

Representations of mobile devices in the 1940s: Focusing on the works of author René Barjavel¹

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Fig.1



Fig.2

1. Introduction.

René Barjavel was a writer largely overlooked in French literary history and studies until a decade ago. The publication of his science fiction novel *Ravage* in 1943, which reflected Philippe Pétain's slogan of "Labor, Family, Patriotism" during the Nazi occupation of France, and its publication by the occupying Denoël, which appeared to collaborate with Germany, are considered to be the reasons for this. The book was published by Denoël, a company that seemed to collaborate with Germany. Previous studies indicated that many researchers in Barjavel are located outside France. Notably the complete collection of Barjavel's works has not yet been published in France, and only a few were translated into Japanese from the 1970s to the 1980s.

Barjavel's *Cinéma total: Essai sur les formes futures du cinéma*, published in 1944. An Essay on Cinema for the Future, written in 1944, and the semi-documentary film *Télévision: Oeil de Demain* (directed by Raymond-Millet), released in 1947, depict aspects of the future visual environment that transcended the concept of television at the time. The film showcases 3D holograms, surveillance cameras, and TVs installed in cars, as described in the original story². Portable TVs, such as today's smartphones, also appear in films. Scenes of people watching TV while walking or in cafés were also observed (Fig.1 and Fig.2).

Therefore, the portable TV is similar to current digital tools and mobile devices. Before discussing the above issues, this article outlines previous studies on Barjavel and science fiction novels from other countries. According to Canadian researcher Sobanet (2007), Barjavel's science fiction novel *Ravage*, published by Denoël in 1943, demonstrates how the slogans of Philippe Pétain and the Vichy regime, such as 'labor, family, patriotism' and traditionalism, influenced the story's foundation³. Weber (2019) analyzed Raymond-Millet's film adaptation of Barjavel's original story *Cinéma total: Essai sur*

les formes futures du cinéma. A Look at *Télévision: Oeil de Demain* with a heavy focus on the media history of the 1940s⁴. Additionally, Joret (2019) compared André Bazin's writing *Qu'est-ce que le cinéma?* Inspired by Barjavel's *Cinéma total : Essai sur les formes futures du cinéma*⁵. However, in the context of literature, previous studies have drawn comparisons between mobile devices described in science fiction novels from the 1940s and those described in *Télévision: Oeil de Demain*. There was no comparative discussion of the shape of the mobile devices in the play *Télévision: Oeil de Demain* with real radios and televisions that existed in the 1940s, or with fictional mobile devices that would have appeared in science fiction films of the same era. Therefore, this article discusses these two points, supplementing the arguments of previous studies. This article aims to derive the mental landscape that Barjavel depicted at the time of “The Perfect Film” from a macroscopic perspective from the present time of the 21st century.

2. Mobile devices depicted in science fiction novels from the 1930s and 1940s.

In 1930, the German author Werner Illing published *Utopolis*, a play about two sailors from Hamburg whose ships were wrecked offshore. They arrive on an island in the ocean and are astonished to find a capital city supported by a transcendent mechanical civilization. The play includes a description of what appears to be on the mobile device.

»Spritztour nach New York, incognito!« antwortete ichforsch. »Nicht möglich, Graf.« Der andere ließ erstaunt sein Monokel fallen. » Sprach gestern mit ihm im Radio.Will mich morgen aufsuchen.⁶«

In 1930, it was impossible to transmit and receive human voices in real time; the same was true for the radio. It would take several years before successful transmission and reception using television. Radios are fictional mobile devices used in highly civilized cities. The book also describes other things, such as highways and a theater dedicated to 3D holograms. The story of the capital's inhabitants drowning in mechanical civilization, the two protagonists destroying the radio device, and the citizens singing the “International” song in high spirits as they return to their socialist state, follows a similar genealogy to the final stages of Barjavel's later book, *Ravage*. Closely examining science fiction novels and films from the English-speaking world, producing several science fiction novels and films, shows that fictional viewing devices appeared in George Orwell's *1984*, published in 1949, shortly after the war.

Behind Winston's back the voice from the telescreen was still babbling away about pig-iron and the overfulfillment of the Ninth Three-Year Plan. The telescreen received and transmitted simultaneously. Any sound that Winston made, above the level of a very low whisper, would be

picked up by it; moreover, so long as he remained within the field of vision which the metal plaque commanded, he could be seen as well as heard⁷.

The most prominent novel depicting a future machine civilization or dystopia in the 1940s is *1984*, mentioned above. Next, this article focuses on the mobile devices described by Barjavel in *Cinéma total: Essai sur les formes futures du cinéma*, published in 1944, four years before Orwell's book.

