# Prosthetic Manhood in the Soviet Union at the End of World War II

## by Frances Bernstein\*

#### ABSTRACT

Millions of Soviet soldiers were disabled as a direct consequence of their service in the Second World War. Yet despite its expressions of gratitude for their sacrifices, the state evinced a great deal of discomfort regarding their damaged bodies. The countless armless and legless veterans were a constant reminder of the destruction suffered by the country as a whole, an association increasingly incompatible with the postwar agenda of wholesale reconstruction. This article focuses on a key strategy for erasing the scars of war, one with ostensibly unambiguous benefit for the disabled themselves: the development of prostheses. In addition to fostering independence from others and ultimately from the state, artificial limbs would facilitate the veterans' return to the kinds of socially useful labor by which the country defined itself. In so doing, this strategy engendered the establishment of a new model of masculinity: a prosthetic manhood.

On 24 June 1945, roughly seven weeks after Germany's surrender,<sup>1</sup> an immense military parade was held on Moscow's Red Square to celebrate the Soviet victory in what was known as the Great Patriotic War. With its lengthy columns of soldiers marching in tight formation and its display of the latest military hardware, the meticulously choreographed spectacle projected an image of vigor and confidence, leaving no doubt of the country's readiness in the event of any future threat to its land or values (see fig. 1).<sup>2</sup> Missing from this celebration, however, were representatives of two groups who also had served and made important contributions to Germany's defeat. According to the parade order drawn up by Army General Aleksei Antonov, chief of the

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<sup>1</sup>Germany's military surrender to the Soviet Union took place on 9 May, one day after it had surrendered to the Allies (VE Day).

<sup>2</sup>Nina Tumarkin, *The Living and the Dead: The Rise and Fall of the Cult of World War II in Russia* (New York, 1994), 92–4. Appearance made a difference—David Abramovich Dragunskii and two other senior officers were to be excluded because of their short stature despite their status as war heroes. After Marshal Ivan Konev intervened on their behalf, they were permitted to march. See Albert Axell, *Russia's Heroes, 1941–1945* (London, 2001), 161–2. For a discussion of earlier Russian military masculinity, see Karen Petrone, "Masculinity and Heroism in Imperial and Soviet Military-Patriotic Cultures," in *Russian Masculinities in History and Culture*, ed. Barbara Evans Clements, Rebecca Friedman, and Dan Healey (New York, 2002), 172–93.

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**Figure 1.** Column of sailor-paratroopers and submariners in Red Square Victory Parade, Moscow. Stalin set the date for the parade right after Germany's surrender, giving soldiers abroad the chance to return home and participants the same amount of time to perfect their performance, for which they were drilled and rehearsed continually. Photographer: Ivan Mikhailovich Shagin, taken on 24 June 1945. Source: Russian State Documentary Film and Photo Archive, ed. khr. 0-213786, http://victory.rusarchives.ru/index.php?p=31&photo \_id=410 (accessed 13 September 2013).

general staff of the Soviet Armed Forces, participant regiments would be comprised of "male, active duty personnel." Explicitly excluded, therefore, were women, a significant number of whom had fought at the front, and those (male) soldiers whose battlefield wounds barred them from further service.<sup>3</sup>

As a result of injury, frostbite, gangrene, or improper medical care, millions of Soviet soldiers were disabled as a direct consequence of their wartime experience.<sup>4</sup> Conservative estimates place this number at 2.75 million, but it is most likely much higher given the bureaucratic and material obstacles to receiving special disability status (and hence the modest state benefits to which a disabled veteran would be entitled).<sup>5</sup> Considering the sheer numbers involved, one would expect to find the presence of so

<sup>3</sup>Beginning in the summer of 1942, women were actively recruited into the armed forces, including for active frontline service. More than 800,000 women served over the course of the war. See Anna Krylova, *Soviet Women in Combat: A History of Violence on the Eastern Front* (New York, 2010); Roger D. Markwick and Euridice Charon Cardona, *Soviet Women on the Frontline in the Second World War* (New York, 2012); Svetlana Alexiyevich, *War's Unwomanly Face* (Moscow, 1988).

<sup>4</sup>G. A. Khorokhorina, *Politika gosudarstva v oblasti sotsial'nogo obespecheniia i reabilitatsii invalidov voiny i truda v period 1941–45 (na materialakh rsfsr)* (Moscow, 2009), esp. sec. 2; Amnon Sella, *The Value of Human Life in Soviet Warfare* (New York, 1992), 67; Russian State Archive of Socio-Political History (hereafter cited as RGASPI), f. 17, op. 117, d. 511, ll. 107–10.

<sup>5</sup> This constituted roughly 8 percent of the entire armed forces. See G. F. Krivosheev, *Soviet Casualties and Combat Losses in the Twentieth Century* (London, 1997), 92. See also Mark Edele, *Soviet Veterans of the Second World War: A Popular Movement in an Authoritarian Society, 1941–1991* (Oxford, 2008); Beate Fieseler, "The Bitter Legacy of the 'Great Patriotic War': Red Army Disabled Soldiers many permanently injured veterans to resonate widely in the postwar experience.<sup>6</sup> But the state's attitude toward the "Invalids of the Patriotic War," as they were called, was decidedly complex and conflicted. Despite the expressions of gratitude for the soldiers' sacrifices and pledges of material support encountered in newspaper editorials and public addresses, the state evinced a great deal of discomfort regarding their damaged bodies.<sup>7</sup> In the context of a culture long hostile to physical impairment, such substantial numbers of armless and legless men constituted a potent threat to the myth of Soviet invincibility already being manufactured as the Cold War heated up.<sup>8</sup>

If economic and political motives dictated that veterans as a special interest group be disbanded as soon as possible,<sup>9</sup> this was doubly true for the disabled among them. For one thing, they were a constant reminder of the destruction suffered by the country as a whole, an association increasingly incompatible with the postwar agenda of wholesale reconstruction. For another, the danger posed by injured male bodies was perceived in specifically gendered terms, with disability threatening feminization. The postwar vision of a remasculinized Soviet Union necessitated a return to the traditional male and female norms that had been so disrupted by the war years.<sup>10</sup> Because disability was perceived as a problem of men, it required a specifically masculine solution.<sup>11</sup>

Of the many forces working to "unmake" veterans, three policy agendas in particular targeted those with disabilities and facilitated their disappearance. The first involved simply excluding them from any official commemoration, representation, or

<sup>8</sup> On the absence of disabled soldiers from monuments and other forms of commemoration, see Robert Dale, "Re-Adjusting to Life after War: The Demobilization of Red Army Veterans in Leningrad and the Leningrad Region, 1944–1950" (PhD diss., Univ. of London, 2010), 20. On the emergence of a Cold War masculinity, see Erica L. Fraser, "Masculinities in the Motherland: Gender and Authority in the Soviet Union during the Cold War, 1945–1968" (PhD diss., Univ. of Illinois at Urbana-Champaign, 2009). As an interesting point of comparison, see Gregory Weeks's description of how the Cold War affected disability policy in occupied Austria: "Fifty Years of Pain: The History of Austrian Disabled Veterans after 1945," in *Disabled Veterans in History*, ed. David A. Gerber (Ann Arbor, Mich., 2000), 229–50, on 241–2.

<sup>9</sup>On veterans as a political threat, see Edele, *Soviet Veterans* (cit. n. 5).

<sup>10</sup> Because of space constraints, I am unable to address in any detail the demands made upon Soviet women during these years. Of course they were obligated to make bodily sacrifices of their own in the name of postwar reconstruction and stability. In addition to caring for their disabled husbands and sons, women were expected to erase the memory of their wartime experience, relinquish their newly acquired independence, leave higher-paying and skilled jobs to make way for demobilized men, and produce as many children as possible (a particularly dauting challenge, given the highly skewed female-to-male ratio). See Greta Bucher, *Women, the Bureaucracy and Daily Life in Postwar Moscow, 1945–1953* (New York, 2006); Mie Nakachi, "Replacing the Dead: The Politics of Reproduction in the Postwar Soviet Union, 1945–1955" (PhD diss., Univ. of Chicago, 2008); Anna Krylova, "Healers of Wounded Souls': The Crisis of Private Life in Soviet Literature, 1944–1946," *J. Mod. Hist.* 73 (2001): 307–31, esp. 324–7.

