

Is It about a Bicycle? A Posthumanist Perspective on the Role of Women's Bicycles in WWII Resistance Movements

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Drawing upon Donna Haraway's cyborg theory, this paper argues that the bicycle can be conceived as a cyborg extension of body and identity which transcended its mechanical essence to become an integral co-partner for women involved in resistance activities in WWII. More specifically, the study explores how women used cycling during World War II not only for mobility but as a profound expression of courage, endurance and solidarity which enabled them to overcome physical and symbolic barriers under totalitarian regimes. The bicycle emerges not only as a central co-agent but also actively co-creates the situations in which it emerges as a transformative force. Cycling acted as a catalyst for personal and collective empowerment, fostering new subjectivities while transcending physical and social limitations. This study sparks multidimensional discourse on how technological tools can co-create our societies and identities, offering insights into how bicycles can drive socio-political change, promote emancipation and foster inclusivity.

Keywords: bicycle, female involvement in World War II resistance movements, cyborg theory

Introduction

This article examines the interconnections between bicycles, social movements and political activism, exploring how cycling serves not just as a mode of transportation but as a tool of emancipation, empowerment and social inclusivity. It aims to address the following central research question: How do bicycles, as technological tools, co-create societies and identities, particularly in the context of political and social activism?

While studies have often focused on bicycles as mere objects within urban infrastructures, this paper expands the scope by investigating their symbolic significance and their role in socio-political transformations. The objective is to offer a nuanced understanding of the ways in which bicycles facilitate the redefinition of personal identities and community belonging. This inquiry also delves into the broader implications of cycling on shaping public spaces, contributing to collective resistance and challenging hegemonic power structures.

Earlier studies have identified the potential of the bicycle as a tool for reshaping individual identities, particularly in terms of gender, class and race. Feminist scholars have highlighted its role in the women's liberation movement, granting women new opportunities for mobility and freedom in the 19th and early 20th centuries (Strange, 2002; Hallenbeck, 2009; Garrard, 2021). Similarly, critical race theorists have examined how marginalized communities have used bicycles as a form of resistance against spatial segregation (Lubitow, Tompkins, & Feldman, 2019; Bopp, Sims, & Piatkowski, 2018; Norcliffe, 2016). Additionally, research has explored how bicycles influence class and socio-political change (Furness, 2010; Steinbach, Green, Datta, &

Edwards, 2011). This study builds upon these foundations to explore how bicycles act as co-agents of both personal and collective identity transformation (Horton, Cox, & Rosen, 2016; Aldred, 2013; Oldenziel, Emanuel, de la Bruhère, & Veraart, 2016) through the specific context of women's roles in resistance movements during World War II as interpreted through the lens of Donna Haraway's cyborg theory.

Drawing on the theories of cybernetics and technological determinism, the article explores how the bicycle acts as a cybernetic extension of the human body, influencing the ways in which individuals perceive themselves and their surroundings. The cybernetic nature of bicycles, in this context, refers to their ability to mediate the relationship between humans and their environments, facilitating a symbiotic "intra-action" (Barad, 2007) between technology and social systems. This theoretical framework allows for a deeper exploration of how bicycles contribute to the formation of cybernetic realities: where the boundaries between humans, machines and socio-political structures become increasingly fluid.



Figure 1. The Czech resistance member Zdenka Uhlířová (1934) with her bicycle¹.

The Second World War, broadly conceived in the popular imagination as a conflict defined by rapid technological advancements such as *blitzkrieg*, jet planes, and ballistic missiles, also relied heavily on more rudimentary forms of transportation, including bicycles. While the German Wehrmacht's reliance on over 2.7

¹ Thanks to Michael Šmíd from Memory of Nation, Prague, for providing the photo.

million horses² underscores the war's paradoxical dependence on both advanced and archaic technologies, the bicycle stands out as a Baradian hybrid entity³: an emblem of the harmonious and efficient merging of human locomotion with technological innovation. Unlike the fusion of human and animal or the mechanization through fossil fuels, the bicycle embodies a unique cybernetic extension of the human body, mediating the relationship between individuals and their environments and fostering a fluid intra-action between technology and social systems. This theoretical framing, rooted in cybernetics and technological determinism, allows for an exploration of bicycles as facilitators of "cybernetic realities" where the distinctions between humans, machines, and socio-political structures become increasingly permeable.

