

A Very Complex Organism: Industrial Films on “3. maj” and “Brodosplit” Shipyards

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Abstract

This paper analyses three industrial films shot in two out of three largest Yugoslav shipyards: *Treći maj – brodogradilište (3. maj) – brod* by Frano Vodopivec from 1976, *Treći maj* by Petar Trinajstić and Željko Luković from 1983 both shot in Rijeka and *Brodograđevna industrija Split: Zapisi iz škvera* filmed in 1984 (list of nine authors in bibliography), shot in Split. Although industrial films are still a somewhat under-researched genre, their importance stems from the fact that this once “mighty industry” is currently hanging on a thread, and these films will probably soon become one of major memory channels for the future generations on topic of shipbuilding. This is why this paper takes in consideration represented content – such as the tradition of referring to the ships as “living beings” – but also tries to understand it within a larger shipbuilding culture. Finally, it is of importance to grasp the possible meanings of these films in the moment of their production, but also today as it has passed nearly fifty years from their creation, and therefore our final remarks are written from a post-socialist, but also post-shipbuilding prism.

Keywords: 3. maj, Brodosplit, Industrial film, Shipbuilding, Yugoslavia

Introduction

Published in 1955 a book written in English language and titled *Yugoslav Shipbuilding Industry*, with the ambition of presenting this complex and networked industry with many branches, presented one of the largest Adriatic shipyards in a following way: “By the amount of its output, experience and technical equipment the ‘3. maj’ shipyard is the most important among the Yugoslav shipyards”.¹ Although there were at least two other shipyards of major importance, Uljanik in the city of Pula, and Brodograđevna industrija Split (Brodosplit) in the city of Split, in those years, 3. maj stood out among Yugoslav shipyards. This status will be confirmed in that very same 1955 when its workers will launch *Silvretta*, motor cargo ship

¹ NN. 1955. *Yugoslav Shipbuilding Industry*. Rijeka: Društvo inženjera i tehničara brodogradnje – Rijeka, 33.

– a first ship “produced for a foreign customer in one of the Yugoslav shipyards”.² This important launch for the company *Suisse Atlantique* will represent the origin of global orientation of all major Yugoslav shipyards. However, although the history of largest three Yugoslav shipyards has recently been rather well studied with different approaches and from various angles in humanities,³ my research intentions in this paper are a bit different as I would like to analyze several industrial, or as some authors would name them – “utility films” shot in the shipyards.⁴ This visual form is highly under researched in contemporary Croatia or in any other former Yugoslav country, although socialist Yugoslav studies in recent years have been growing and producing very interesting results. Moreover, as Vinzenz Hediger and Patrick Vonderau, editors of the book *Films that Work*, claim: “films made by and for the purposes of industrial and social organizations constitute the next big chunk of uncharted territory in cinema studies”.⁵ Hopefully, they will soon also hold an important place in socialist studies, given the fact that socialism rested and insisted on strong industrialization that cannot be separated from its media, and more narrowly, its film presentations.⁶

All the films that will be presented in this article have been found in Croatian Cinematheque at the Croatian State Archives (*Hrvatska kinoteka pri Hrvatskom državnom arhivu*) in Zagreb during 2024. However, although the output, size, and importance of mentioned shipyards will change over the years, the archival research has shown the major presence of films shot in 3. maj and we can claim that, besides Uljanik shipyard during the period of its huge technical breakthroughs starting in late ‘60s,⁷ Rijeka’s shipyard is the most filmed one. At least partially, this can also be attributed to the activities of an amateur cinema and photo club “Jadran” founded in 1970 within the shipyard.⁸ I will thus mostly focus on two furthestmost complete films in Rijeka’s case: Third May – Shipyard – Ship (*Treći maj – brodogradilište (3. Maj) – brod*) by Frano Vodopivec from 1976 and Third May (*Treći maj*) by Petar Trinajstić and Željko Luković from 1983 to which I will add analysis of a film shot in Split’s shipyard Shipbuilding industry Split: Notes from the Shipyard (*Brodograđevna industrija Split: Zapisi iz škvera*) filmed in 1984 (a list of nine authors can be found in bibliography) that introduces significative themes unseen in other films. This is also a single complete film on Split’s shipyard that I was able to retrieve from the archives. For the purposes of this article, I will not significantly touch on the industrial films about Uljanik shipyard in Pula, since those were recently studied in the monograph *Kolos Jadrana*, published in 2023.

What is the importance of those films historically and today, and what can they tell us about the shipyard culture in periods when they were shot in those cities where “shipbuilding was more than just an economic activity – it was almost a way of life [...]. Shipyards were more than a place of production; they became the source of civilization and cultural experiences of

² Trinajstić, Petar. 2005. *Stoljeće moderne brodogradnje u Rijeci: 3. Maj, 1905.-2005*. Rijeka: Grafika Zambelli, 111.

³ See, for example, Markulinčić, Hrvoje, and Armando Debeljuh (eds.). 2006. *Uljanik 1856-2006*. Pula: Uljanik d.d; Belamarić, Igor. 2009. *Brodosplit u Supavalskoj uvali*. Split: Književni krug - Knjižara Morpurgo; Brunnbauer, Ulf / Ther, Philipp, and Piotr Filipkowski (eds.). 2024. *In the storms of transformation: Two shipyards between socialism and the EU*. Toronto: University of Toronto Press.