<sup>11</sup>The term "remasculinization" comes from Susan Jeffords, *The Remasculinization of America: Gender and the Vietnam War* (Bloomington, Ind., 1989). For more on the Soviet remasculinization narrative, see my "Rehabilitation Staged: How Soviet Doctors 'Cured' Disability in the Second World War," in *Disability Histories*, ed. Susan Burch and Michael Rembis (Urbana-Champaign, Ill., 2014), 218–46.

under Late Stalinism," in *Late Stalinist Russia: Society between Reconstruction and Reinvention*, ed. Juliane Furst (London, 2006), 46–61, on 47.

<sup>&</sup>lt;sup>6</sup> My focus on visible signs of impairment and specifically on soldiers with amputations is not to suggest the absence of "invisible" disabilities (sensory and psychiatric) among Red Army soldiers: on the contrary, both types of battlefield injuries and conditions were pervasive.

<sup>&</sup>lt;sup>7</sup>According to Beate Fieseler, Stalin himself never publicly referred to the war disabled, either during or after the war; Fieseler, "Nishchie pobediteli': invalidy Velikoi Otechestvennoi voiny v Sovetskom Soiuze," *Neprikosnovennyi zapas*' 2–3 (40–41) (2005), http://magazines.russ.ru/nz/2005/2/ (accessed 12 September 2011).

association with the Red Army, as they had been from the victory parade.<sup>12</sup> A second effort concerned the state's ongoing practice of redefining disability classifications to reduce its substantial support obligations to veterans with impairments. That so many previously identified as disabled were now categorized as fit to work greatly boosted the state's triumphant claims about its success in treating and rehabilitating this population.<sup>13</sup>

This article focuses on a third strategy for erasing the scars of war, one with more ostensibly unambiguous benefit for the disabled themselves: the development of prostheses. Offering the possibility of elevating the wounded from the ranks of the child-like invalids to which they would otherwise be consigned (rhetorically and actually), these devices served a variety of objectives, at once aesthetic, political, and cultural. In addition to fostering independence from others and ultimately from the state, artificial limbs would facilitate the return of the war disabled to the kinds of socially useful labor by which the country defined itself. Henceforth, the disabled male body would be configured not in terms of absence (the missing limb), but presence (the mechanical replacement). Implicitly, the agenda for disabled veterans required the establishment of a new kind of masculinity: a prosthetic manhood.

By design, execution, and representation, Soviet postwar prosthetics were masculine objects and assumed a male recipient.<sup>14</sup> Moreover, the function of prostheses as a technology of masculinity extended beyond the objects themselves to those who designed them. During the war and especially in the period that followed, a significant amount of publicity was given to so-called invalid-inventors [invalidy-izobretateli]: men, disabled themselves, who made devices that were then put into production for other war amputees.<sup>15</sup> These inventions and inventors conveniently compensated for the shortcomings of professional prosthetic design, a point to which I will return below.<sup>16</sup> Through their creations, inventors made possible a return to manhood that was, in principle, accessible to any disabled veteran. By employing the same modern technology that helped win the war to engineer masculinity, the bodies of soldiers, like the country itself, could be made whole again. In the attention shown to these inventors, as well as to other prosthesis success stories, a model of behavior—an exemplary invalidism—was articulated to which others with the same impairments could aspire. Yet, as this article demonstrates, the prototype of prosthetic manhood would remain confined to the blueprint stage, ultimately unattainable by those expected to adopt it.

<sup>&</sup>lt;sup>12</sup> By removing them from public view, the relegation of the most severely disabled to special care facilities served a similar function.

<sup>&</sup>lt;sup>13</sup> Central State Archive of St. Petersburg (hereafter cited as TsGASPb), f. 2554, op. 2, d. 471, ll. 1–2; d. 502, ll. 2–9; d. 533, ll. 48–56; Fieseler, "Nishchie pobediteli" (cit. n. 7).

<sup>&</sup>lt;sup>14</sup> On the normative and neutral status of the male image in visual propaganda, see Elizabeth Waters, "The Female Form in Soviet Political Iconography, 1917–1932," in *Russia's Women: Accommodation, Resistance, Transformation*, ed. Barbara Evans Clements, Barbara Alpern Engel, and Christine D. Worobec (Berkeley and Los Angeles, 1991), 225–42, on 227, 232.

<sup>&</sup>lt;sup>15</sup> State Archive of the Russian Federation (hereafter cited as GARF), f. 438, op. 1, d. 550, ll. 109–10. For other examples, see N. Shenk, "Izobretateli-invalidy," *Sotsial'noe obespechenie* 2 (1941): 16–8; "Konstruktor-izobretatel'," *Sotsial'noe obespechenie* 5 (1941): 12–3; D. S. Reshchikov, *S pomoshch'iu rabochego proteza* (Moscow, 1958); I. Treskov, "O protezakh," *Pravda*, 30 July 1945.

<sup>&</sup>lt;sup>16</sup> A. Miftakhov, "Bol'she vnimaniia proteznomu delu," *Sotsial'noe obespechenie* 1 (1956): 29–30; S. Pozniakov, "Pochemu invalidy vozrashchaiut protezy?" *Sotsial'noe obespechenie* 10 (1956): 43–6. The Ministry of Social Welfare eventually held republic- and countrywide contests to encourage nonprofessionals to submit designs for new models. See Ia. A. Rants, "O konkurse na usovershenstvovannye protezy," *Vrachebnoe delo* 1 (1949): 77–8.

#### BODIES AND THEIR VALUE IN THE SOVIET UNION

A great deal can be learned about the nature of a state by considering the values it attaches to the bodies of its citizens. Of all Western nations in the twentieth century, the Soviet Union has arguably been the most permissive—even encouraging—of damage inflicted upon its own population and justified in the name of the national interest: from the moment of its founding the Soviet Union had endured world war, revolution and civil war, dekulakization and collectivization of the peasantry, the rapid and unforgiving pace of industrialization, the GULAG system of forced labor, mass deportations, resettlements, and famines. We need only recall Stalin's notorious 1931 speech to industrial managers, justifying the physical sacrifices required for industrialization, to appreciate how bodily harm at the hands of the country's enemies also could be mobilized for political purposes:

To slacken the tempo would mean falling behind. And those who fall behind get beaten. But we do not want to be beaten. No, we refuse to be beaten! One feature of the history of old Russia was the continual beatings she suffered because of her backwardness. She was beaten by the Mongol khans. She was beaten by the Turkish Beys. She was beaten by the Swedish feudal lords. She was beaten by the Polish and Lithuanian gentry. She was beaten by the British and French capitalists. She was beaten by the Japanese barons. All beat her—because of her backwardness, because of her military backwardness, cultural backwardness, political backwardness, industrial backwardness, agricultural backwardness. They beat her because it was profitable and could be done with impunity. . . . They beat her, saying: "You are abundant," so one can enrich oneself at your expense. They beat her, saying: "You are poor and impotent," so you can be beaten and plundered with impunity. Such is the law of the exploiters—to beat the backward and the weak.<sup>17</sup>

In similar fashion, Soviet propaganda following the German invasion of June 1941 portrayed Russia as the victim of abject violence perpetrated by the Nazis. Countless exhortations called on its citizens to avenge the country's despoiled villages, violated women, and massacred children, sacrificing all in defense of the motherland. If Stalin was portrayed as the great father of the people, the country itself was personified as a mother (literally mother-motherland, *mat'-rodina*), a symbol of endurance, vulnerability, and devotion, in whose name her children were called upon to lay down their lives.<sup>18</sup> With Russia at its most powerless coded as feminine, (male) Red Army soldiers with disabilities thus posed a particular representational problem.<sup>19</sup> Such visual reminders of the violence of war were at odds with the image of military masculinity the state sought to project, especially following the decisive Soviet victory at Stalingrad (February 1943), which marked the turning point of the war.

<sup>17</sup> Joseph Stalin, "The Tasks of Business Executives: Speech Delivered at the First All-Union Conference of Leading Personnel of Socialist Industry, February 4, 1931," Marxist Internet Archive, http://www.marxists.org/reference/archive/stalin/works/1931/02/04.htm (accessed 1 July 2013).

<sup>18</sup>Lynne Attwood, *Creating the New Soviet Woman: Women's Magazines as Engineers of Female Identity, 1922–1953* (London, 1999), 136, 138; Elena Baraban, "The Return of Mother Russia: Representations of Women in Soviet Wartime Cinema," *Aspasia* 4 (2010): 121–38; Susan Corbesero, "Femininity (Con)scripted: Female Images in Soviet War Time Propaganda Posters, 1941–1945," *Aspasia* 4 (2010): 103–20; Linda Edmondson, "Putting Mother Russia in a European Context," in *Art, Nation and Gender: Ethnic Landscapes, Myths and Mother-figures*, ed. Tricia Cusack and Sighle Bhreathnach-Lynch (Burlington, Vt., 2003), 53–66.