La rencontre du cinéma et des ondes paraît aussi fatale que celle de deux rivières qui descendent vers la même vallée. De leur jonction naîtra le grand fleuve de l'art nouveau. Les ondes porteront les images dans tout l'espace. Les postes récepteurs les concrétiseront à volonté. Il y aura des récepteurs d'appartement pour le plaisir des familles, des récepteurs de poche grands comme votre briquet, pour les gens en voyage, et des récepteurs à grande puissance, pour l'organisation de spectacles destinés à des foules considérables, sur les stades, sur les places publiques, ou dans les immenses salles de demain. Cette synthèse ne s'opérera pas sans difficulté. La télévision va faire des progrès rapides. Après la présente guerre, des postes récepteurs perfectionnés seront fabriqués en grande série⁸.

Given this historical background, it is clear that Barjavel anticipated the development of television into mobile devices that people know today. However, describing mobile devices in terms of des récepteurs or receivers was due to the limitation of the time. Moreover, the text in *Cinéma total: Essai sur les formes futures du cinéma* does not provide any further details on the shape or size of the receiver. To the best of our knowledge, we could not find any previous research on the details of the machine used in the production of films based on the original *Télévision: Oeil de Demain*. The following describes the props investigated in this study, which are considered prototypes of mobile devices that appear in the film.

3. The world's first videoconference, actual equipment around the 1940s, and movie props.

In the real world, the newspaper of *Le Matin* reported in Paris on May 19, 1932, on the success of the world's first two-way call using videos, or videophones⁹. The device used was a conventional black landline telephone with, two speakers, and a screen for today's tablets. Different from receivers and televisions, but examining the progress of pre-transistor tube radios, in 1939, the American company Emerson introduced the CF-255, a portable radio with an outer case made of plastic instead of wood, and a size different from the conventional size. The front view was approximately the size of an A6 paperback book, slightly larger in height and width, but approximately 9 cm thick¹⁰. If we reconcile several historical facts, such as the success of video telephony in the 1930s and the introduction of

portable radios with vacuum tubes, we can confirm that engineers in the pre-World War II era used mobile devices. However, in the semi-documentary film *Télévision: Oeil de Demain*, mobile devices are smaller versions of machines in the real world. We researched science fiction films made in various countries between 1895 and 1944. In the 1940 Hollywood film *Flash Gordon: Conquest of the Universe*, Part 3 (Chapter 3), we found two illustrations that showed distressed people using a tiny plastic receiver to call headquarters (Fig.3 and Fig.4).



Fig.3



Fig.4

The illustrations depict distressed individuals using a small plastic receiver to contact the headquarters¹¹. During World War II, which began the following year, the U.S. military used a large black telephone and backpack radio, similar to the cell phones of the late 1980s, for communication. The aforementioned palm-sized receiver was unimaginable in the real world. Although Raymond-Millet did not testify during his lifetime, it is reasonable to assume that he used television and radio in the real world until the 1940s. In addition, he may have used *Flash Gordon: Conquest of the Universe*, Part 3 (Chapter 3) as inspiration for mobile devices, with a monitor that appeared as a prop on his

television. It is worth investigating whether Barjavel, the original author, introduced fictional mobile devices and other machines into the text of *Cinéma total:Essai sur les formes futures du cinéma* in 1944. Next, this article confirms the mobile devices used in Barjavel's early science fiction novels.

4. About the novel *Ravage*.

Ravage, published by Barjavel in 1943 when Nazi Germany occupied all of France, is a novel set in 2052, and we review some of the descriptions surrounding the protagonist in the first half of the story.

La Ville Radieuse dominait ce quartier de sa masse blanche. Son dernier étage abritait tous les postes d'émission de la capitale. M. Pierre-Jacques Seita en avait profité pour baptiser le sien Radio-300 parce qu'il dominait de trois cents mètres les toits de Paris. [...] Le monde entier captait ses émissions de télévision en relief et couleurs naturelles, et son budget de publicité atteignait des sommes si considérables que les malveillants se trouvaient sans doute bien au-dessous de la vérité. [...] L'écran occupait toute la surface d'un des murs du bureau. La deuxième partie du spectacle allait commencer. [...] Chaque troupe descendait l'avenue au son d'une marche héroïque, sortait du mur dans un tonnerre de tambour, et se fondait dans l'invisible¹².

The quoted passage is a small excerpt from a description of mechanical civilization. However, in 1942, Barjavel introduced a machine in his work that was similar to today's holograms, with figures appearing on colored television. In other words, the prototype appears in *Cinéma total:Essai sur les formes futures du cinéma*. The second half of the story portrays a tragic society in which the United States is divided into the North and South. Due to the war, missiles were dropped in France, resulting in a lack of electricity and the loss of lives. The survivors were forced to live primitive lifestyles. Sobanet (2007) notes in the outline of this article that *Ravage*, published by Denoël Publications, follows a storyline of destruction, chaos, and eventual rebirth of humanity that mirrors the basic scenario of World War II, supported by the Vichy regime¹³. In Barjavel's *Ravage*, the few surviving citizens in France on the verge of destruction based their way of life on the Vichy government's stance against Germany, centering around the slogan “labor, family, and fatherland,” rather than the values of “liberty, equality, and benevolence.” This story supports this ideology.