As Eric Hobsbawm poignantly observed in his work *Interesting Times* (2002), "the bicycle has been one of the most significant inventions for realizing the human potential for freedom, paralleling the transformative impact of Gutenberg's printing press but without the drawbacks inherent to other technologies" (Hobsbawm, 2002, pp. 88-89).

This sentiment resonates with the experiences of historical actors such as Ruth Werner (1907-2000), a German anti-Nazi activist and later communist spy, who highlighted the politicization of the bicycle during her youth in the 1920s, thus underscoring its enduring role as an instrument of both personal and collective agency: "When I joined the Communist Youth League in 1924, even the bicycle and its speed became political" (Werner, 1980, p. 155). By situating bicycles within this broader socio-political and historical framework, this study reveals how they have not only shaped public spaces and societal structures but have also acted as co-agents of identity formation and resistance, reinforcing their significance as tools of both individual and collective emancipation.

Methodology

Haraway's concept of the cyborg, as articulated in her "A Cyborg Manifesto" (1985), resonates with concerns relevant to the narratives of female resistance in 20th-century Europe, such as the Star Wars missile defense program, the AIDS epidemic, and the emerging post-science era, but many of her concerns find an echo in the accounts of female resistance to 20th-century European authoritarianism. It can perhaps be said that the cyborg has been an element of military history since the moment that the first human raised a stick or stone against its enemy. However, the wars of the industrial age and the Second World War in particular, see the concept come into its fullest manifestation with the use of mechanised warfare and the fullest exploitation of the scientific developments of the Enlightenment onwards into the art of killing. Cyborgs, emerging during World War II as both concepts and physically configured beings, served to enhance military communication

² More than 1.8 million of which lost their lives (Raulff, 2017, p. 109).

³ In this study, the concept of *hybrid entity* serves as a critical tool to emphasize agential cuts (Barad, 2007) that denaturalize the differences between humans and other entities, thereby supporting their entangled composition of reality. Haraway's reference to Vinciane Despret underscores the importance of learning from encounters and understanding the needs of nonhuman beings, which is key to her cosmopolitical ethics (Stengers, 2015). This concept highlights the dynamics and mutual interconnection of entities, navigating between stable and unstable boundaries that define their intra-actions. While Latour (2012 [1993]) emphasized stability in shaping ontologies of *quasi-objects* along the axis of Nature and Society, Haraway (2013 [1988]) underscored the instability of boundaries and the challenges they pose to concepts of nature and culture, arguing that objects of knowledge are agents in the process of knowledge production. This discourse, supported by research on materiality (Kirsch, 2013), more-than-representation (Lorimer, 2005), and more-than-human (Whatmore, 2002), is vital for understanding hybrid identity in the military context of women during World War II.

strategies. As Haraway states, they are illegitimate offspring⁴ that have autonomously proliferated across various realms of language and science. This ambivalence in their potential is pivotal to understanding their role in resistance movements. In "A Cyborg Manifesto", Haraway explores these ideas in greater depth: "my cyborg myth is about transgressed boundaries, potent fusions, and dangerous possibilities which progressive people might explore as one part of needed political work" (Haraway, 1985, p. 154). She posits that cyborgs possess the potential to instigate a novel mode of governance, concurrently incorporating lived social and bodily realities (Haraway, 1985, p. 154) in which individuals need not fear their affiliation with animals and machines.

This paradigm is also observable within resistance movements, where the seemingly harmless technology of the bicycle technology assumed a pivotal role. Bicycles enabled women involved in resistance movements to effectively communicate and transport materials between disparate resistance cells. This mode of technological integration serves as an exemplar of cyborgic deployment of technology in the struggle against oppression and dominance. Haraway's concept of situated knowledge, the belief that all knowledge is situated and never universal, rooted in specific times, spaces, and experiences, is essential for understanding cyborgs in resistance contexts. Situated knowledge can offer us a means of comprehending the dynamics of resistance and the role of cyborgs within it, unfolding in a dynamic apparatus of bodily production. Haraway also explicitly links women's liberation to the human/machine hybrid concept:

A cyborg is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction. Social reality is lived social relations, our most important political construction, a world-changing fiction. The international women's movements have constructed 'women's experience', as well as uncovered or discovered this crucial collective object. This experience is a fiction and fact of the most crucial, political kind. Liberation rests on the construction of the consciousness, the imaginative apprehension, of oppression, and so of possibility. The cyborg is a matter of fiction and lived experience that changes what counts as women's experience in the late twentieth century. This is a struggle over life and death, but the boundary between science fiction and social reality is an optical illusion. (Haraway, 1985, p. 149)

While Haraway explicitly refers to the period in which she was writing, this article considers that the specifically feminist aspect of her concept of the cybernetic organism can be applied to the role of the bicycle in women's resistance to authoritarian regimes in the era of the Second World War and its aftermath. The hybrid organism formed by bicycles and the female resistance fighters and the ordinary women who found themselves confronting fascism and communism can be traced through the main conceptual umbrella which Haraway identified as some of the key aspects of the cyborg: co-creating new social realities and challenging traditional power structures.

Flann O'Brien's work, *The Third Policeman* (written in 1939-1940, published in 1967) offers a vivid illustration of how effectively the bicycle can be integrated into Haraway's concept through the character of a postman who rides on his bicycle daily for 38 miles each day of his forty-year career. This relentless cycling ritual becomes an essential part of the postman's life and identity, indicating that bicycles are not merely mechanical devices but extensions of human bodies and identities. O'Brien describes these humanized bicycles as having cunning and remarkable behaviour, appearing unexpectedly in various places,

⁴ "The main trouble with cyborgs, of course, is that they are the illegitimate offspring of militarism and patriarchal capitalism, not to mention state socialism. But illegitimate offspring are often exceedingly unfaithful to their origins. Their fathers, after all, are inessential." (Haraway, 1985, p. 151).

such as leaning against the kitchen dresser during a rainstorm, inching close enough to the family to hear conversations (O'Brien, 1967, p. 97). This literary depiction underscores how bicycles become integral to human life and identity, functioning seamlessly with their users and facilitating unobtrusive movement in unexpected and perilous situations.

Haraway's theory further emphasizes that liberation hinges on the construction of consciousness and the imaginative apprehension of oppression, thereby opening new possibilities of thinking. Her concept of the cyborg—bridging fiction and reality—demonstrates how technology, including bicycles, can transform and expand women's experiences and capabilities. According to Haraway, the "cyborg is not merely a matter of fiction and lived experience but reshapes what is considered women's experience in the late twentieth century". This battle over life and death, where the boundary between science fiction and social reality is an optical illusion, illustrates how technology can be utilized to overcome oppression and create new opportunities for women, promoting personal and collective empowerment, and driving socio-political change.

This study integrates this approach and Haraway's posthumanist theories, using sources such as oral history, personal testimonies, memories, visual documentation, literature, and art to understand the complex aspects of human experience that transcend traditional disciplinary boundaries. A multidisciplinary and interdisciplinary approach provides a nuanced perspective on the relationships between the material and social worlds. The group of women analyzed in the study form one of many such examples of resistance, considering the historical and social contexts of their experiences and are by no means intended to serve as a comprehensive sample. Authentic narratives can be difficult to collect firsthand due to the advanced age or passing of most witnesses; therefore, available memories and documentation have been utilized in this study. Bicycles are examined as manifestations of resistance and collaboration and analyzed within the context of historical events and the individual experiences of women who used them to overcome social barriers and contribute to resistance efforts. This approach emphasizes the active role of intangible objects, such as bicycles, as co-participants in human experiences and resistance, offering an alternative understanding of history through the integration of material and social aspects.

Cycling as Cybernetic Realities: Transgression of the Borders

Bicycles can be conceived as cybernetic extensions that enable individuals to transcend physical, social, and political boundaries. This transgression occurs on multiple levels—personal, communal, and systemic—allowing cyclists to challenge existing power structures and engage in collective resistance. In this revised exploration, the focus is on how the act of cycling reconfigures societal spaces and redefines the concept of mobility, ultimately leading to a renegotiation of societal norms and power dynamics.

