the early 1800s (which we solved partly through industrial espionage) or the clear superiority of European scientific talent in the early twentieth century. We couldn’t overcome that gap until the late 1930s, when so many fine minds fled to the US to escape political persecution on the European continent.

During a stunningly successful flight of one of Horikoshi’s test aircraft, Hattori exults, “It feels just like being in a foreign country!” Horikoshi and his fellow engineers often talk about technology gaps, estimating them in numbers of years. At one point they observe in half-bemused dismay as their partially assembled test models are hauled to the airstrip by oxen. German counterparts deal Horikoshi and his colleagues a far more stinging insult, though, by restricting their movements in the Junkers production facility despite a technology transfer agreement that surely involved paying the Nazis a hefty sum of money. Without revealing the resolution of the standoff, I can note that it resonates with a theme related to Japanese catch-up syndrome: a bid for dignity in the eyes of Western counterparts and a yearning to be accepted as peers. Horikoshi’s idol and dream mentor, Italian aircraft designer Giovanni Caproni, symbolizes this aspiration poignantly.

To Horikoshi, the well designed airplane is an art work, a thing of beauty, and Caproni, his companion in dreams, says it outright: “Airplanes aren’t tools for war or a way to make money. Airplanes are a beautiful dream. The designer gives the dream a form.” Perhaps the young Horikoshi, portrayed as agreeing with Caproni so enthusiastically, is only Miyazaki’s fictional projection, rendered with an artist’s sensibilities. Perhaps the real Horikoshi was simply interested in highly specialized technical problems—a rather cold-blooded person by comparison. We could put the world’s military design engineers on a continuum: on one end, we’d locate reluctant geniuses who would much rather apply their talents to civilian projects, and on the other, calculating techno-opportunists and sociopaths. Toward the civilian-inclined end we might locate Nishina Yoshio, internationally acclaimed physicist who was essentially ordered to develop an atomic weapon by Japan’s World War II military, or perhaps even Mikhael Kalashnikov, Russian World War II inventor of the infamous AK-47 assault rifle, who famously claimed that were it not for Nazi aggression he would have preferred inventing farming equipment. A particularly famous former Nazi might belong closer to the unpleasant end of the continuum: recalling satirist Tom Lehrer’s song lyrics, Wernher von Braun regarded where his rockets landed as someone else’s “department.”

Focusing on individual character to explain an engineer’s decision to participate in building the engines of war begs the most important question. Who has the political power to allocate R & D resources to weapons design and development at the expense of domestic civilian projects? The question is just as relevant to the United States today as it was for the Japan of the 1930s. With a figure of \$520 billion for FY 2014, the Department of Defense enjoys a stunning resilience in the face of budget cuts everywhere else. The follies and abuses of American empire that inspired Chalmers Johnson’s trilogy on the subject are, if anything, yet more glaring today, and the costs yet more stark. Our infrastructure gets a D+ in the American Society of Civil Engineers’ 2013 report card, and our world teeters on the edge of climate catastrophe. Considering our gargantuan electronic spy system and a polarization in wealth and income that threaten what remains of democracy, how far *are* we removed from the Japan of the 1930s? We *are* different from Horikoshi’s Japan in one respect: our immensely costly F-22 and F-35 warplanes can’t fly.

The Wind Rises contains other themes that would resonate with an older Japanese audience but will probably elude Westerners: the stern and demanding but protective boss (Kurokawa); the ideal of the husband whose first obligation as spouse is to pursue his career; the daringness of romance in an era of arranged marriages; and the mysterious European (Kasutorupu) whose roles are to catalyze the young couple’s right to proclaim their love and foretell the future based on a wider view of the outside world denied the insular Japanese.

There remains, nonetheless, the pressing universal question, particularly apt for present-day Americans infatuated with militarism: where are we putting our creative talent, and to what end? It's time for intellectuals to address the issue systematically. Following the example set by Columbia University's Seymour Melman, we should analyze in very specific terms the costs of military R&D to our country's well-being. Specialists in Science, Technology, and Society should reject portrayals of scientists and engineers as members of a powerful and privileged cult who write their own ticket. The plight of university laboratory researchers living from one soft money grant to the next ought to disabuse us of such notions, and I invite historians to recall Harry Truman's insulting treatment of a remorseful Robert Oppenheimer after his atomic bombs were used on civilian populations.

Hopefully, a movie like *The Wind Rises* will inspire more of this discussion than any academic treatise could. By making Horikoshi into a flesh-and-blood human being who loves as intensely as he creates, Miyazaki has asked us to engage the issue of just who holds the power to create and the power to destroy, and he has emphasized the message by making this his final movie. We should thank him heartily for that opportunity.

NOTES

¹ This review was originally published online by APPSI and its sister institute, the Japan Policy Research Institute, as a *JPRI Critique* Volume 20 Number 2 (February 2014).

² The dialogue quotes in this review are based on the original script and may vary somewhat from subsequent dubbing translations.

³ Stanley Milgram's laboratory experiments in "destructive obedience," conducted in the early 1960s, systematically explored factors that influence willingness to obey or resist orders to harm other human beings. The experiments were structured as a fictitious set of learning procedures in which actual subjects were ordered to deliver shocks at dangerous levels to subjects who, unknown to subjects, were actors. The experiments were crafted with carefully constructed variations such as division of responsibility for delivering shocks and proximity to shock victim.