5. Commonalities between Todorov's Scientism and Barjavel's near future.

The title of Todorov's December 2000 publication, *Mémoire du mal, tentation du bien* is *An Investigation of the Century*. This book primarily deals with the conflict between totalitarianism and democracy, including communism and Nazism, which are variants of totalitarianism. Thus, this book provides a macroscopic perspective on Barjavel's *Cinéma total:Essai sur les formes futures du cinéma*

era in the late 20th century. The focus was on the passage titled “The Birth of the Doctrine of Totalitarianism” from the same book.

Science et démocratie sont sœurs, elles naissent dans le même mouvement d'affirmation de l'autonomie, d'affranchissement par rapport à la tutelle des traditions. Cependant, si la science cesse d'être une forme de connaissance du monde et se transforme en guide de la société, en producteur d'idéaux (autrement dit, si la science se mue en scientisme), elle entre en conflit avec la démocratie. [...] Pour assurer la bonne marche des affaires à l'intérieur du pays, l'État scientiste devra se munir d'un outil approprié : la terreur¹⁴.

In 2000, when Todorov published *Mémoire du mal, tentation du bien: enquête sur le siècle*, cell phones were widespread, but primarily used for calling and texting. Digital cameras, the Internet, and social networking functions for international calls did not yet exist, as they do today.

The final section, analyzes Barjavel's portrayal of a dystopian society dependent on machines in *Ravage* during the war. Additionally, we examine his references to the future evolution of television on mobile devices in *Cinéma total: Essai sur les formes futures du cinéma*, semi-documentary film *Télévision: Oeil de Demain* features a scene where two individuals collide while walking and watching mobile devices called a “receiver,” and another scene where a car accident occurs due to the distraction of a TV. After watching the semi-documentary film, *Télévision: Oeil de Demain*, Barjavel may be perceived as a future visionary. However, Barjavel's depiction of the near future is included in *Cinéma total: Essai sur les formes futures du cinéma* was written as an antithesis of the worldview he held during the Nazi occupation. The purpose was to reject the labor, family, fatherland, and traditionalism of the Vichy regime that he once admired, anticipated post-World War II trials, and gained an advantage in the court's decision. In addition to anticipating the start of the trial after World War II, the book can be positioned opposite Barjavel's worldview during the Nazi occupation.

In 2024, more than 20 years after Todorov's book was published, it is evident that mobile devices have become convenient. However, the anonymous slander and libel, the use of social networking services by politicians to fight among nations, the invasion of privacy caused by video and camera recordings, and the excessive dependence on smartphones are all dystopias. The impact of these “un outil(tools)”, as Todorov called them, on humanity is an ongoing question that the human race will answer in the future.

¹ This article is based on the author's oral presentation at the National Conference of the Japanese Society of French Language and French Literature, held at Kyushu University in the fall of 2023.

² This is a book version of an essay that appeared at *L'Echo des étudiants* in 1944. In this study, monographs were used as references rather than newspapers. *L'Echo des étudiants* can be viewed at BNF.

<https://gallica.bnf.fr/ark:/12148/bpt6k8289179t/f1.image>

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- ³ Andrew Sobanet, “A Return to the Soil: René Barjavel's Pétainist Utopia”. *French Forum*, Vol. 32 (Pennsylvania : University of Pennsylvania Press, 2007).
- ⁴ Anne-Katrin Weber, “Television as new media: Raymond-Millet’s ‘Télévision: Oeil de Demain’ (1947) and the politics of French experimental TV”, NECSUS. *European Journal of Media Studies*, Vol.8(Hesse : Philipps University of Marburg ,2019).
- ⁵ Blandine Joret, *Studying Film with André Bazin*. (Amsterdam : Amsterdam University Press, 2019).
- ⁶ Werner Illing, *Utopolis*. (Frankfurt : S. FISCHER Verlag,1976) p.48.
- ⁷ George Orwell, *1984*. (Dublin : William Collins, 2021) pp.4-5.
- ⁸ René Barjavel, *Cinéma total : Essai sur les formes futures du cinéma*. (Paris: Denoël, 1944.) p. 60.
- ⁹ <https://www.radiotsf.fr/1932-premiere-experience-mondiale-de-visiotelephonie-a-paris/>
- ¹⁰ http://www.tuberadioland.com/emersonCF-255_main.html
- ¹¹ https://www.youtube.com/watch?v=pvNcU_eeXvg&t=2767s
- ¹² René Barjavel, *Ravage*. (Paris: Denoël, 1972.) pp.26-27.
- ¹³ See Sonabet, “A Return to the Soil: René Barjavel's Pétainist Utopia”. p.177.
- ¹⁴ Tzvetan Todorov, *Mémoire du mal, tentation du bien : enquête sur le siècle*. (Paris, Robert Laffont, 2000.) pp.38-39.