⁴ Hediger, Vinzenz, and Patrick Vonderau (eds.). 2009. *Films that work: Industrial film and the productivity of media*. Amsterdam: Amsterdam University Press, 10.

⁵ Hediger and Vonderau, *Films that work*, 10.

⁶ In this sense the final remark in the introduction of the exhaustive book *Films that work* is very indicative: “Finally, one omission in this volume needs to be addressed: The collection does not include an essay on Soviet industrial films or from a socialist country”, Hediger and Vonderau, 15.

⁷ Matošević, Andrea. 2023. *Kolos Jadrana. Industrijski film i brodogradilište Uljanik u drugoj polovici XX. stoljeća*. Zagreb: Srednja Europa, 121-141.

⁸ Trinajstić, *Stoljeće moderne brodogradnje u Rijeci*, 134.

the shipbuilders”⁹ However, as anthropologists know very well, living a certain culture and narrating it verbally or visually are different things. This difference, as I will try to show, can prove itself to be very interesting as it opens further questions – from whom and to whom these visual industrial narrations are being produced and why. Also, if we pay enough attention to how its content is being presented, we can grasp one of the specificities of shipbuilding culture, i.e., the relationship with the ships that were never reduced to mere transport objects. It goes without saying that industrial films, and that is the case with those that will be presented here, compress extremely complex construction systems and parts of shipbuilding culture into fifteen- or twenty-minute displays. That means that if we want to better understand the reality they present, we should be aware of the excluded content and bear in mind their partiality. Lastly, because the Croatia’s shipbuilding industry is mostly ruined or hangs on by a thread and without much hope that it could go back on the path of industrial successes achieved during socialist period,¹⁰ very soon the major traces of its knowledge, discourses and processes, besides published texts, will be those films. They will most probably be the major memory channel for future generations on the topic of shipbuilding, an irreplaceable practice for the development and growth of local city communities intertwined with the shipyard, as a series of aerial shots in *Treći maj – brodogradilište (3. Maj) – brod* suggest. This is another reason why awareness of their existence, but also studying and contextualizing them are so crucial. The title of this paper stems from a partial interplay of these layers: even though short sentence “a very complex organism” is mentioned in Luković’s and Trinajstić’s *Treći maj* in the context of explaining the metaphorical meaning of a ship to the wider audience, it is used as this paper’s title with somewhat more ambivalent intentions. Not only are ships very complex organisms, but the same can be said of shipyards where they were designed and constructed, or the processes through which they “came into life”. Documentaries have translated these intricacies into a particular visual and auditory language.

Although these industrial films belong to the hidden history of socialist Yugoslav cinema, and thus cinema studies would be their most obvious analytical territory, in this paper I will try to capture them also through an ethnographic and anthropological perspective. This implies that strong emphasis will be put on the traditions, culture, and processes of their representations. Also I will bear in mind the fact that those films today became “*media boundary objects*”, i.e. objects that can mean different things to different people and serve different purposes in different contexts, ranging from the original purpose of industrial organization to an afterlife in the sense of Warburg [...].¹¹ These processes open the questions of nostalgia and retro-utopia, firmly tied to the idea of industrial modernity, a connection highlighted recently in former Yugoslav countries by more than one scholar.¹²

Shipbuilding With a Human Face

There are several layers through which shipyards and ships, places, and objects are being humanized in the mentioned industrial films. Placed and built in a socialist country where one of the significant concerns was working people and the organizational and existential

⁹ Trinajstić, *Stoljeće moderne brodogradnje u Rijeci*, 38.

¹⁰ Matošević, Andrea. 2023. Paradoks hrvatske brodogradnje. Brodarski institut i STEM ante litteram. *Etnološka tribina* 53(46), 211-128.

¹¹ Hediger, Vinzenz / Hoof, Florian, and Yvonne Zimmermann (eds.). 2024. *Films that work harder: The circulation of industrial film*. Amsterdam: Amsterdam University Press, 24-25.

¹² Potkonjak, Sanja, Tea Škokić. 2015. Retro-Utopia. On the Idea of Work and Progress in Post-Socialist Croatia. *Ethnologia Balkanica* 18, 369-384; Petrović, Tanja. 2017. *Nostalgia for industrial labor in socialist Yugoslavia. Or why the post-socialist affect matters*. In *Nostalgia on the move*, edited by Slavković, Mirjana, and Marija Đorgović. Beograd: Muzej Jugoslavije, 14-30.

risks of “alienation of man from his own production activities [...] and the alienation of man from man”,¹³ these films show a completely different reality in factories facing the Adriatic Sea. What connects all three films is quite similar opening shots – in the very first few seconds, extreme close-up or close-up shots of an unnamed man’s face are being shown. In Rijeka’s example these men are technicians and engineers, while in Split’s example a mass of workers is shown walking through the factory gate, a sequence filmed at “a key site of industrial culture, but also of film history” since “workers leaving the factory, plus a dog, were the subject of the first Lumière film”.¹⁴ Such an opening hints at the way the “factory” will be presented to viewers – a place of modernity and technical breakthroughs, of oversized objects such as cranes and ship sections, production and work, but also a place where man does not necessarily slave to technology but controls it. Opening remarks in *Treći maj – brodogradilište (3. Maj) – brod* do say a lot about this overlapping of men and “floating machines”: “A story about a ship is always a story about a man – ships have always been built by man for man and will always be built that way, so this is our story about people and ships”.

