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SPECIAL ISSUE ARTICLE

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Oil media: Changing portraits of petroleum in visual culture between the US, Kuwait, and Switzerland

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SPECIAL ISSUE
Making power visible: Codifications, infrastructures, and representations of energy

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Abstract

This article examines three cases of mid-20th-century oil media—oil-related imagery, iconographies, and media—in visual culture: a series of popular science books entitled *The Story of Oil* published in the US, an oil-themed set of Kuwaiti postage stamps (1959), and an art exhibition in Zurich (1956) titled *Welt des Erdöls: Junge Maler sehen eine Industrie* (*World of Petroleum: Young Artists See an Industry*). While depicting crude oil in its natural habitat was a common photographic theme in the early 20th-century United States, the material discussed shows that, by the mid-20th century, crude oil no longer had the same visual presence. The iconography of oil in the three case studies came to rely increasingly on images of oil infrastructure and on context-specific depictions of living within petro-modernity or petro-culture, meaning lifestyles fueled by cheap fossil energy. However, it is not just the changes in visual representations of petroleum that matter; any debate about the visibility and invisibility of petroleum has to take into account the very media through which petroleum has become visually communicated—that is, the precise forms of oil's mediatization. The aesthetic negotiation of petroleum through media-based visual representations has been crucial for the *dematerialization* of fossil matter in its

conversion to fossil energy, as well as the *decoupling* of sites of extraction from sites of production and consumption in the public imagination. As petro-culture has morphed into national or even global culture (rather than representing just one possible energy source among many), oil media has paved the way for our intimate relationship with fossil energy-dependent lifestyles, which is one of the biggest drivers of climate change.

KEYWORDS
art history, fossil energy, oil media, petroleum, postage stamps, visual culture

1 | VISUALITY AND PETROLEUM

Fossil fuels have driven 20th-century global history like no other energy source. Coal, crude oil, and natural gas are the non-renewable hydrocarbon agents that generate the motion, heat, electricity, and power many have come to take for granted.[1] Today, a picture of almost anything can be read as a visual representation of fossil energy and a symbol of living within petro-modernity. This visual as well as material omnipresence is a result of the global normalization of fossil fuel dependence, which is one of the biggest drivers of climate change.[2] Historically, the frequent appearance of petroleum infrastructure, oil companies' products, and petro-fueled lifestyles in visual culture was already evident by the mid-20th century in contexts such as the US, Kuwait, and Switzerland, as the case studies discussed in this article suggest. Still, the growing visibility of fossil energy through sites of production and practices of consumption in visual representations did not necessarily create transparency or convey a realistic picture of extractive industries or of fossil energy's socio-environmental impact. Rather, it reflected specific dominant narratives that historical actors such as oil companies sought to disseminate—the (mis)conception of fossil energy's infinite abundance and cheap availability, for example, or the emotionally charged association of oil industrialization with modernization and nation-building. The historical examination provided here is aimed at disclosing the visual strategies of what I call "decoupling" the sites, the power relations, and the politics of extraction from the ways in which the advantages of fossil energy in daily life were showcased, and ultimately from the social, political, and ecological consequences of extracting and burning petroleum that we face today.

Petro-modernity is characterized by the omnipresent penetration of cheap fossil energy into literally every sphere of modern life.[3] Yet, this transformation has taken place in the context of an entirely uneven experience, historically and geographically, of seeing and picturing the fossil raw material as well as its processual conversion from crude oil into an energy source. Crude oil is an extremely rich biogenic matter with a multi-sensual physical materiality and a striking visuality. It presents us with a "co-constitution of visuality and materiality" that is "in constant dynamic process and situated within networks, hierarchies and discourses of power."[4] As Gillian Rose and Divya P. Tolia-Kelly suggest, focusing on these integrated qualities "does not assume solidity of objects [or matter] and fixity of meaning," but rather acknowledges crude oil as the sum of all its heterogeneous, multisensory physical conditions.[5] Crude oil has a stark material presence that can be represented in imagery.

[1] I use the terms petroleum and oil interchangeably.
[2] See Scott (2018, pp. 180–181); Welling (2020, p. 138).
[3] See LeMenager (2014, p. 67).
[4] Rose & Tolia-Kelly (2012, p. 4).
[5] Rose & Tolia-Kelly (2012, p. 5).