Donna Haraway famously asserted that: "By the late twentieth century, [...], we are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs. The cyborg is our ontology; it gives us our politics" (Haraway, 1985, p. 150). This concept underscores how cycling could co-create cybernetic entities, integrating human and technological elements. Within such an understanding, the bicycle ceases to be a mere mode of transport; it becomes instead a conduit for self-expression and empowerment. Women in resistance movements leveraged bicycles not just for logistical support but as tools of defiance, reshaping their identities and roles in society. Cycling embodies cybernetic realities where women, through the act of cycling, activate a process of co-constitution, becoming cybernetic entities. This conception bridges traditional divides between human and machine, organic and technological, stable and adaptive.

Haraway posits that cyborgs are not just futuristic fantasies or literary creations but actual entities shaping our societies, calling for a more inclusive and emancipated world that respects the diversity of human experience. In this context, the bicycle transcends its role as a mere mode of transport, integrating into the identity and possibilities of women.

The act of cycling transforms into an expression of self-humanization and facilitates the creation of new subjectivities. Women in resistance become hybrid beings; their identity and resilience are strengthened through their entanglements with technology.

Specifically, bicycles served as tools that allowed women to defy restrictions imposed by occupying forces and societal norms. On an individual level, women on bicycles (such as the Czech resistance member shown in Figure 1) overcame physical and symbolic barriers, redefining what it meant to be a female cyclist in times of crisis. The bicycle enabled covert resistance, with women using them to transport messages, weapons, and supplies, often under the guise of ordinary activities, thus turning the bicycle into a symbol of both ordinary life and extraordinary resistance. This new dynamic gave rise to a form of identity that was as much constructed as it was fought for. The bicycle, in this view, was not simply a means to an end; it was a companion and a co-conspirator, a source of strength that supported their journeys both literal and metaphorical.

Living Realities of Cybernetic Empowerment Through Cycling

In order to demonstrate the transformative impact of bicycles, specific historical accounts reveal how bicycles contribute to the emergence of new subjectivities and the transcendence of physical and social boundaries. For example, in occupied France, women known as “les cyclistes” played critical roles in distributing pamphlets and intelligence, using bicycles to navigate through checkpoints and avoid detection. These accounts underscore the multifaceted role of bicycles in resistance movements, acting as tools of mobility, subversion and solidarity, allowing women to claim spaces that were otherwise denied to them. The bicycle’s simplicity and ubiquity allowed women to blend in while carrying out clandestine activities, turning the bicycle into a sign of both ordinary life and extraordinary resistance. This convergence of human and technology reflects the essence of the cyborg as conceived by Haraway: an entity that navigates and transcends boundaries, merging human aspirations with technological capabilities.

Donna Haraway’s concept of the cyborg as a “disassembled and reassembled, postmodern collective and personal self” (Haraway, 1985, p. 163) underscores the transformative power of technology in shaping human identity. Nancy Wake (1912-2011), known as the *White Mouse*, exemplifies this dynamism through her courageous actions in the Maquis after the Nazi occupation of France. Wake coordinated resistance activities⁵, often undergoing 500-kilometer bicycle journeys through occupied territory to deliver critical intelligence, an almost herculean effort that demonstrates her resolve and fortitude in fighting Nazi oppression:

I arrived back in Saint-Santin twenty-four hours before the time they had anticipated I would, even though they were well aware I might never return. I had pedalled 500 kilometers in seventy-two hours. [...] All I could do was cry. When I got off that damned bike I felt as if I had a fire between my legs and the inside of my thighs were raw. (Wake, 1985, pp. 167-168)

⁵ Henri Tardivat described Wake as follows: “She is the most feminine woman I know, until the fighting starts. Then, she is like five men”. In: http://www.diggerhistory.info/pages-heroes/white_mouse.htm (accessed June 7th, 2024).