Nevertheless, interrelations of man and machines, “organic and inorganic” elements in the shipyards, as Sanja Puljar D’Alessio has noted in her extensive book on organizational culture in 3. maj shipyard, is an unavoidable theme. It is emphasized that in her extensive ethnographic fieldwork, she often stumbled upon the “organization metaphor as an organism” and concluded:

*Unlike the organization metaphor as a machine, which embodies the idea of formal rationality and at the same time its static character promises to be satisfactory way of dealing with complexity [...] the metaphor of the organization as an organism serves analysis of the organization as a whole (or at least of its individual elements as parts of a meaningful whole) in order to grasp its organic character, and at the same time to outline historical (evolutionary) study of organizations.*¹⁵

What film examples teach us, when compared to Puljar D’Alessio’s conclusions, is that maybe this metaphor of the organism can be expanded to other aspects of shipbuilding culture beyond the category of organization and, in the sense I am about to propose, that it is tied to the notion of ships. A careful viewer and listener will notice that the over-voice in films often mentions vessels as if they were living beings. In *Brodogrđevna industrija Split: Zapisi iz škvera*, the scenes of launching the chemical carrier *Atlas Exporter* are followed by this significant explanation:

*Until this moment, this was just a factory on the berth. A ship becomes a ship after its launch. From now on, he will acquire his biography, deal with his destiny [...] those huge tons of steel become an organism, here on this slipway, he got both body and soul.*¹⁶

This is a very good and not isolated example of presenting ships as if they were living beings, moreover, as if they were humans. In an almost identical way, *Treći maj – brodogradilište (3. maj) – brod* speaks of the vessel on the slipways waiting to be launched: “he is like a complete body on the berth waiting for his soul – the engine and other drive equipment”. Also, a noteworthy passage explains to the viewers:

¹³ Petrović, Gajo. 1971. *Čemu Praxis*. Zagreb: Praxis, 174.

¹⁴ Hediger and Vonderau, *Films that work*, 9. For the meaning of the factory gate in Yugoslav shipbuilding, with emphasis on Pula’s Uljanik see, Petrungaro, Stefano. 2019. Ethics of work and discipline in transition: Uljanik in late and post-socialism. *Review of Croatian History* XV(1), 191-213, 197-199.

¹⁵ Puljar D’Alessio, Sanja. *Mi gradimo brod, a brod gradi nas: etnografija organizacije brodogradilišta 3. maj*. Zagreb: Institut za etnologiju i folkloristiku, 103-114.

¹⁶ Emphasis in italics by the author.

*The engine will drive the screw, and the screw the ship, but there will always be a man behind all of this. This was the case while the ship was still chained to the land that gave birth to it and even when it was lowered into the sea for which it was made and born, the ship was still not completed. Installing and assembling equipment is a special process in the production of a ship, just as ship and propulsion installations are a special part of its organism. Completed, the ship is waiting for its owner and a passport for long voyages.*¹⁷

Ship has “a body”, “a biography”, “a destiny”, it is “an organism” that is “borne” and has “a soul” and “a passport”. We should not forget that when shipbuilders are referring to ships in such a manner, as human beings, it is not only a question of language but of practice too. Ships are probably the only means of transport, or “complex objects” that go through a *rite de passage* consisting of naming, christening – breaking the bottle of champagne onto its hull and receiving a godmother or a godfather that addresses it with words *Brode, dajem ti ime...* (Ship, I give you the name...).¹⁸ These connections between a ship and its godmothers/godfathers can be tight, and often are not reduced to the act of launching itself but can become part of the life of a godmother, ship, and ship’s crew.¹⁹ But what is even more surprising and far less known is the practice of “dismantling (*kasiranje*) or delivering worn-out ships in the specialized workshops where they will be cut to pieces”.²⁰ A newsreel filmed in 1967 and titled *Dismantling the ships (U rezalištu brodova)* is dedicated to this practice. It begins and ends in a mood that is appropriate for mourning. If launchings were memorable moments of collective joy, then their dismantling was a process immersed in grieving. This is how film refers to “old and dying ships,” followed by the sound of a mournful trumpet:

*Brodospas is a cemetery of ships, where old, exhausted ships arrive from all over the world. Here they die slowly and quietly with postmortem boat ceremonies. The company Brodospas made sure that this death was as quick as possible, so it provided gantry cranes and hydraulic shears [...]. Whether it's about ships or people, in this place it doesn't seem to make a difference.*²¹