<sup>19</sup> For an early analysis of representations of disabled soldiers, see Vera Dunham, "Images of the Disabled, Especially the War Wounded, in Soviet Literature," in *The Disabled in the Soviet Union*, ed. William O. McCagg and Lewis Siegelbaum (Pittsburgh, 1989), 151–64.

That this was not the only possible reaction of a country to its disabled soldiers can be seen in the responses of the USSR's most important wartime adversary and ally, both of whom recognized the value of mobilizing visual images. In Nazi Germany, representations of invalided veterans served to distinguish between the worthy disabled—who sacrificed their bodies in the service of their country—and the unworthy, who would be targeted for the country's coercive eugenic measures. In the United States, in contrast, representations of amputee soldiers underscored the sacrifices required of all citizens during wartime. This was a reversal of an earlier War Department policy prohibiting media depictions of wounded or dead soldiers, an approach much closer to that of the Soviets.<sup>20</sup>

Visual acknowledgment of the disabling consequences of war at the front could be found elsewhere, in particular in the pervasive depictions of mutilation inflicted by the Soviet Union upon its enemies, onto whom its own staggering wounds could be projected.<sup>21</sup> Cartoons, illustrations, and posters showed Germans decapitated or blown apart, arms and legs raining down from the sky, stumps prominently displayed (fig. 2). Through this transposition, the physical horrors of war that befell the Red Army could be discursively managed. By ascribing disabling injuries solely to the country's opponents, however, disability itself became politically suspect at home: something to which only its enemies were susceptible. Indeed, it was far less problematic to show deceased soldiers—marked by an empty helmet or an eternally waiting mother whose loyalty and commitment were unimpeachable.

The wariness with which disabilities were treated in the Soviet context stemmed in part from ideological opposition to charity (as a hypocritical practice of the bourgeoisie) and begging (in which stumps and scars served as tools of the trade).<sup>22</sup> Relegated safely to Russia's tsarist past, both endeavors relied on pity, a concept deemed inimical to state ideology and also unnecessary, given the social welfare system established after the revolution. In the postrevolutionary context, disabilities were likely associated instead with personal fallibility, most frequently by way of drunkenness, or with poor work performance, as there could be no public acknowledgment of the countless workplace accidents owing to unsafe conditions, shoddy equipment, or unrealistic production targets.

The Soviet Union's experience in the Second World War triggered the reappearance of veterans with disabilities crowding train stations and streets begging for alms, some with empty sleeves pinned up, others propelling their legless bodies on makeshift rolling platforms. Eventually, the former servicemen departed these spaces, some voluntarily and others as a result of decrees cracking down on "antisocial and parasitical elements" issued in the early 1950s.<sup>23</sup> Other, more sinister motivations were found to

<sup>20</sup> On Germany, see Carol Poore, *Disability in Twentieth Century German Culture* (Ann Arbor, Mich., 2007), chap. 2. On the United States, see David Serlin, *Replaceable You: Engineering the Body in Postwar America* (Chicago, 2004), chap. 1; and George Roeder Jr., *The Censored War: American Visual Experience during World War Two* (New Haven, Conn., 1993).

<sup>21</sup> Similar illustrations appeared regularly in popular publications such as *Ogonek* 17 (1943): 11–2; and *Krokodil* 4 (1942): 4; 28 (1942): 4. Identifying this same phenomenon, Claire E. McCallum argues alternately that wartime depictions of severely injured enemies served to express the Soviet Union's military might and the health of the body politic; McCallum, "The Fate of the New Man: Reconstructing and Representing Masculinity in Soviet Visual Culture, 1945–65" (PhD diss., Univ. of Sheffield, 2011), 110–2. For a more general discussion of these conventions, see Victoria E. Bonnell, *Iconography of Power: Soviet Political Posters under Lenin and Stalin* (Berkeley and Los Angeles, 1997), 260. <sup>22</sup> N. P. Priorov, *Kak pol'zovat'sia protezom* (Moscow, 1943), 3.

<sup>23</sup> On the disappearance of disabled war veterans from public view see Edele, *Soviet Veterans* (cit. n. 5), esp. 93–5; Beate Fieseler, "La protection sociale totale: les hospices pour grandes mutilés de guerre





account for at least some of those invalid-veterans soliciting handouts as well as other kinds of assistance. As P. P. Verzhbilovskii, a social worker and the author of several publications on the employment of the war disabled, cautioned his readers:

The enemy could exploit the advantages and priorities the Soviet Union awarded its wounded fighters. There are notorious cases of infiltrators and saboteurs being sent into our country to spy disguised as an invalid. There are cases when the Hitlerites intentionally maimed those being sent here as spies and saboteurs, since masquerading as an invalid made it easier for them to conduct their vile espionage.

Verzhbilovskii concluded with the following note of caution: "This is why in questions concerning our service to invalids we must not forget about vigilance."24

Whatever the values—whether discomfort, gratitude, or suspicion—associated

dans l'Union soviétique des années 1940," Cah. Monde Russe 49 (2008): 419-40; Elena Zubkova, "S protianutoi rukoi: nishchie i nishchestvo v poslevoennom SSSR," Cah. Monde Russe 49 (2008): 441–74; Dale, "Re-Adjusting" (cit. n. 8), 146–7.

<sup>&</sup>lt;sup>24</sup> P. P. Verzhbilovskii, *Trudovoe ustroistvo invalidov otechestvennoi voiny* (Moscow, 1948), 29.

with the disabled soldier during the war, with the transition to peacetime new demands were made upon all bodies, impaired or not. Becoming injured in defense of one's country was no longer sufficient evidence of dedication to the state; additional sacrifices were called for in the name of postwar reconstruction.<sup>25</sup> To rebuild the country's devastated economy and infrastructure, those with disabilities, like everyone else, were expected to work to the best of their abilities.<sup>26</sup> Beyond the general ideological value of labor, the ability to work was deemed to be central to a wounded soldier's recovery, and labor therapy was employed in all treatment and rehabilitation centers.<sup>27</sup> Moreover, disability benefits were too low to live on without supplemental income from working.28

In her analysis of representations of disabled Soviet soldiers, historian Claire Mc-Callum draws a sharp distinction between images produced during and after the war. She finds that wartime depictions were confined to scenes of battle, with soldiers' wounds emphasizing their heroism and willingness to sacrifice themselves in the cause of victory. After 1945, visual portrayals of disabled veterans all but disappeared; other genres (such as literature and official discourse) emphasized the veterans' ability to "overcome" their conditions and successfully reintegrate into peacetime society.29

McCallum highlights soldiers surmounting their disabilities, but according to literary scholar Lilya Kaganovsky, socialist realism (the artistic approach that became the official—and obligatory—state cultural style in 1934) dwelled upon and required such impairments.<sup>30</sup> Kaganovsky identifies two contradictory models of "exemplary masculinity" in Stalinist-era<sup>31</sup> representations: juxtaposed against the "virile male body" of the iconic steelworker was the image of "the wounded, long-suffering invalid." Through the sacrifice of his "traitorous" body, the "heroic invalid" of socialist realism offered an easily deciphered symbol of ideological dedication to the state. At the same time, these texts established "real" men's distance from political power since they posed no threat to Stalin's own perfection.<sup>32</sup> This, she argues, was the "real goal of Stalinist masculinity."33

<sup>25</sup> On reconstruction and the state of the economy, see Sheila Fitzpatrick, "Postwar Soviet Society," in The Impact of World War II on the Soviet Union, ed. Susan J. Linz (Totowa, N.J., 1985), 129-56; Mark Harrison, "The Soviet Union: The Defeated Victor," in The Economics of WWII, ed. Mark Harrison (New York, 1998), 268-301; Jeffrey Jones, Everyday Life and the Reconstruction of Soviet Russia (Bloomington, Ind., 2008).

<sup>26</sup> The only exceptions to this obligation were those classified as category 1 disabled, whose severe disabilities not only prevented them from working but necessitated full-time care.

<sup>27</sup> There is an extensive literature dealing with the use of labor therapy to treat soldiers with dis-abilities. See, e.g., V. P. Makridin, "Voprosy trudoterapii," *Gospital'noe delo* 6 (1944): 7–9. On the contribution of psychologists to the development of labor therapy during the war, see Albert R. Gilgen, Carol K. Gilgen, Vera A. Koltsova, and Yuri N. Oleinik, Soviet and American Psychology during World War II (Westport, Conn., 1997), chap. 3.