Wake's statement, "When I'm asked what I'm most proud of doing during the war, I say 'the bike ride'" (Wake, 1985, pp. 167-168), indicates that this cycling challenge was a crucial source of strength and resilience, a manifestation of the ability to overcome her physical and psychological barriers. In line with Haraway's thinking on the mechanisms of oppression and their connections to gender, it is possible to consider that these factors are constructed and influenced by historical and societal contexts, suggesting in turn that feminist identity and individual identity can be complex and ambiguous. The importance of coalitions and cooperation in achieving common goals is evident in Nancy Wake's engagement in the resistance. Her situation exemplifies the complex nature of identity and political engagement in history and feminist discourse, where women like her fought not only against external enemies but also against internal constraints and stereotypes regarding the roles and capabilities of women in military and resistance circles (for instance, commanders initially hesitated to send her on missions due to doubts about her endurance and her capacity to withstand the physical demands)⁶.



Figure 2. Author's image: *Beyond All Expectations*, 2024.

Marthe Cohn (1920-2021), a French Jewish spy, also undertook dangerous missions to gather vital intelligence for the Allies. Her approximately 90-mile bicycle ride to deliver information on a planned German military ambush to Allied forces in the Black Forest exemplifies her resourcefulness and dedication:

She needed to get this information to French intelligence as quickly as possible. It was already midafternoon, and she would have to cycle approximately 90 miles. After five hours of biking, she was too exhausted and hungry to continue, so she stopped at a restaurant. It was run by pro-Nazis. (Atwood & Engelman, 2019, p. 105)

Marthe utilized the legend of losing her fiancé to dispel their suspicions ("Marthe again became Martha Ulrich and repeated her often-practiced lies", *ibid*). They assisted her by allowing her to hitch a ride with a convoy of German soldiers and took she and her bicycle onto one of their vehicles. With insufficient time to encode the message, she personally handed it over to Swiss border guards, who delivered it to the appropriate

⁶ In a posthumanist context, Flann O'Brien's depiction of a postman cycling daily for forty years highlights how bicycles, deeply integrated into human life, blur the boundaries between the human and the mechanical, reflecting and extending their users' capacities and experiences (O'Brien, 1967, p. 97).

authorities. By visualizing Cohn's journey, readers can grasp how theoretical concepts like self-humanization and cyborg realities could manifest themselves in real-world scenarios, thereby making the abstract ideas more relatable and comprehensible. Marthe Cohn's self-humanization could begin when she mounted a bicycle, gaining freedom and mobility crucial for overcoming physical and symbolic barriers, thereby potentially becoming a hybrid entity blending human and technological elements. The bicycle, as her co-agent, could facilitate the creation of new subjectivities; Cohn's 90-mile journey might illustrate how an inanimate object could integrate into her identity and agency. Her acceptance of aid from local German soldiers meant that she was even utilizing the enemy for the purposes of espionage, possibly transforming her role and status in the resistance. Her act of delivering information on critical enemy positions in the Black Forest constituted a tangible opposition to the Nazi regime, demonstrating the political activism that contributed to the success of Allied military strategies. This scenario could highlight how the bicycle, as a co-partner, might actively engage in the fight against totalitarianism, forging cyborg realities where human and technology collaborated for achieving freedom and autonomy.

Simone Segouin (1925-2023), also known as *Nicole Minet*, actively engaged in sabotage and intelligence missions against German occupation forces. The strategic theft of a bicycle from a German military administrator became instrumental in her resistance efforts; this bicycle became her co-partner, enabling swift and efficient movement across occupied France for sabotage and intelligence missions. Segouin used the bicycle to transport messages, weapons, and supplies for resistance groups, significantly contributing to weakening German occupation forces. The integration of the bicycle into her identity and operations highlights its instrumental role in her contribution to the liberation of Chartres and Paris.

Donna Haraway views the cyborg as a symbol of resilience and opposition, particularly emphasizing its femininity: "For me, the notion of the cyborg was female, and a woman, in complex ways. It was an act of resistance, an oppositional move of a pretty straightforward kind" (Markussen, Olesen, & Lykke, 2000). The bicycle, as a technological extension of the female body, enabled women to transcend physical and social boundaries, echoing Haraway's concept of cyborgs as communicative systems: "From my point of view, the cyborg was a figure that collected up many things, among them the way that post-World War II technoscientific cultures were deeply shaped by information sciences and biological sciences" (Markussen et al., 2000). The cyborg merges human with machine, human with other organisms, surpassing limitations, altering gender roles, and creating new paradigms.