Fossil energy is not invisible either. Materially, the arrival of fossil energy was readily apparent, even in the context of people's private homes. Switching from an open fireplace to a gas-run fire and then to an electric oven was actively experienced (and therefore epistemologically not invisible). Nevertheless, (fossil) energy as such remains difficult to picture and visually represent, especially as its materiality has become widely unrelatable to the original energy carrier, crude oil. The conversion process has effectively dissolved the co-constitution of material and visual ecologies that crude oil as raw material incorporates—the dematerialization of energy.

In this context, this article argues that images—as they are transported in visual media—have played an important role in negotiating the physical and discursive presence of fossil energy by curating its epistemological and social *visibility* for selected audiences. Sheena Wilson and Andrew Pendakis have rightly pointed out that "In the age of oil it is the image, at this time more than in any other era, that proliferates as a medium of communication."[6] Images and visual media can mediate, normalize, but also aestheticize petroleum as materiality, energy, and way of life, because visual representations both transport and help shape discourses of power and public awareness.

Most scholars working in the emerging inter- and transdisciplinary field of petro-cultures or (fossil) energy humanities have problematized petroleum's in/visibility as an impactful factor in fossil energy's sociocultural devaluation and taken-for-grantedness that continues to inhibit the transition to alternative energies. Andreas Malm explains petroleum's invisibility as a "crisis of the imagination," while Ursula Biemann credits "the level of abstraction" enforced by the oil market for petroleum's absence or inaccessibility.[7] Andrew Pendakis and Sheena Wilson see the underlying petro-capitalist system at play.[8] Building on the idea that visibility creates greater epistemological transparency, in the article "How to Know about Oil" Imre Szeman even suggests an inquiry along visual forms, exemplified by Edward Burtynsky's photography on oil.[9]

Despite the general acknowledgment of petroleum's crucial entanglement with the image and the visual, there have been surprisingly few art-historical approaches to the rapidly growing multidisciplinary field of petro-cultures. Many studies on petroleum and petro-cultures in the energy humanities focus on literature and language.[10] Regarding visual media, film has received the most attention and has been discussed in relation to different regional and corporate foci.[11] In addition, contemporary art is being increasingly examined, as for example in Amanda Boetzkis's work on plastics and vision.[12] Still, the concept of "in/visibility" has remained vague. If considering energy visibility as both the physical and discursive presence of energy, as the special issue of which this article is a part suggests, one needs to ask both which aspects of the oil-industrial complex and of the historical oil experience are translated into images as pictorial motifs, and by which media they are transported towards audiences. Moreover, how are these images integrated into certain historically contingent socio-political discourses, and by whom?

To this end, this article examines in detail the historically changing norms of how to visualize fossil matter and fossil energy. It analyzes the choice of motifs and iconographies of a small but varied selection of visual artifacts that were meant to represent the official (usually corporate-conformist) side of petroleum visibility from the early to the mid-20th century in the context of the US, Kuwait, and Switzerland—in other words, Western oil companies and what one could call their partner regimes. In this way, the article provides an art-historical analysis of the visual culture of petro-cultures in these localities that goes beyond the rather general phenomenon of petroleum's invisibility. Rather, it discusses the specific ways in which petroleum was mediated in historical imagery and through different types of visual media.

In this article, I argue that carefully selected elements of the extractive fossil industry, such as the derrick, became iconic iconographies, symbolizing (depending on the context) either the taming of natural resources,

[6]Pendakis & Wilson (2012, p. 4).
[7]Malm (2017, p. 126); Biemann & Pendakis (2012, p. 8).
[8]Pendakis & Wilson (2012, p. 4).
[9]Szeman (2013).
[10]See, for instance, the following seminal texts: Ghosh (2005); Shannon et al. (2011).
[11]Canjels (2017); Damluji (2013); Jacobson (2019); Worden (2012).
[12]Boetzkes (2019).

modernization and nation-building, or technological sophistication. On the one hand, while the oil derrick did become a somewhat normalized symbol of oil extraction, this specific infrastructure-based visual representation did not create more awareness about the politics, power relations, and socio-ecological consequences of petro-modernity. On the other hand, crude oil slowly disappeared from the picture entirely. But crude oil's absence was not always the case, as the following example shows.