<sup>28</sup> Mark Edele argues that the provision of welfare services and pensions were intentionally inadequate (rather than accidentally or circumstantially so) to force those with disabilities back to work; Edele, Soviet Veterans (cit. n. 5), 90.

<sup>29</sup> McCallum, "Fate of the New Man" (cit. n. 21), 123–4. <sup>30</sup> Socialist realism is a style of art whose purpose was to advance the goals of communism and socialism. See Katerina Clark, The Soviet Novel: History as Ritual (Chicago, 1981).

<sup>31</sup>For the purposes of this article, "Stalinism/Stalinist" refers both to the chronological era during which Stalin was in power and to the repressive and authoritarian form of governance characterizing his regime.

<sup>32</sup> Lilya Kaganovsky, How the Soviet Man Was Unmade: Cultural Fantasy and Male Subjectivity under Stalin (Pittsburgh, 2008), 4, 22, 120.

33 Ibid., 146.

This essay seeks to draw from these seemingly contradictory interpretations. It builds upon McCallum's analysis by suggesting that the temporal distinction she makes between the wartime and postwar functions of these images extends to the injuries themselves. With few exceptions, battlefield injuries remained invisible in visual media, marked instead by a modest bandage wrapped around the forehead. Disabled soldiers were likewise missing from the war monuments erected after the Soviet victory, with the first appearing only in the mid-1950s.<sup>34</sup> Moreover, the shift from wound, however grievous, to disability was likewise one of location. As long as the soldiers were at the front, in the heat of battle, the wounds remained wounds, that is, temporary. Disability—both as permanent status and sign—was a product of the rear.

Furthermore, the model of prosthetic manhood discussed here mediates between Kaganovsky's opposing figures: through the use of artificial arms and legs, the heroic invalid could be engineered into the iconic steelworker. Regardless of the authenticity of their mechanical limbs, what made disabled veterans exemplary was the awareness that they were still disabled underneath. Writing about American advertisements for prosthetics at the turn of the twentieth century, Marquard Smith identifies a central dilemma encountered by commercial manufacturers of artificial limbs: how to market a device that, given the optimal outcome, would be indistinguishable from a real limb.<sup>35</sup> A mechanical limb needed to be inconspicuous enough to remain unnoticed but visible enough to be identified as artificial and therefore consumable: simultaneously erased and emphasized.

Even though Soviet prostheses were not governed by the imperatives of a competitive marketplace, they presented a similar conundrum. Despite a repeated emphasis on the need for realistic models and especially lifelike hands, in the Soviet context, as in the capitalist West, an artificial limb was successful only in so far as it hid an impairment and called attention to it at the same time. War heroes Mares'ev and Petrov (to be discussed further below) were famous not solely for their military exploits, stunning though these may have been, but because the men were disabled when they achieved them. Thus in Mares'ev's case, it was not his courageous eighteen-day crawl back to friendly territory but the return to battle on prosthetic legs—his victory over his own disability combined with his victory over the enemy—that would define him. Similarly, the prostheticized shock workers who overfulfilled production quotas were recognized as "heroes of labor" in part because they overcame the obstacles of their own bodies to achieve these remarkable industrial feats.

#### VIKTOR KONONOV AND THE ARTICULATION OF PROSTHETIC MANHOOD

The imperatives outlined above explain the enthusiasm with which prostheses were greeted as a solution to the "problem" of the disabled veteran in their capacity to counter the vast material, psychological, and symbolic damages wrought by the war through a simple technological fix. Hailed for enabling ex-soldiers' return to work and their ability to function independently, prostheses thereby served as a potent agent of

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<sup>&</sup>lt;sup>34</sup>McCallum, "Fate of the New Man" (cit. n. 21), 141. See also Natal'ia Konradova and Anna Ryleva, "Geroi i zhertvy: Memorialy Velikoi Otechestvennoi," *Neprikosnovennyi zapas* 2–3 (2005): 134–48, http://magazines.russ.ru/nz/2005/2/ (accessed 10 June 2013).

<sup>&</sup>lt;sup>35</sup> Marquard Smith, "The Vulnerable Articulate: James Gillingham, Aimee Mullins, and Matthew Barney," in *The Prosthetic Impulse: From a Posthuman Present to a Biocultural Future*, ed. Marquard Smith and Joanne Morra (Cambridge, 2005), 43–72.

remasculinization.<sup>36</sup> The cultural and political importance attached to them can be seen in the conferral of Stalin Prizes (the country's highest award) on several inventors of artificial limbs, all disabled themselves, in the years following the war, an honor they shared with such notables as Andrei Tupolev (the designer of the medium-range bomber Tu-2, 1948), Mstislav Rostopovich (1950), and Andrei Sakharov (1954).<sup>37</sup> According to Aleksei Iugov, a medical doctor turned journalist for the prominent *Literaturnaia gazeta*, the Soviet Union equated developments in prosthetics with such essential inventions as jet-propelled aircraft or the newest metallurgical technology.<sup>38</sup> Given the paucity of visual images of the war disabled, this trend is especially note-worthy.<sup>39</sup>

Among the Stalin Prize winners, one recipient in particular came to signify the transformational potential of artificial limbs and of those who employed them. Viktor Kononov had been working as a mechanic when he designed for his own use an artificial hand that would become the most heralded and one of the most widely supplied prosthetics of the war and postwar years.<sup>40</sup> Made initially for below-the-elbow amputees,<sup>41</sup> "Kononov's arm" was the first completely active hand produced in the Soviet Union, meaning all five fingers could bend to grasp and, through a lock mechanism, hold an object. Lightweight and easy to put on and take off without assistance, the device enabled a high degree of self-sufficiency.<sup>42</sup> And as the most lifelike of any prosthesis available, it was deemed to be of great psychological benefit as well (fig. 3).<sup>43</sup>

The attention Kononov's arm received also derived from its inventor's biography. A poster child for the transformational power of Soviet technology, he was an unschooled autodidact devoted to self-improvement, and thus quite literally a self-made man. Moreover, he achieved his great success only after he became disabled. The subject of countless publications, including a biography, Kononov's story follows the typical socialist realist narrative, in which the hero progresses from adversity through consciousness to success and happiness, thanks to the opportunities avail-

<sup>36</sup> Of course, an emotional and financial investment in science and technology as a means of bolstering a masculinity at risk was not exclusive to either the Soviet Union or the postwar era. See, e.g., the contributions by Michael S. Reidy, "Mountaineering, Masculinity, and the Male Body in Mid-Victorian England," and Michael Robinson, "Manliness and Exploration: The Discovery of the North Pole," both in this volume.

<sup>37</sup> B. P. Popov and D. I. Gritskevich, "Protezirovanie v RSFSR," *Ortopediia, travmatologiia, i protezirovanie* 5 (1956): 3–8, on 7. The Stalin Prize was awarded annually to honor the country's highest achievements in the fields of science, engineering and technology, literature, and the arts. Archive of the Academy of Medical Sciences (AMN), f. 9120, op. 3, d. 2, l. 156; RGASPI, f. 17, op. 125 d. 585, ll. 120, 177; GARF, f. 413, op. 1, d. 1939, l. 59.

<sup>38</sup> Aleksei Iugov, "Chelovek prevyshe vsego!" Literaturnaia gazeta, 7 August 1948, 4.

<sup>39</sup> For other examples, see N. Shenk, "Izobretateli-invalidy," *Sotsial'noe obespechenie* 2 (1941): 16– 8; "Konstruktor-izobretatel'," *Sotsial'noe obespechenie* 5 (1941): 12–3; Reshchikov, *S pomoshch'iu rabochego proteza*; Treskov, "O protezakh" (both cit. n. 15).

<sup>40</sup> Before the Second World War, the prosthetics industry in the Soviet Union was embryonic, with institutes (where limbs were designed) and factories (where they were fabricated) limited to a few major urban centers. For a brief history of the development of the industry and an assessment of the range of prostheses available at the time, see L. P. Nikolaev and I. A. Shumilin, "Otechestvennye aktivnye protezy," in *Aktivnye protezy verkhnikh konechnostei*, ed. A. K. Prikhod'ko and A. M. Veger (Kharkiv, 1949), 69–94.

<sup>41</sup> Eventually the arm was modified for above-elbow and bilateral amputees.

<sup>42</sup> A. R. Kreslin and K. I. Ivanov, *Pamiatka po osvoeniiu, pol'zovaniiu i ukhodu za protezom predplech'ia s aktivnoi kist'iu konstruktsii laureata stalinskoi premii V. E. Kononova* (Moscow, 1952).
<sup>43</sup> O. S. Dobrova, "Opyt protezirovaniia bezrukikh," *Ortopediia travmatologiia i protezirovanie* 1 (1956): 35–8, on 35.