Ships are not only “being borne” or “having a destiny” but are “getting old” and “dying”. In other words, they follow the course of human life and go through related practices and processes. But such an understanding and interpretation of vessels was not exclusive to 3. maj, Brodosplit or Uljanik shipyards, nor it was idiosyncratic to socialist Yugoslavia. Oscar winning documentary *Seawards the Great Ships* (1960) by Hilary Harris who filmed Scottish shipbuilding tradition, tells the story in a very similar way where the “giant baby of Clyde” is “an alive thing” with “eyes and brains”.²² Therefore, when in front of such language and practices that overlap with each other, we should understand them in at least a dual way. It is a language of intimacy – only in shipbuilding, “all work stops, and everyone gathers to see the product leaving the factory,” where, for example, “cars simply come off the production line”.²³ But also, this tradition is a common denominator of shipbuilding culture, regardless of the country where the vessels were being built and the language of the shipbuilders. It is

¹⁷ It is important to underline the practice in the English language of referring to ships as a feminine “she”, not in masculine (he) or neuter (it) form. However, since I am translating from the Croatian original and not to examples from the British tradition, I will keep grammatical gender as it is mentioned in the original language. Emphasis in italics by the author.

¹⁸ Trinajstić, *Stoljeće moderne brodogradnje u Rijeci*, 34.

¹⁹ Matošević, *Kolos Jadrana*, 162.

²⁰ Kopal, Marija, and Franko Kopal. 1990. Brodogradnja u privredi Pule i proces prestrukturiranja svjetske brodogradnje. *Gospodarstvo Istre. Časopis za gospodarska pitanja* 3(4), 62-68, 65.

²¹ Emphasis in italics by the author.

²² We can follow the same discourse in Italian documentaries, e.g. *La fine dell'Andrea Doria* (CIAC, Compagnia Italiana Attualità Cinematografiche, 1956) that follows the very last minutes of the submerged ship in 1956 near New York. It explicitly reminds the Italian speaking audience that: “Not only the dead and wounded are a disaster for a country. Misfortunes, mourning and penury, from now on, they are also a question of matter.”

²³ Bellamy, Martin. 2001. *The shipbuilders. An anthology of Scottish shipyard life*. Edinburgh: Birlinn, 78.

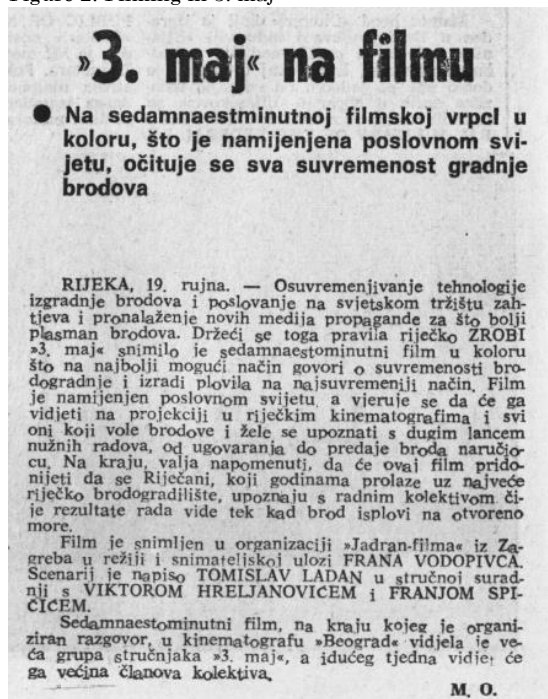
a sort of shipbuilding *koine*, a collective tradition that remained alive and in use even amid the modernization of the production of ships.

Figure 1: Filming in 3. maj



Source: Brodograditelj. 1978. "Ho-ruk" u kinu "Partizan", 20 April 1978, 7.

Figure 2: Filming in 3. maj



Source: Brodograditelj. 1976. 3. maj na filmu, 23 September 1976, 2.

Visions of Modernity

"A ship is a very complex organism", whose completion "involves thousands of people of many different professions using many different tools, from the simplest hand tool to the most modern electronic machines" states the voice-over in perfect English in *Treći maj* by Željko Luković and Petar Trinajstić. Obviously filmed for promotional purposes,²⁴ like most of the

²⁴ Most of these non-fictional films were filmed bilingually, in a visually identical Croatian and English version. This is also the case of the *Treći maj* film considered here. In 3. maj there was a direct influence between film production and amateurism. Members of the amateur cinema and photo club "Jadran" Željko Luković and Petar Trinajstić were also directors and screenplay authors for "shipbuilding film *Ho-ruk* filmed by the members of amateur cinema and

previously mentioned films, it builds its narrative on the coexistence of welding machines and up-to-date IT equipment, manual labor, and sophisticated technical solutions. Directors of films are showing 3. maj and the Brodosplit shipbuilding process from the “collective worker”²⁵ point of view. However, such an all-round, or cross-section viewpoint means that modern technology is more in focus and, secondly, that “Some kinds of knowledge, such as an experienced worker’s specific skills, remain implicit”²⁶ and hidden from the viewer. Put differently, these films are telling us and showing us that these shipbuilding communities can construct and build “a very complex organism”, but they are not telling us almost anything about how it is actually being done. In this aspect only, all these non-fictional films remain truly faithful to their advertising character, and their authors, in some cases, are probably telling us far less than they know.