During World War II resistance, women utilized bicycles to convey secret messages and supplies, granting them mobility and freedom. Haraway underscores that no objects, spaces, or bodies are inherently sacred; any component can be interconnected, given the right signal-processing code in a shared language: "Human beings, like any other component or subsystem, must be localized in a system architecture whose basic modes of operation are probabilistic, statistical" (Haraway, 1985, p. 163). Viewing the bicycle as a co-partner, it actively contributes to the creation of cyborg entities, blending human and technological agency. This context empowered women in resistance to transcend both physical and symbolic barriers, redefining their societal roles. Conceptualizing the cyborg as an entity formed by the fusion of human and technical aspects becomes integral to their identity and agency: "The cyborg was, of course, part of a military project, part of an extraterrestrial man-in-space project. It was also a science fictional figure out of a largely male-defined science fiction" (Markussen et al., 2000). For instance, when Marthe Cohn requested a bicycle

for espionage activities, stating, “My mission terminates with armistice, not before. I have to cross the border today, the front today and go south in Germany. But I asked him [Commander Petit] for a bicycle because I was tired of walking”⁷, it illustrates how an inanimate object like a bicycle could become a crucial part of her identity and capabilities in espionage.



Figure 3. Resistance member in Brest, 1944⁸.

Exploring how non-living entities fit into an individual's identity and activities, becoming part of our active existence and co-creating our identity, as Haraway states:

The machine is not an it to be animated, worshipped, and dominated. The machine is us, our processes, an aspect of our embodiment. We can be responsible for machines; they do not dominate or threaten us. We are responsible for boundaries; we are they. (Haraway, 1985, p. 180)

The act of cycling can thus be perceived as an integral part of the human body and its capabilities, enabling the overcoming of physical and social boundaries, achieving strategic objectives, and contributing to resistance activities, thereby becoming not just a means but also a part of an individual's identity in the fight against the enemy. The mechanical and physical aspects of cycling, such as energy transfer through the pedals, the gyroscopic effect of the wheels, and resistance to air drag, significantly contributed to the mobility, freedom, and efficiency of resistance fighters during World War II. The bicycle became not only a means of achieving goals but also a part of their identity and capabilities in the fight against the enemy. Stability, speed, and efficiency were critical during sharp turns and riding on various types of terrain. Optimizing their riding posture and their pedalling technique also contributed to enhancing their cycling performance, thereby maximizing the potential of the hybrid entity.

⁷ Interview with WSW Radio, 2016: <https://www.wmuk.org/westsouthwest/2016-03-31/wws-a-jewish-spy-in-world-war-ii-germany> (accessed July 17th, 2024).

⁸ Photographed by Capt. Claxton Ray, 360th EAB US Army, in <https://archive.org/details/BrestFranceIn1944/WomanAtPhotoStoreBrestFrance1944.jpg> (accessed August 6th, 2024).



Figure 4. Ceremonial unveiling of a mural by Gerolf Van de Perre featuring Hortense Daman in Heverlee, Belgium⁹.

Hortense Daman (1926-2006) was an active member of the Belgian resistance who was active in Leuven. She is still a celebrated figure in Belgium, and a large public mural commemorating her wartime activities was recently unveiled in the town of Heverlee. At just 14 years old, she was already engaged in resistance activities, smuggling messages, weapons and explosives in the basket of her bicycle hidden under layers of vegetables, fruit or eggs. She assisted downed British airmen, distributed banned newspapers and leaflets, and provided food for men hiding from German soldiers during raids. Reflecting on one such operation in 1944, Hortense realized that the bicycle embodied safety and protection for her. Even when faced with the possibility of fleeing from dangerous situations, she did not dare to dismount, fearing it would increase her vulnerability. She recalls:

It was decided that the best way was to conceal the grenades in the front pannier of her bicycle under a layer of eggs and pull a red and white chequered cloth over the top of the basket [...]. When Hortense set out to cross the town the weight of the grenades loaded down the front of the bike. She was used to filling the pannier with vegetables from the market, but grenades weigh more than turnips. With all the weight at the front she found she was fighting to keep her balance over some of the older cobbled streets. [...] Watching the soldiers carefully, she eased towards the side of the road with all the other women, still pedalling slowly, and keeping near the kerb so she could put one foot down to steady herself. She dared not get off her bike for fear the heavy pannier-load of grenades would swing round and topple over as she tried to hold the handlebars from the side. Briefly her imagination swelled with a vision of what would happen when the Germans saw two dozen unbroken steel-grey 'eggs' bouncing off the stones in a cascade of broken shells and splashing yellow egg yolks. (Bles, 2013, p. 167)