Figure 3. Kononov in his workshop. Source: Russian State Archive of Scientific-Technological Documentation (Samara), f. 180, d. 552, l. 87. I am grateful to Doctor of Medical Science Mikhail Anatol'evich Dymochka, chief federal expert for medical-social expertise, Federal State Budgetary Division of the Federal Bureau of Medical-Social Expertise of the Russian Ministry of Labor, and to the Central Research Institute of Prosthesis and Prosthesis Construction for permission to use figures 3 and 4.

able only in the USSR.<sup>44</sup> Born into a poor peasant family with many mouths to feed, his father's death when Viktor was ten forced the boy into the workforce, toiling long hours for very little money. Eventually he took up a variety of professions, including joiner, locksmith, blacksmith, and boat mechanic's assistant. In 1915 he was drafted, wounded, and, when he had recovered, sent to the automobile division, transporting the injured from the front lines. He fought during the Civil War and became a me-

44 B. Azbukin, Chelovek idet k tseli (Moscow, 1950).

chanic for the secret police, eventually and fatefully joining the transport division of the Red Army stationed in Mongolia.<sup>45</sup>

On 28 October 1928, while driving his superior to headquarters by motorcycle, Kononov was in a serious accident in which he lost his right arm. Having recovered enough to return to work a few months later, he no longer drove "masterfully, with strength and confidence," as one of the many articles written about him related.<sup>46</sup> The artificial limb he ordered from Germany, praised for its high quality, turned out to be a standard cosmetic prosthesis, and on his very first business trip three of the fingers broke off.

In 1929 Kononov designed a crude prosthetic that he used for the next four years, though he remained dissatisfied with its limitations. To achieve his goal of an artificial hand that bent at the joints and was capable of grasping and holding, he inserted steel cables in the fingers (originally encased in leather, eventually replaced by rubber hosing), which were attached inside the wooden palm to a single cable wound around a drum. At the end of the hand was a metal band connected to a sleeve, itself fastened to a shoulder harness. A movement of the shoulder caused the fingers to close and, by activating the lock mechanism located on the forearm, allowed the grasp to be maintained. The hand could be removed easily and replaced with any number of work- and living-related attachments (clamp, hook, hammer, pencil holder, spoon, etc.). Given the range of movements it permitted, when sheathed by a leather glove it was almost indistinguishable from a natural hand.<sup>47</sup> In 1932 the Moscow Prosthetics Factory produced a mock-up of his device, and Kononov was hired as a designer by the Scientific Research Clinic of Prosthetics and Orthopedics of the Russian Republic-the premier prosthetics institute in the country—to continue improvements on his invention.<sup>48</sup> In 1941 his device was put into limited production, and by 1946 Kononov's arm was manufactured in factories and workshops across the country.

Both the invention and the inventor served as useful propaganda in the country's developing Cold War narrative, further evidence of the purportedly huge disparity between the treatment of veterans in the United States and the Soviet Union.<sup>49</sup> Soviet prosthetists and health workers hailed Kononov's arm as far superior to American models, and in particular to the much-celebrated "Wonder Arm," in appearance, function, simplicity of design, and cost.<sup>50</sup> As they explained, this was not surprising, given

<sup>45</sup> M. Kirsanov, "Ruka kononova," Sotsial'noe obespechenie 10 (1940): 16.

<sup>46</sup> Ibid.

<sup>47</sup> L. G. Kapachnikova, "Protezirovanie invalidov s odnostornnei kul'tei predplech'ia v srednei treti protezom kononova" (Kandidat. diss., TsNIIPiP MSO RSFSR, 1952).
<sup>48</sup> Ibid., 17. See also M. Vapshevich, "Ruka kononova," *Sotsial'noe obespechenie* 2 (1941): 14–5;

<sup>48</sup> Ibid., 17. See also M. Vapshevich, "Ruka kononova," *Sotsial'noe obespechenie* 2 (1941): 14–5; M. Mikhailov, "Pervoe soveshchanie rabotnikov proteznoi promyshlennosti," *Sotsial'noe obespechenie* 7–8 (1940): 24–7. Eventually the institution was renamed the Central Scientific Research Institute of Prosthetics and Prostheticization of the Social Welfare Ministry of the Russian Soviet Federation of Socialist Republics.

<sup>49</sup> Iugov, "Chelovek prevyshe vsego!" (cit. n. 38); I. A. Shumilin, "Raznovidnosti aktivnykh protezov," in Prikhod'ko and Veger, *Aktivnye protezy verkhnikh konechnostei* (cit. n. 40), 6. Despite such jingoistic pronouncements, Soviet orthopedists and prosthetists followed American developments closely; on two occasions specialists traveled to the United States on extended fact-finding missions, visiting leading specialists, treatment centers, and manufacturers. Soviet specialists purchased American equipment, specialist literature, and devices, which they sought to replicate domestically (typically unsuccessfully, given the expense and complexity of the American technology). Russian State Archive of Technical-Scientific Documentation (hereafter cited as RGANTD), f. 146, op. 1, d. 21, ll. 22-23, 33; GARF, f. 413, op. 1, d. 252, l. 20 ob.; d. 560, l. 95.

<sup>50</sup> While a number of foreign specialists and organizations, most notably the Paris-based International Federation of Veterans, were aware of the Kononov arm and sought information on its manufacture,

the superior nature of Soviet technology and the special attention the state showed its disabled veterans: in place of the vast opportunities for fulfillment available in the USSR, only neglect awaited American war invalids, whose economic, physical, and psychological needs remained unmet.<sup>51</sup>

Articulated in Kononov's story was the fantasy that not only could a profound injury be erased, but so too could the psychological and emotional baggage that went with it. Thus, in the words of D. Reshchikov, a double amputee, prosthetics take invalids "from the most depressed condition, from severe psychological suffering, to the point at which no trace remains."<sup>52</sup> Moreover, artificial limbs made it possible to move up the professional ladder, from blue- to white-collar labor: in Kononov's case, from driver to designer, and in Reshchikov's, from factory technician to teacher. In his address to the Prosthetics Institute after winning the Stalin Prize, Kononov spoke to this ability directly: "In our country, a country building communism, the boundary between intellectual and physical work is fading. A vivid example of this is the conferral of the highest title on me, a former worker and now a master designer."<sup>53</sup>

The achievements of the invalid-inventors provided much-needed reassurance, despite or perhaps because of the overwhelming evidence to the contrary, that the disabled could become more self-reliant and competent than before they were injured. Yet regardless of the grave labor shortage due to the country's astronomical wartime losses (over 20 million perished, including both civilians and combatants), veterans with disabilities encountered numerous impediments to work.<sup>54</sup> Ignoring a law requiring them to do so, employers often refused to hire the war wounded outright to make room for demobilized nondisabled servicemen or offered them low-status and low-paying jobs, such as watchman. Moreover, because disability status was calculated according to loss of labor capacity, by facilitating a return to work, prostheses served to disqualify veterans from the meager benefits to which they would have been entitled otherwise.<sup>55</sup>

Already the subject of numerous professional publications, Kononov's invention

I have not come across any mention of the prosthesis by their American counterparts. RGANTD, f. 146, d. 127, ll. 3-4.

<sup>&</sup>lt;sup>51</sup>On the development of the prosthetics industry in the United States, see Serlin, *Replaceable You* (cit. n. 20), chap. 1. Interestingly, the enthusiastic response of the amateur inventors to the state's call for proposals marks another point of discrepancy between the American and Soviet experiences: in the United States, the government sought to enlist disabled veterans in the development of new prostheses and was surprised by their lack of interest (personal communication with Audra Jennings).

and was surprised by their lack of interest (personal communication with Audra Jennings). <sup>52</sup> D. Reshchikov, "Moi chudesnye ruki: kak ia vladeiu rabochimi protezami," *Sotsial'noe obespechenie* 8 (1957): 31.

<sup>&</sup>lt;sup>53</sup> RGANTD, f. 146, op. 1, d. 50, l. 46.

<sup>&</sup>lt;sup>54</sup>GARF, f. 413, op. 1, d. 651, ll. 7–18. GARF, Social Welfare Ministry: 413/1/651/7–18; Beate Fieseler, "Soviet-Style Welfare: The Disabled Soldiers of the Great Patriotic War," in *Disability in Eastern Europe and the Former Soviet Union*, ed. Michael Rasell and Elena Iarskaia-Smirnova (London, 2014), 18–41, esp. 28–30.