One of the effects of compressing time in these films, a fifteen-minute or half-hour presentation of processes that last half a year to a year, and in some cases even more, is the impression of ease, flow, and expediency in the construction of ships. Also, they leave us with the vague impression that various departments and sections of production physically stood very close to each other and tightly interacted without issues, while in reality things were far more complicated as anthropologist Sanja Puljar D’Alessio has shown in her ethnographic book on 3. maj and its internal organization processes. One of the most plastic examples is given in the film by Frano Vodopivec, filmed in 1976, where it is explained that the “construction of a modern ship involves many steps”:

*And correspondence with shipowners, and the choice of type, model, size of the ship. And that is only the first stop of the ship on the long and complex journey of cooperation between creative intellect and technical processes that is increasingly being covered in an increasingly shorter time. But already here, in the human brain with an idea and a hand with a pencil, electronic systems come to the rescue. The irreplaceable process of encryption and decryption begins. From data to descriptions, from descriptions to drawings, from drawings to blueprints. Or from codes to programs, and from programs to projects. Enigmatic tapes appear, all within the framework of computer intervention, which is a huge gain in both time and precision. It enables the possibility of manufacturing in hundredths of a millimetre.*²⁷

This is a very important passage, because it instills trust in the processes upon which the construction of ships rests. This text is read to the audience while the camera shows computers and modern technology combined with the metallurgical tasks in the workshops, particularly *Autokon* a “System of numerical control of flame-cutting machines” and *Prelikon* “in which the theoretical treatment of the ship is stored”,²⁸ introduced during the first half of the ’70s. Albeit not the only one, this huge IT breakthrough could be one of the reasons why this film was made in the first place. But as Puljar D’Alessio notes, “developing an information system and streamlining an organization go hand in hand, one cannot exist without the other” and in those years “Vagueness and lack of compliance with internal instructions and regulations, centralized data collection system, long period from the

photo club ‘Jadran’ and produced by major film company ‘Jadranfilm’. See, Brodograditelj. 1978. “Ho-ruk” u kinu “Partizan”. *Brodograditelj*, 20 April 1978, 7.

²⁵ Groening, Stephen. 2011. “We can see ourselves as others see us”: Women workers and Western Union’s training films in the 1920s. In *Useful cinema*, edited by Acland, Charles R., and Haidee Wasson. Durham & London: Duke University Press, 34-59, 42.

²⁶ Hediger and Vonderau, *Films that work*, 11.

²⁷ Emphasis in italics by the author.

²⁸ Mehlum, Even, and P. F. Sørensen. 1971. Example of an existing system in the ship-building industry: The *Autokon* system. *Proceedings of the Royal Society of London. Series A, Mathematical and Physical Sciences* 321(1545), 219-233, 219.

occurrence of the event, its computer processing and delivery of information to the user”²⁹ also characterized internal organization of the shipyard.

However, modernity was not only about technical achievements and its IT breakthroughs. It had a lot to do with the quality of workers’ lives and care for their health. It was already mentioned that the amateur cinema and photo club “Jadran” was founded within the shipyard, with many workers not only participating but also winning awards for their film achievements.³⁰ It was a place where people from different points in the strict industrial hierarchy met on an equal basis, which would not have been possible otherwise.³¹ But other facilities were organized within the realms of shipyards. In Brodosplit, within the auspices of the shipyard, the health centre was operative and filmed in *Brodograđevna industrija Split: Zapisi iz škvera*. Due to the professional illnesses and injuries, it had a “specialist infirmary larger than those in many of our cities” that included “dentist, pharmacy, trauma centre, kinesiotherapy, but also heart electrocardiogram available at the station”. The problems that pressured the infirmary were quite large, and included, as Edi Roje, one of its doctors, stated in a text published in 1971, a plethora of issues. But some stood out:

*We are primarily concerned with the enormous increase in the number of patients at the station. In certain months it increased up to 100 percent when compared to year 1969. A considerable number of subcontractor workers companies use our services also, and we strive to provide them with quality of healthcare protection, and there are also students from our industrial schools, which we received accordingly to the established policy of the shipyard and health services. All our departments are overloaded, laboratory above all but our X-ray cabinet as well. All this complicates our work, increases waiting and nervousness and, let's be honest, increases the possibility of our mistakes and omissions.*³²

This significant pressure on health stations and their specialist infirmaries gives a glimpse into the workers’ health every day, their needs, and the dangers of shipbuilding occupations, but it also tells a lot about efforts to meet their needs. Also, the care that the shipyard showed for their employees does not come down only to cultural practices and health, because all shipyards, as the film *Brodograđevna industrija Split* reminds us, had a canteen with warm meals being offered to all. All these coexisting facilities within shipyards invite us to think of them in terms of cities within cities, almost “self-sufficient and animated by a whole series of different professions”.³³ Analysed films remind us of this interpretative possibility, although each one to a different extent. All three documentaries are very similar in showing a technical “step-by-step” approach to shipbuilding; they build the narrative through an analogous and very comparable style, but it is only in *Brodograđevna industrija Split* that the question of professional health issues and coping with them is explicitly opened. This is an enormously important theme, as work hazards and health were major issues in hard industry milieus. The theme of danger is thus central for the industrial work culture, but documentaries do not tell us much about its informal side, a wider net of everyday practices and relations on berths and in the workshops. Let us briefly remind ourselves of parts of that culture.