2 | TAMING NATURE: CHANGING PORTRAITS OF CRUDE OIL IN *THE STORY OF OIL*

In 1909, Walter Sheldon Tower published a somewhat generically titled book called *The Story of Oil* with D. Appleton in New York.[13] Tower, who was a young assistant professor of geography at the University of Pennsylvania, intended the book to be a general introduction to the use of petroleum in modern U.S. society in "non-technical terms," and sought to provide a popular history of the petroleum industry "without prejudice or passion."[14] The publication focused mainly on Standard Oil in the US, then the most powerful oil company in the country. It is therefore likely that the company, whose monopoly on U.S. oil production was heavily criticized at the time, had commissioned or at least actively supported the book.[15] Be that as it may, the important question for our purposes is: How did Tower's book, as an example of early 20th-century popular introductions to oil, familiarize its audiences with petroleum and the oil industry, and by which motifs was the topic visualized accordingly?

The 1909 edition of *The Story of Oil* is illustrated with 32 photographic reprints and three technical drawings. Five of the photographs present petroleum "in the wild," meaning prior to refining; these pictures show gushers, open ditches, and oil fires. The remaining illustrations depict, amongst other things, oil transportation systems, various objects that use fuel (lamps, machines), and oil workers. In fact, Tower paid considerable attention to natural formations where oil had surfaced organically (for example in Texas, but also in Azerbaijan) and to the pre-modern uses of oil around the world. He portrayed crude oil as a natural raw material and resource that was historically known to humankind.

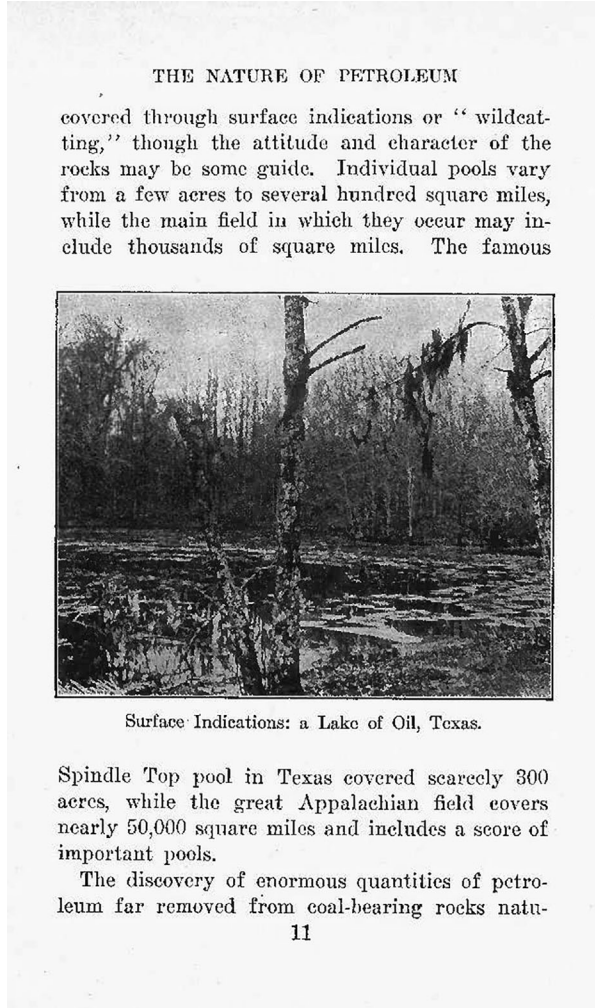
One particular black-and-white photograph depicts a "Lake of Oil" in Texas. It was included to illustrate the ways in which surface indications appeared (Figure 1). The horizontal photograph shows a black pond with oil deposits on the surface, surrounded by bushes and trees overgrown with moss. The overall atmosphere of the image is somber yet tranquil. Oil has emerged to such an extent that it has formed a lake amidst the Texan vegetation. In the photograph, petroleum figures as a visible (perceivable, knowable) and readily available natural element. In the early 20th-century United States, crude oil was obviously visually and materially present. Not only were certain regions home to easily accessible petroleum surface deposits, but, as Tower's book shows, crude oil was also visually mediated as part of a public discourse on petroleum. The raw material was photographed in its "natural habitat," and these images were published in popular science books and booklets about oil that were aimed at the wider public.