<sup>&</sup>lt;sup>55</sup> Before the early 1930s, the Soviet Union, like tsarist Russia before it and like most of its Western counterparts, calculated disability benefits according to the nature of one's injury. In 1932, in the midst of the country's mass-industrialization campaign, disability categories were tied instead to one's occupation. Thus a right-handed accountant who lost his left hand was entitled to no compensation. Fieseler, "Soviet-Style Welfare" (cit. n. 54), 24–5. See also Edele, *Soviet Veterans* (cit. n. 5), 82; Bernice Madison, *Social Welfare in the Soviet Union* (Stanford, Calif., 1968); Sally Ewing, "The Science and Politics of Soviet Insurance Medicine," in *Health and Science in Revolutionary Russia*, ed. Susan Gross Solomon and John Hutchinson (Bloomington, Ind., 1990), 69–96; and Ethel Dunn, "Disabled Russian War Veterans: Surviving the Collapse of the Soviet Union," in Gerber, *Disabled Veterans* (cit. n. 8), 251–71.

was first introduced to the general public in a January 1943 article in *Trud*, the chief newspaper of the Soviet trade unions.<sup>56</sup> That was where Captain Chizhov read about it. While serving on the Western front, he was injured by a shell fragment and lost several fingers. His hand had to be amputated, and, remembering the article, he requested and was fitted with a Kononov arm. With his new limb, Chizhov wrote to express his gratitude to the inventor: now he could smoke a cigarette, light a match, chop wood, and, most importantly, hold and shoot a heavy machine gun, thereby allowing him to rejoin his unit in "the destruction of German fascism."<sup>57</sup>

Another invalid-inventor who received a fair amount of attention was Boris Efremov, a Stalin Prize winner for his above-knee prosthesis. Efremov staged a particularly elaborate and public demonstration of his leg's capabilities, accompanied by witnesses testifying (in writing) to his accomplishment.<sup>58</sup> As reported in the 15 November 1944 edition of *Krasnaia zvezda*, the Red Army newspaper:

On an overcast autumn morning a car stopped in Maiakovskii Square. The door opened and a man wearing a blue mackintosh emerged. This was Efremov. He quickly walked across the sidewalk. In the crowd it was difficult to distinguish him from other pedestrians. He didn't even have a stick in his hands, typically used by those with prostheses. He crossed Gor'kii Street, crossed the square at Belorusskii Station and continued his way along the Leningrad Highway.

In the first 29 minutes he walked almost two and a half kilometers. Later he slowed down a little bit. A strong wind interfered with his movement, and he encountered steep inclines and slopes, but the designer Efremov continued on in his effort. Without stopping to rest, he arrived at the end of his planned journey (Rechnoi Vokzal). In two hours and 23 minutes Efremov walked 11 km 600 m on prosthetics.<sup>59</sup>

In spite of this display of manly vigor and endurance, Efremov's leg was ultimately a failure, roundly rejected by veterans for its "ugliness." Their response underlines the importance of appearance, beyond mere functionality, to conceptions of prosthetic masculinity—features Kononov's arm ostensibly was able to fulfill. There were also institutional factors at work: while Efremov received substantial financial support and encouragement from the army, prosthetists and social workers affiliated with the Ministry of Social Welfare (under whose jurisdiction prostheses were developed and fabricated) were adamantly opposed to his invention's manufacture.<sup>60</sup>

### EXEMPLARY INVALIDS: MODELING PROSTHETIC MANHOOD

Kononov and the other invalid-inventors were not the only soldiers heralded in the press whose achievements relied on prostheses. Without question the most celebrated of this group was Alexander Mares'ev, the combat pilot made famous in *Pravda* by the war correspondent Boris Polevoi and later immortalized in his novel *The Story of* 

<sup>56</sup> K. Golitsinskii, "O proteze Kononova," *Trud* 11 (6655) (14 January 1943): 4.

<sup>57</sup> RGANTD filial, f. 180, op. 1, d. 552, l. 103.

<sup>58</sup>Central Archive of the Ministry of Defense (hereafter cited as TsAMO), f. 75, op. 12328, d. 236, l. 9.

<sup>59</sup>Ibid., l. 8: "Vypiski iz gazety *Krasnaia zvedzda* ot 15 november 1944 No. 270/5950/ o proteze konstruktsii B. F. Efremova." See also F. Tokarev, "Eshche o protezakh," *Pravda*, 16 August 1945.

<sup>60</sup> Whether this was owing to its appearance or to an interagency scramble for resources or authority, the industry's leading specialists were hostile to the invention and its inventor. GARF, f. 413, op. 1, d. 754, ll. 19, 137, 141.

*a Real Man* (1946).<sup>61</sup> On 4 April 1942, Mares'ev's I-16 fighter plane was hit during an air fight over the northwestern front, and he was forced to parachute into the forest behind enemy lines, severely damaging his legs. For eighteen days, unable to stand, he pulled and crawled his way over frozen ground back to friendly territory before being rescued. Both limbs had to be amputated below the knee, and Mares'ev spent the next several months in a military hospital undergoing treatment and rehabilitative therapy. In the hospital he was given a pair of prosthetic legs (not Efremov's, as they were designed for transfemoral amputations) and, resolving to return to the front as a pilot, spent countless grueling and painful hours learning to walk again. Eventually he mastered the limbs so well that he was not only walking but dancing.<sup>62</sup> The battle to conquer his own body was only one of the obstacles Mares'ev faced; he next had to overcome opposition from the medical review board and the military command, as permission from both groups was required before he would be allowed to fly. A little over a year later, Mares'ev resumed active duty, downing several enemy planes in the battle of Kursk.<sup>63</sup> For his actions he was awarded the title of Hero of the Soviet Union.

Similarly celebrated was Vasilii Petrov, a war hero who seemingly rose from the dead to fight again. In 1943, as deputy commander of the 1850th Anti-tank Artillery Regiment on the Ukrainian front, Petrov was seriously injured, losing both arms while holding the Bukrinsk bridgehead on the Dnieper River, an action for which he won his first Hero of the Soviet Union award. Believed dead, Petrov was taken to the morgue along with the other battle casualties. When the brigade commander learned about the death, he sent two men to retrieve the body in order to bury Petrov with military honors. They searched for close to a day before discovering him just barely alive in a shed amongst countless corpses awaiting burial. They brought him to the battalion medical station and demanded that the base surgeon operate immediately. The doctor refused, arguing that his time would be better spent on those more likely to survive, until the men held a pistol to his head and insisted. Petrov survived and after his recovery petitioned to be sent back to the field, a request personally approved by Stalin. Equipped with prosthetic arms,<sup>64</sup> Petrov served as deputy commander and then commander of the 248th Anti-tank Regiment. He was awarded his second Hero of the Soviet Union decoration for holding a beachhead on the Oder River.65

While there were other isolated cases of soldiers with artificial limbs returning to active duty (like Captain Chizhov), few were capable of doing so, much less perform-

<sup>61</sup> Boris Polevoi, *Povest' o nastoiashchem cheloveke* (Moscow, 1966). For Mares'ev's "real" biography, see Aleksandr Abramov, "Krasnye sokoly: Russkie aviatory letchiki-asy, 1914–1953: Mares'ev Aleksei Petrovich," http://airaces.narod.ru/all6/maresyev.htm (accessed 9 September 2013); "Aleksei Mares' ev, 'Ia ne iz legendy," interview by Anatolii Dokuchaev, October 2003, http://www.bratishka .ru/archiv/2003/9/2003\_9\_6.php (accessed 5 May 2015); Dinara Al'bertovna Borisova, "'V nebo iz Ibres'. Aleksei Mares' ev," www.edu.cap.ru/home/9239/dokument/maresev.doc (accessed 5 May 2015). Note the different spelling of the pilot's real (Mares' ev) and fictional (Meres' ev) surnames. For the purposes of this discussion, I will refer to Polevoi's narrative, as that is the version with which the public was familiar, either through the novel itself or through the film, released two years later (Aleksandr Stolper, 1948). The book was also the basis of Sergei Prokofiev's final opera, banned from being performed after a single, closed-door performance in 1948. Francis Maes, *A History of Russian Music*, trans. Arnold Pomerans and Erica Pomerans (Berkeley and Los Angeles, 2005), 339.

62 Polevoi, Povest' (cit. n. 61), 228, 238.

<sup>63</sup> Abramov, "Krasnye sokoly" (cit. n. 61).