²⁹ Puljar D’Alessio, *Mi gradimo brod, a brod gradi nas*, 113-115.

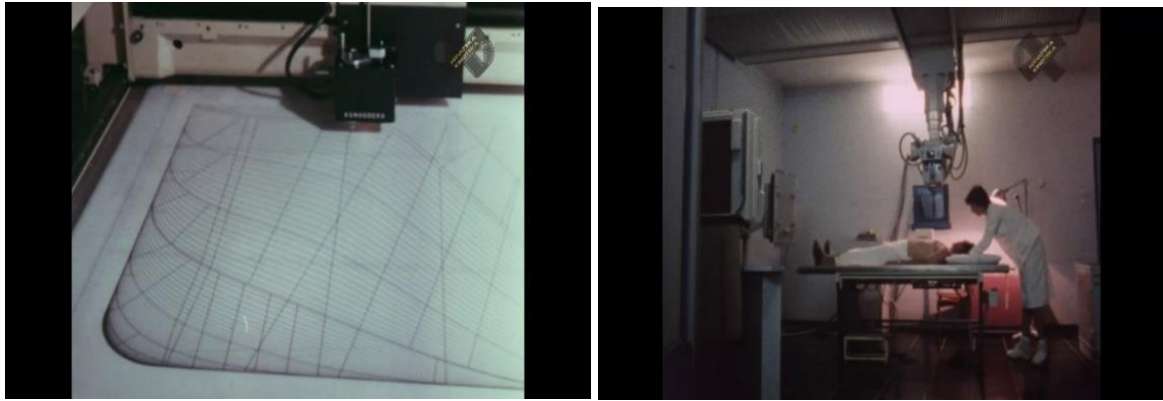
³⁰ Brodograditelj, 1976. Najviše nagrada “Jadranu”. *Brodograditelj*, 1 January 1976, 10.

³¹ Puljar D’Alessio, *Mi gradimo brod, a brod gradi nas*, 112.

³² Brodograditelj, 1971. Zdravstvena stanica ne može biti u sastavu brodogradilišta. *Brodograditelj*, 1 March 1971, 6.

³³ Bellamy, *The shipbuilders*, 36.

Figure 3 and figure 4: Modern designing of ships and medical care for shipbuilders.



Source: *Treći maj – brodogradilište (3. Maj) – brod* (dir. Frano Vodopivec, 1976) and *Brodograđevna industrija Split: Zapisi iz škvera* (dir. Z. Baković, A. Baučić, V. Vrdoljak, A. Pivčević, O. Mlakar, M. Prebil, R. Lisjak, N. Tanhofer, A. B. Vrdoljak, 1984). Courtesy of Croatian State Archives.

What the Picture Leaves Out

The difference between the film presentation of technology and the ways it was implemented, partially analyzed in the previous subchapter, leads us to other discrepancies between lived and presented practices in shipyards. Though industrial films are not ethnographic films, and it would be unfair to expect them to capture the subtleties of in formal culture in those milieus, they did film the tradition of experiencing the ships as living beings. But more difficult topics, such as risks of injury in a number of manual workplaces, deaths in the construction of hulls and berths, or a masculine culture that accepted such a hazard, never found their way into the official industrial films. Shipbuilding films analyzed here are somewhat similar to those filmed in other industrial branches. Cameras were most welcomed when the new houses were being built in American mining communities, as Janet Wells Greene points out, but “filming was limited in cases of mining accidents”.³⁴ These dynamics become even more important if we know the implicit shipbuilder’s knowledge of the interconnectedness of work and the possibility of death. Ethnographic research has underlined the common belief among shipbuilders: “This is what they say—every ship takes one death injury, and every year at least one worker dies.”³⁵ Official statistics and news follow this credo up to a certain point, as there were two death cases in biggest Yugoslav shipyards in 1966, 1969 and 1970. But the following year was particularly horrific, as in “3. maj three workers have lost their lives while working on a ship Arctic Troll. Two workers have been burned alive and carbonized while the third one died in hospital”.³⁶ In the same year, 1971, another fifteen shipbuilders lost their lives in a fire while working on the hull of the ship Ragna Gorthon in 3. maj. The youngest one was nineteen years old.³⁷

Such tragedies were intertwined with successes that shipbuilders have experienced, and surely enlarge the framework for understanding the dominant industrial culture of work. Masculinity, camaraderie, risk taking, and hazard were strictly connected to the successfully completed task, although it sometimes meant negotiating with superiors on ways in which

³⁴ Wells Greene, Janet. 2005. *Cameras in the coalfields: Photographs as evidence for comparative coalfield history*. In *Towards a comparative history of coalfield societies*, edited by Berger, Stefan / Croll, Andy, and Norman LaPorte. Aldershot: Ashgate, 65-86, 66.

³⁵ Matošević, Andrea. 2019. *A lot of sweat, a little bit of fun, and not entirely “hard men”*: Worker’s masculinity in the *Uljanik* shipyard. In *Everyday life in the Balkans*, edited by Montgomery, David. Indiana: Indiana University Press, 179-187, 181.