This action succeeded. A few months later, when Hortense learned that her friend Jean Maes was to be arrested, she quickly rode her bicycle to his house. They managed to escape but were stopped by German soldiers who violently pulled them off their bicycles: "Men in the Gestapo and GFP leaped out with Whitcombe-Power,

⁹ Photo by Jogchum Vrielink: <https://hortensedaman.be/wie-was-hortense-daman> (accessed July 8th, 2024).

MP40 machine-pistols and pulled them off their bikes. They grabbed Hortense and shoved her in a car, wedged tight between two grim-looking GFP in coats and felt hats” (Bles, 2013, p. 167).

They were taken to the Gestapo offices in the town, where their personal belongings and identification documents were confiscated. This was followed by interrogations, physical abuse, and imprisonment in Ravensbrück.

Although Jaroslava Mokrá (born 1930), from the Protectorate of Bohemia and Moravia, was not directly involved in resistance activities like Hortense Daman, her family life was closely linked to the resistance and its consequences. Her parents actively supported the resistance, and this ultimately led to their arrest by the Gestapo when they lent a bicycle which would be used in the assassination of Reinhard Heydrich in May 1942. This bicycle was not only a practical means of mobility but also an important part of family history: “Dad took great pride in it [...]. One time, I fell off and smashed my knee. When Dad carried the bike upstairs, he scolded me for scratching it. He was extremely proud and protective of it”. Jaroslava noticed that the bicycle had disappeared:

Mom, I know where the bike is. The boys at Aunt Khodlová's place have it. Can you imagine my mom's shock!? She made me swear never to tell anyone. And I kept my promise, even when they arrested Chief Piskáček, my aunt's family, and my parents¹⁰.

After the arrest and execution of her parents and other family members, the violent events of the war forced Jaroslava to face early adulthood and adapt to a new reality, losing not only material objects but also trust and security in the world around her. Haraway's concept of becoming-with emphasizes the co-evolution of humans and non-humans through their relationships and connections. This idea is evident in the narratives of Jaroslava Mokrá and her family. Although Jaroslava was not directly involved in resistance activities, the bicycle in her story serves as a crucial link to the resistance and its broader impact on her family life and identity. Haraway's theories can be seen in the way the bicycle mediates relationships and experiences within Jaroslava's family. The narrative shows how the bicycle becomes an agent of change, embodying the correspondences between personal and political histories. The bicycle's disappearance and Jaroslava's vow of silence highlight the complex interplay between trust, secrecy, and survival during the war. This intertwining of human and non-human elements aligns with Haraway's notion that identities and histories are co-constructed through relational processes, underscoring the profound impact of these connections on shaping individual and collective experiences.

For Éva Heyman (1931-1944), a Hungarian of Jewish origin, the loss of her red bicycle was not only a material loss but also an emotional blow, tied to the certainty and tragedy of her family. Her diary entries in *The Red Bike* (1949), published posthumously by her mother Ágnes Zsolt, document not only everyday childhood experiences but also dramatic changes in her life due to violence, deportations, and the loss of freedom that affected the Jewish community in Hungary during the Nazi occupation.

¹⁰ <https://www.pametnaroda.cz/cs/mokra-roz-smrzova-jaroslava-20161024-0> (accessed July 9th, 2024).