64 GARF, f. 146, op. 1, d. 13, l. 17.

<sup>65</sup>Nikolai Nikitich Skorokhodov, *Chelovek-legenda* (Saransk, 1970). See also Vladimir Gorishniak and Iakov Nagnoiny, "My rodom: Vasilii Petrov," http://yarodom.livejournal.com/790481.html (accessed 6 July 2013).

ing the sort of extraordinary feats achieved by decorated war heroes or Stalin Prize winners. Though this level of distinction was out of reach for most everyone, the press also was filled with examples of little heroes to emulate. With the right character and attitude anyone could become a shock worker, exceeding production goals and displaying selfless commitment to the country through whatever kind of work one could do. The highest pinnacle of such achievement was to be named a Stakhanovite, in honor of miner Aleksei Stakhanov, who surpassed his work quota fourteen times over by extracting 102 tons of coal in less than six hours.<sup>66</sup>

In a series of pamphlets intended for disabled soldiers, readers were introduced to many such little heroes. A Stakhanovite and machine repairman before the war, senior sergeant Mikhail Kuliabin lost his right arm in battle. From an article in *Trud* he learned about the possibility of adapting machines for amputees like himself and was inspired to do the same. Kuliabin returned to his factory and, with a similar modification to the equipment, overfulfilled his quota by 150 percent. The author noted that he looked no different from anyone else on the shop floor, concluding: "In short: it is impossible to call this the work of an invalid."<sup>67</sup> While these articles never claimed so outright, readers might easily conclude that artificial limbs produced improved specimens, capable of the sort of achievements not possible in their predisabled, pre-engineered bodies.<sup>68</sup> Hence the large number of war disabled who became Stakhanovites or moved up the professional ladder. If this was not enough of an incentive, little hero narratives emphasized a moral equivalency between front line and factory line: "Yesterday a fighter battling the enemy, today [Kuliabin] is a fighter on the labor front. The only difference is that he has exchanged his rifle for a repair tool."<sup>69</sup>

#### MEN AND THEIR MACHINES

With his experience more readily accessible as a model of prosthetic manhood than those of a Mares'ev or a Petrov, Kononov remained the archetype for this new improved breed of Soviet man. Sources depicted him as leading an exceptionally wellrounded and fulfilling life. Kononov practiced gymnastics, played the xylophone, filled and lit his own pipe, tinkered with car engines, rode a bike and a motorcycle. Just as his detachable hand facilitated his migration from one form of work to another, Kononov's liminal status enabled him to shift between categories of identity: he could engage factory workers and rub elbows with the most highly esteemed academics. He traveled the country to personally demonstrate his invention (and his own life) to others with disabilities. Yet there was one significant exception to this picture of the perfect well-rounded life: his self-sufficiency was quite literal since the one realm in which he seemed to be lacking was romantic companionship. Whatever the relational status and history of the real Kononov, the celebrated invalid-inventor Kononov was, as far as the coverage of him was concerned, single. His primary "attachment" was to his arm.

<sup>&</sup>lt;sup>66</sup> This heavily promoted movement celebrated and richly rewarded those who surpassed production targets. On the phenomenon, see Aleksei Grigorevich Stakhanov, *The Stakhanov Movement Explained* (Moscow, 1939); Lewis H. Siegelbaum, *Stakhanovism and the Politics of Productivity in the USSR*, 1935–1941 (New York, 1988).

<sup>&</sup>lt;sup>67</sup> E. Kharitonovich, *Chelovek nashel sebia* (Moscow, 1944), 28-31.

<sup>&</sup>lt;sup>68</sup> M. F. Iashonkov, "A. I. Titovu i drugim," Sotsial'noe obespechenie 10 (1956): 50–3, esp. 51.

<sup>69</sup> Kharitonovich, Chelovek nashel (cit. n. 67), 21.

Attention to this issue may have been deemed unnecessary, given the vastly unequal ratio of women to men after the war and a general discomfort with overt attention to sexual matters characteristic of the culture.<sup>70</sup> Nonetheless, Kononov's biography underlines the very distinct nature of late Stalinist masculinity, and prosthetic masculinity, in particular. In this respect, as in others, the Soviet model differed from its wartime counterparts. In the United States during this era, addressing impaired veterans' anxieties regarding sexuality and their relationships with wives or girlfriends was seen as fundamental to the rehabilitation agenda, which sought to help men reestablish their prewar status as the head of the family.<sup>71</sup> In Japan, state policy encouraged single women to marry disabled soldiers.<sup>72</sup>

In contrast, rehabilitation in the USSR was depicted as a solitary endeavor; as Kaganovsky writes, "the Stalinist text leaves little room for the conventional marriage plot."<sup>73</sup> These popular narratives showed that war invalids capable of achieving true independence by means of their artificial limbs did not need to depend on women. Popular illustrations as well as those appearing in professional publications reinforced this theme of male self-reliance. With their Kononov arm, men could chop wood and hammer nails, write and shave, pour tea and eat soup, as well as perform the sort of domestic tasks that would have been relegated to the woman of the household, such as making the bed and brushing one's shoes and clothing (fig. 4). Notably, this muddling of gender roles did not work in reverse; in the few illustrations showing women using the device, they are engaged in such strictly feminine pursuits as sewing and knitting. Nor does the problem of male sexual performance seem to have garnered much attention in the psychiatric literature, as it did in the West.<sup>74</sup> In those instances in which the disabled veteran does get the girl, it occurs only after his recovery is complete—a reward for his efforts, as it were. The process of both psychological and physical rehabilitation was something to be tackled and endured alone.

The role that would have been played by the loving wife or girlfriend in another context was filled instead by the lathe, loom, or drill, the nuclear family by the greater

<sup>70</sup> According to Catherine Merridale, there were 20 million fewer men than women at the end of the war; Merridale, "The Collective Mind: Trauma and Shell-Shock in Twentieth Century Russia," *J. Contemp. Hist.* 35 (2000): 39–55, on 52. On sexual asceticism in the postrevolutionary context, see my *The Dictatorship of Sex: Lifestyle Advice for the Soviet Masses* (DeKalb, Ill., 2007). For the postwar era, see Deborah Field, *Private Life and Communist Morality in Khrushchev's Russia* (New York, 2007), chap. 4; and Bucher, *Women* (cit. n. 10).

<sup>71</sup> David Gerber, "Heroes and Misfits: The Troubled Social Reintegration of Disabled Veterans in *The Best Years of Our Lives,*" in Gerber, *Disabled Veterans* (cit. n. 8), 70–95. On a similar understanding of successful rehabilitation after the First World War, see Beth Linker, "Shooting Disabled Soldiers: Medicine and Photography in World War I America," *J. Hist. Med. Allied Sci.* 66 (2011): 313–46, http:// jhmas.oxfordjournals.org (accessed 9 July 2013).

<sup>72</sup> Lee Pennington, "Occupational Therapy: Japanese Disabled Veterans and the Postwar Occupation of Japan" (paper presented at the American Historical Association Annual Conference, New York, January 2009).

<sup>73</sup> Kaganovsky, *How the Soviet Man Was Unmade* (cit. n. 32), 89; Clark, *The Soviet Novel* (cit. n. 30), 69.

<sup>74</sup>The mental and sexual health of disabled veterans was a low priority given the pervasive trauma affecting every corner of society. As Paul Wanke, a historian of Soviet military psychiatry, notes, "the Soviet Union was simply unable and unwilling to provide such services"; see Wanke, *Russian/Soviet Military Psychiatry*, 1904–1945 (New York, 2005), 94, 112. On American attention to such issues, see Beth Linker and Whitney Laemmli, "Half a Man: The Symbolism and Science of Paraplegic Impotence in World War II America," in this volume. On the understanding and treatment of trauma in Russia throughout the twentieth century, see Merridale, "The Collective Mind" (cit. n. 70); and Julia Furst, "Introduction," *Late Stalinist Russia* (cit. n. 5), 1–20, on 5.





Рис.49. Удержание стакана и пользование им с помощью протеза Кононова /инв.Р-н, сл.3/.



Рис.51.Чистка щеткой одежды с помощью протеза Кононова. /Инв.Б-н,сл.25/.

Рис.50. Пользование расческой с помощью протеза Кононова. Тот же случай.



Рис.52. Чистка щеткой обуви с помощью протеза Кононова. Случай тот же.

*Figure 4.* Using the Kononov arm to hold a glass of water, comb hair, brush clothes, and clean shoes. Source: Kapachnikova, "Protezirovanie" (cit. n. 47), 151.

collective Soviet family. It was their mastery of feminized machines that signaled the disabled men's true recovery. Before the war, Aleksandr Chibirikin had been a lathe operator, a Stakhanovite who overachieved norms by 400 percent. As the commander of his unit, he lost his right arm rescuing his men from three different tanks under enemy fire. Returning to his factory after his recovery, Chibirikin became an instructor, teaching other men how to "love their machines."