³⁶ *Brodograditelj*, 1971. Tri smrti u “Arctic Trollu”. *Brodograditelj*, 15 March 1971, 9; *Brodograditelj*, 1971. Gradnja brodova ugrožava brodograditelje. *Brodograditelj*, 1 May 1971, 12.

³⁷ Trinjastić, *Stoljeće moderne brodogradnje*, 135; *Brodograditelj*. 1971. Tragedija “3. Maja”. *Brodograditelj*, 21 September 1971, 1.

they were to be carried out. Ethnographic research has shown that workers were sometimes pushed to ignore the rules and negotiate on their and other people's safety. A retired crane driver recalled how he was forced to lift a cargo heavier than allowed:

But we had to lift overloaded cargo, beyond allowed, yes. You will do it, or find another job in another city, that's what they said. Whenever I said, 'I will not lift that cargo,' their response was 'you must.' And we came to a compromise: I would do it, but slowly. But once, the entire section that weighed more than thirty tons fell into the water! Directly down! A main motor axle broke. If somebody had been down there, it would have been a massacre.³⁸

Situations as these were not an exception, and it is highly significant that for the tragedy with 15 casualties in 3. maj three higher ranked employees were arrested: an engineer who managed construction of engine rooms, a fuel specialist, and a foreman under the "suspicion of contributing to the occurrence of the accident by omitting the crucial steps in the work process".³⁹ These few selected and important examples, to which manipulating with asbestos causing "asbestosis disease" could be added among others,⁴⁰ give us at least a glimpse into the negotiating, very often almost improvising, and dangerous nature of workers' everyday. Constructing a ship was not a work on an assembly line, although the films seem to suggest exactly that. Far more complicated with always more complex duties to accomplish, as the complexities of the constructed ships were rising, they required continuous adjustments and adaptations to the tasks that were not and could not be completely standardized. An assembly line does not put workers in such danger as the construction procedures in shipbuilding do. The conveyor belt brings with it an abundance of minor physical injuries and nuances such as boredom and monotony, but rarely, if ever, risks that can end up with multiple casualties that we have seen in 3. maj. Nonetheless, all films that have been analyzed here present shipbuilding as an industrial process devoid of difficulties, doubts, mistakes, and finally dangers typical of "a tailor-made shipyard where the wishes of customers were accepted".⁴¹ In the best of the cases, they remain implicit. After the christening and launching of one ship, the keel for another is immediately placed on the berths, voice-overs and cameras remind the viewers, thus leaving them with the notion of continuous and uninterrupted work. That was a correct sign of a good and healthy business in a highly functioning factory, a sign that had to induce trust with business partners and pride among shipbuilders. Also, it was a sign that needed contextualization, as these films were an integral part of the shipyard, and they showed the viewers only a limited portion of its life. In other words, the entirety of the shipyard with several thousand employees cannot be completely reduced to a few tens of minutes' work.

³⁸ Matošević, *A lot of sweat*, 181.

³⁹ Brodograditelj. 1971. Trojica u pritvoru. *Brodograditelj*, 21 September 1971, 6.

⁴⁰ Brodograditelj. 1974. "Izolateri" brodogradilišta "Split" sami sa svojim teškim problemima. *Brodograditelj*, 13 June 1974, 8.

⁴¹ Puljar D'Alessio, *Mi gradimo brod, a brod gradi nas*, 125.

Figure 5: Launching of the ship in Brodosplit



Source: Brodograđevna industrija Split: *Zapisi iz šķvera*. Courtesy of Croatian State Archives.

The Significance of Industrial Films – Conclusions

The importance of these, in the last thirty years neglected, films can be understood in several ways depending on the historical or contemporary viewpoint. Their historical significance is underlined by the fact that they themselves make an integral part of Yugoslav shipbuilding, or in a larger sense, industrial film heritage. This heritage was sometimes created by professional filmmakers, but at times amateurs contributed to it, and, at least in the cases analyzed here, with no noticeable differences in quality. This is probably one of the reasons why workers' cultural production, typical of the Yugoslav self-management system, was not a topic in those films. Films, in some cases, as we have previously seen, were already the result of cultural amateurism; they were the cultural product delivered by workers and should be seen as such.⁴² Although throughout this paper a promotional, or “propaganda”, nature of these films was underlined as their most noticeable purpose was “intended for the business world”, we should not forget their far more complex nature briefly announced in a short article on Frano Vodopivec's documentary *Treći maj – brodogradilište (3. Maj) – brod* published in *Brodograditelj* journal:

At the screening in Rijeka's cinema the film will be seen by those who love ships and want to get acquainted with the long chain of the shipyard's necessary works, from contracting to the delivery of a ship to the client. This film will contribute to the fact that the citizens of Rijeka, who have been passing by Rijeka's largest shipyard for years, get to know the work of a collective whose results are only seen when the ship sails to the open sea. The seventeen-minute film, at the end of which a discussion was organized in the cinema 'Belgrade', was seen by a larger group of '3. Maj' experts, and most of the collective members, will see it next week.⁴³