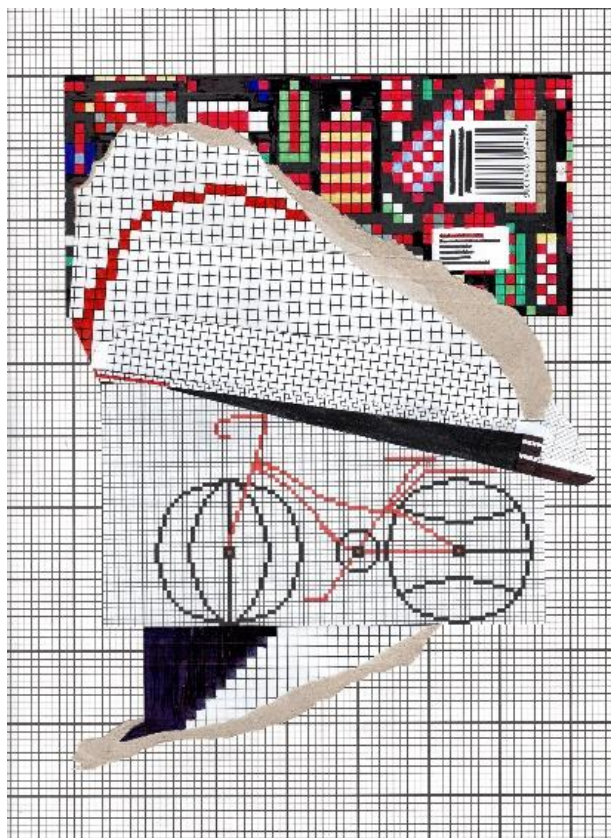


Figure 5. Ka Te Blažová, *The Bicycle*, 2024¹¹.

On April 7, 1944, Éva wrote:

Today they took away my red bicycle. [...] I threw myself on the ground, held on tightly to the back wheel of my bicycle, and yelled at the policemen that they should be ashamed of themselves for taking a child's bicycle. 'That's pure robbery,' I shouted. [...] This red bicycle was mine and everything, from the beginning! I even gave it a name, I called it Friday. Not just because it was Friday when I could pick it up, no, because Friday in Robinson Crusoe is an example of loyalty, as loyal as he was to Robinson. This 'Bicycle-Friday' was always meant to be loyal to Éva-Robinson. And so it was. (Zsolt, 2012, pp. 83-84)

Haraway suggests that our relationships with technology and material objects are inseparable from our identity and agency:

The machine is not an it to be animated, worshipped, and dominated. The machine is us, our processes, an aspect of our embodiment. We can be responsible for machines; they do not dominate or threaten us. We are responsible for boundaries; we are they. (Haraway, 1985, p. 180)

This struggle with loss and adaptation is intrinsically connected with the Haraway and Braiddoti's contemplations on becoming-with as a fundamental aspect of survival and identity in a rapidly changing world. Just as Haraway's cyborg myth eschews cynicism, the loss of Heyman's bicycle does not necessarily lead to a complete loss of hope; it may lead instead to the search for other fluid stabilizations and co-identities that could be more flexible and adaptable to new conditions and technological changes. Perhaps we could consider how

¹¹ I extend my sincere gratitude to Ka Te Blažová for creating this remarkable artwork that has greatly enriched this study.

these changes manifest themselves in our lives and what other opportunities they might open up to us: "Who cyborgs will be is a radical question; the answers are a matter of survival" (Haraway, 1985, p. 153).

Conclusions

This article has demonstrated that the bicycle has not been (and is not) merely a mechanical means of transportation, but rather a co-partner that transforms and expands human capacity to act and change the world around them. The cyborg can be understood as an entity capable of being disassembled and reassembled, encoded and decoded, expressing collective and individual self-awareness. Thus, cycling gains deeper significance as a means of transforming social roles and strengthening women's emancipation during geographically and historically challenging periods. This article does not concern itself exclusively with historical facts, but also aims to foster discussion on how technological tools can shape our societies and identity. The intersection of technology, self-humanization and political activism is key to widening our understanding of the dynamics that impact the lives and struggles of women in both the past and in the contemporary moment. As Haraway suggests, transcending boundaries and constructing new norms and codes is an essential part of our politics and culture, and only in this way will be able to confront the current challenges of global power and domination. The study invites reflection on the possibility that every object, including bicycles, can serve as an opportunity for transformation and emancipation if viewed through the lens of the potential changes that it can bring to our lives. It is a call to construct a more emancipated society that respects diversity and individual capacity for transformation. Thus, we can conclude this study on women's resistance on bicycles by reminding ourselves that the bicycle is more than just a means of mechanical mobility: It is an embodiment of the possibility to surpass boundaries and transform the world¹².

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