After this conversation the machines became for the youths living, complex, thinking beings. They needed to be fed, watered, kept free of dirt and the metal dust that covered everything. The students had to be smarter in order to control without error such complicated organisms. Chibirikin told the workers about when he started, his helpless bewilder-

ment when she, this mysterious machine, for some inexplicable reason broke down.... "To get them to work demands that we are also precise. The machine loves precision, attention." Within three months every student was surpassing target norms.<sup>75</sup>

Chibirikin's address to the young men sounds more like courtship or wedding night advice than technical manual.

Despite the country's looming demographic crisis, reintegration into the collective family was a higher priority than reintegration into the individual family.<sup>76</sup> While Mares'ev had a love interest whom he later married, his recovery was inspired by a newspaper article about a one-legged World War I pilot and by the example of the fellow patient who gave it to him. As the party-appointed political commissar of his regiment, Semen Vorob'ev stood in for the state; indeed, he was the "real man" of the title. Similarly, one of the little heroes of the prosthetic narrative, Izrail Kheifets, lost not only his legs and all his fingers to the Germans but also his father, wife, and three children. Contemplating suicide, Kheifets was saved thanks to the solicitude of the state and the intervention of social welfare employees. The ministry provided food, firewood, a new suit, and prostheses. As the author concludes, "Kheifets imagined for himself loneliness. The motherland opened wide for him the doors to the greater Soviet family."<sup>77</sup>

#### CONCLUSION

Whatever expectations the ex-soldiers had for attaining the model of prosthetic manhood detailed above were disappointed by the system-wide failures of the prosthetics industry. The small number of research institutes and manufacturers operating at the start of the war were unprepared for and overwhelmed by the demand, made even greater by the loss of facilities located in the occupied western areas of the country. The ministries of social welfare and health were embroiled in a pronounced and prolonged turf battle for control, with ultimate jurisdiction shifting from one to the other and back again; as noted above, there were also clashes between the welfare ministry and the army medical establishment. There was conflict between the orthopedists who prepared the stumps, the engineers who designed the devices to go over them, and the workers who fabricated them. Within the factories there was little coordination and frequently downright hostility between the medical and manufacturing divisions. The archival record brims with evidence of manifold breakdown at all stages of the process. Materials, when available, were of poor quality and subject to frequent delays in delivery. Labor shortages and extremely low salaries meant that factories were often understaffed and the people who worked there had received limited training, resulting in shoddy construction and requiring a return of the devices for repairs several times a year (according to one report it was unusual if a device did not break during the first three months). Inadequate instruction and supervision extended to those who measured the intended recipients, resulting in poor fit and ensuing complications from stumps reopening, strains on compensating body parts, and other problems.<sup>78</sup>

<sup>&</sup>lt;sup>75</sup> V. I. Cherevkov, Snova v stroiu (Moscow, 1945), 13-4.

 <sup>&</sup>lt;sup>76</sup> On this point as it relates to literature, see Krylova, "'Healers of Wounded Souls'" (cit. n. 10), 317.
<sup>77</sup> Cherevkov, *Snova v stroiu* (cit. n. 75), 32–6.

<sup>&</sup>lt;sup>78</sup> For a detailed examination of the industry's failures, see my "Prosthetic Promise and Potemkin Limbs in Late-Stalinist Russia," in Rasell and Iarskaia-Smirnova, *Disability* (cit. n. 54), 42–66.

Disabled veterans complained bitterly of the entire process. They were required to make multiple trips, in many cases traveling great distances, for fittings and then to receive the devices, and they endured long delays for their appointments. Because there were no seats in the waiting rooms, amputees had to sit on the floor or stand for several hours while they waited to be seen. For those obliged to stay overnight or longer, no accommodations were provided, forcing amputees to sleep in train stations. War heroes or no, they encountered the same rude service and bureaucratic intransigence for which the Soviet Union was notorious. Once they received their limbs, they were given little instruction in how to care for or properly use them. When, inevitably, the devices broke, delays in repairs sometimes stretched for many months and even years.<sup>79</sup> Not surprisingly, many chose to forgo wearing their prosthetics entirely or use them only cosmetically. These inadequacies continued well into the late 1950s.<sup>80</sup> In her address to the Russian congress of physicians employed in the prosthetics industry, Deputy Social Welfare Minister M. F. Aleksashina commented on the absurdity of the state's continued failure to accommodate upper limb amputees:

We live in an age when the enormous growth of technical culture, when the technical apparatus employed in such powerful hydrostations as Kuybyshev and Stalingrad, the likes of which history has never seen before, inspires the entire scientific and technical world. And to this day we still can't manage upper limb prostheses.<sup>81</sup>

The accomplishments of a Mares'ev or Petrov remained out of reach for most Soviet citizens, whether disabled or not. Similarly, prosthetic manhood, while theoretically possible, was unattainable by all but the very few amputees fortunate enough to have had their limbs made and fitted individually: the mechanical arms of Kononov and Petrov by the Prosthetics Institute and Mares'ev's legs by an elderly craftsman trained before the revolution who worked by hand.<sup>82</sup> None of these were manufactured via the system of industrial production so central to the country's proletarian identity. The disconnect between Kononov's arm as totemic promise and those mass-produced in factories was especially striking. Work attachments were often unavailable or unusable with "improved" models.<sup>83</sup> When it was determined by the early 1950s that the grip was too weak and the arm too heavy for industrial labor, it was recommended that the device be given only to white-collar employees.<sup>84</sup> Despite repeated promises to expand the range of available options, hands continued to be produced in only one (masculine) size, as opposed to the six originally planned, and in one skin shade, rather than four.<sup>85</sup>

The failure to deliver on prosthetic masculinity amounts to a double amputation. The state, which promised to step in and take the place of the missing limb by ex-

<sup>81</sup>GARF, f. 413, op. 1, d. 2056, l. 28; and similarly Central State Archive of the City of Moscow (TsGA Moskvy), f. 1046, op. 1, d. 4, l. 237.

<sup>85</sup> In this case, the Rubber and Chemical Industry Ministries, which bore responsibility for the outer rubber coverings, were at fault. GARF, f. 413, op. 1, d. 1631, l. 12; f. 438, op. 1, d. 615, l. 2; RGANTD, f. 146, op. 1, d. 98, l. 130. On race as a factor in the determination of limb shades in the United States, see Beth Linker, *War's Waste: Rehabilitation in World War I America* (Chicago, 2011), 115.

<sup>&</sup>lt;sup>79</sup> See, e.g., RGANTD, f. 146, op. 1, d. 39, ll. 6–7.

<sup>&</sup>lt;sup>80</sup> Miftakhov, "Bol'she vnimaniia" (cit. n. 16); S. Pozniakov, "Pochemu invalidy vozrashchaiut protezy?" *Sotsial'noe obespechenie* 10 (1956): 43–6.

<sup>82</sup> Polevoi, Povest' (cit. n. 61), 152, 155.

<sup>&</sup>lt;sup>83</sup>RGANTD, f. 146, op. 1, d. 98, l. 213.

<sup>&</sup>lt;sup>84</sup> Kapachnikova, "Protezirovanie" (cit. n. 47), 198.

changing it for a mechanical one, only made matters worse. Ultimately, the only prosthetic masculinity delivered was discursive. It allowed the Soviet system to claim that it was making up for the mutilation of its soldiers without actually doing the real work to help their bodies, thus creating phantom limbs to compensate for phantom pains.

After Stalin's death and the initiation of the cult of World War II, visual representations of the Great Patriotic War invalids became more prevalent.<sup>86</sup> By this time many of the most seriously impaired had passed away. In her analysis of Cold War masculinities, Erica Fraser argues that the wartime disruptions of gender norms allowed for the postwar emergence of multiple sites of maleness.<sup>87</sup> The moment of prosthetic men passed, to be replaced by astronauts, scientists, and athletes: all far less problematic embodiments of Soviet manhood.

<sup>86</sup>McCallum, "Fate of the New Man" (cit. n. 21), chap. 2. Interestingly, Vasilii Petrov served as the prototype for sculptor Valentin Znoba's Soldiers of Victory Monument, created for the Great Patriotic War Museum in Moscow.

<sup>87</sup> Fraser, "Masculinities" (cit. n. 8), 4, 56. On cosmonauts as a symbolic model of masculinity, see also Slava Gerovitch, "'New Soviet Man' Inside Machine: Human Engineering, Spacecraft Design, and the Construction of Communism," *Osiris* 22 (2007): 135–57.