The weight of these works stems from the fact that shipyards, although strongly connected with the local community, were restricted areas for those who were not employed in them. Only on rare and special occasions – such as launchings – the larger community could enter the confined area. That is why we can interpret these films as a sort of “public eyes”, testimonies of parts of processes and knowledge woven into “a very complex organism” in order “to be born”. They are, in other words, one of the possible bridges between shipyards and the city, industrial plants and the wider community or audience. However, industrial films – whether they had educational, critical, propaganda, or jubilee celebration function, always operated as a sort of frames, or windows into generally closed industrial milieus, and

⁴² For the topic of workers' cultural amateurism see, Koroman, Boris. 2017. Radničko književno stvaralaštvo u samoupravljanju: Reprodukcije kanona, književnost i prakse svakodnevice. *Narodna umjetnost* 54(2), 103-129; Buhin, Anita. 2023. “Kulturni fenomeni dvaju giganata”: Samoupravna kultura u brodogradilištu Uljanik i tvornici turbina Jugoturbina 1970-ih i 1980-ih. *Časopis za suvremenu povijest* 55(1), 93-111.

⁴³ Brodograditelj, 1976. 3. maj na filmu. *Brodograditelj*, 23 September 1976, 2.

shipbuilding documentaries are not an exception in that sense. The same can be argued for films on mining, knitting factories or steelworks, as many – even well-known Yugoslav – documentaries show. For example, *Sigurnosne mjere u rudniku ugljena* (Safety measures in coalmine) by Oldrich Kadrnka (1952), *Od 3 do 22 (From 3 am to 22 pm)* by Krešo Golik (1966), or *Devalvacija jednog osmijeha* by Vojdrag Berčić (1967) always take the viewer also into the plants or deep into the pits, to the workplaces of the many. But the similarities stop here, as the representation of work in shipyards was never individualized, while in other industrial branches, that was not the case. Moreover, shipyards were, more or less, successfully operated throughout the '90s and into the XXI century whilst other heavy or light industrial branches had less fortune in that sense. Furthermore, we should not omit noticing that the films analyzed in this text were seen by “most of the collective”. The same could probably be claimed for other abovementioned branches and examples, but this is a crucial segment as most workers in Brodosplit or 3. maj, although a shipyard employee, knew almost exclusively only their milieu and the segment of work. It was hard to see a welder in a design office, as well as it was rare to see an IT expert on the berths. Therefore, these films gave a different and additional visual and logical sense of the wholeness of the shipyard to its employees. A potentially abstract part of the factory in this sense became more concrete and unified in a visual chain, even to those who passed through the factory gates daily.

On the other side, we found these media examples in the post-socialist era, and we are watching and analyzing them from a post-shipbuilding point of view and standpoint, where all the most significant successes in Brodosplit or 3. maj are behind us in time. It was a time when 3. maj had between 4,830 and 6,032 employees, with a similar situation in Brodosplit, and their yearly output of ships (in years when films were produced) was six for 3. maj (1976) and seven for Brodosplit (1984), with a series of tankers constructed for the USSR and their Moscow-based *Sudoimport* company among others.⁴⁴ That situation preceded and has continued in the following years. It is a part of that business and production zenith that these three films give us a glimpse into. They were produced during successful periods in shipyards, when the shipbuilding orders were continuous and that complex industrial branch was flourishing, despite its internal problems. This is why watching them feels partially like observing science-fiction movies, particularly when compared with their current state of decay, neglect, and a progression of serious operational issues. Albeit not working on films, several authors have analyzed such a situation in terms of retro-Utopia that should be seen as “something that describes the informative role of past experience of work and ideas of personal and community progress, while one lives a life of unemployment, insecurity or lack of optimism regarding the present and the future of one’s work”.⁴⁵ Other scholars have analyzed similar situations in terms of “nostalgia for industrial labour” that is strictly tied to socialist period.⁴⁶ The content of the films gives us the reasons to understand these concepts of “retro-Utopia” and “nostalgia” because not only do they show the enormous objects of the shipbuilders pride and testify to the modern processes of construction from the “collective worker” standpoint, but also open the question of collective care for workers. If factories were not just a place of production, but of socialization too, then, under socialism, we should recognize the whole plethora of other activities and services that were offered to the shipbuilders and, sometimes, their families. Even at the possibility that these films show a bit of a furnished reality and do not pay attention to the issues in the processes of work or its organization, they did include shots of a well-developed health care system, a canteen that offered warm meals and implied a possibility of attending different cultural amateur

⁴⁴ List of constructed ships in Brodosplit is available here: Brodosplit. *Referentna lista brodova isporučenih od 1956. godine* (accessed: 20 March 2025). List of constructed ships in 3. maj is available here: 3. maj. *Reference 1946 – 1999* (accessed: 20 March 2025).

⁴⁵ Potkonjak and Škoki, *Retro-Utopia*, 371.

⁴⁶ Petrović, *Nostalgia for industrial labor*, 14.

organizations. These organized aspects of everyday life can be “linked to social security, the idea of stable and regularly paid work, better education for children, and a higher living standard in every imaginable sense”.⁴⁷ This is also why these films should not be understood as mere reality-recording media, as watching them, we can also get a glimpse into what shipbuilders and their communities expected and imagined their future to be.

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