In his book, Tower discusses the early industrial transportation of oil, storage and refining techniques, and also the various uses of oil that were known back then. Interestingly, at that time, crude oil and petroleum products such as petroleum-based lubricants were not yet so materially different from one another. In this context, the photograph of an oil lake insinuates that petroleum is an organic resource that can be tapped and used for the benefit of modern society as a somewhat "natural" course of history. Tower explicitly acknowledges the whole universe of fossil

[13]Tower (1909). At the time, according to Geoffrey J. Martin (2015, p. 163), Tower was "one of the most published younger human geographers." *The Story of Oil* was reprinted in 1924, which suggests a certain popularity. The book has even been republished as a paperback in recent years.

[14]Tower (1909, p. vii).

[15]Tower's publication was likely a response to Ida Tarbell's *The History of the Standard Oil Company* (1904), an early example of investigative journalism that disclosed improper company activities and stirred so much public discontent with Standard Oil's monopolizing practices that it led to the company's break-up in 1911.



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covered through surface indications or "wildcatting," though the attitude and character of the rocks may be some guide. Individual pools vary from a few acres to several hundred square miles, while the main field in which they occur may include thousands of square miles. The famous

Surface Indications: a Lake of Oil, Texas.

Spindle Top pool in Texas covered scarcely 300 acres, while the great Appalachian field covers nearly 50,000 square miles and includes a score of important pools.

The discovery of enormous quantities of petroleum far removed from coal-bearing rocks natu-

11

FIGURE 1 Photographic book illustration of an oil lake in Texas. From *The Story of Oil* (p. 11), by W. S. Tower, 1909, New York, NY: D. Appleton. Photograph taken by the author

energy, from crude oil to industrial production and public and private consumption. By highlighting the many benefits of oil for "modern man," Tower's narrative serves in particular to justify the growing industrialization and commodification of petroleum. This development is marked, as the subsequent case studies will show, by the gradual disappearance of crude oil as a raw material "in the wild" in favor of iconic symbols such as the oil derrick.

Technological advances and new capital aided the commodification and increasing demand for oil, allowing for quicker and more efficient forms of crude oil processing within the expanding infrastructural apparatus. This shift is also reflected in the ways in which petroleum and its industrial production were visually represented, which can be exemplified by focusing on the subsequent English-language books and brochures that were also published under the title *The Story of Oil*. This somewhat generic title remained a popular name for general introductions to petroleum and its industries until the 1970s. While some books and booklets were directly commissioned or even published by oil companies that specialized in refining and producing fossil fuels and other oil-based products, others were written by journalists and scholars interested in educating the public about petroleum.

After Tower's publication, the next book to bear the title *The Story of Oil* was authored by W. J. Roberts in 1943.[16] Roberts set out to tell "the story of that great power of our time *OIL*" against the background of World War II from an American perspective in nontechnical terms.[17] Overall, illustrations, especially of infrastructure, played a much bigger role in communicating the oil story than in Tower's days, but codifications in the form of charts, graphs, technical drawings, and numbers outweighed photographs, especially those of crude oil.

Amongst other things, these illustrations showed drilling sites, sections of oil-bearing strata, and technical drawings of the distilling process. Depictions of crude oil were limited to one chapter that was suggestively titled "Some Freak Oil-Wells and Disasters." Here, crude oil no longer appears natural, tranquil, and ready to be tapped, but is instead pictured mainly in the context of dramatic occurrences. One black-and-white photographic reproduction shows an oil-well fire (Figure 2). A gigantic jet of flames, fire bursts, and smoke clouds that darken the sky make up most of the image, in contrast to the tiny infrastructure indicating the well site at the bottom of the picture. Sighting oil was no longer a somewhat normal occurrence, as had been implied in Tower's account. In the 1943 illustrated edition of the story of oil, petroleum was visible at human-made extraction sites (wells). Its visual appearance was associated with accidents and irregular situations that challenged man to tame nature; the illustration caption admiringly states that the incident was "one of the world's most impressive sights."

Popular science books like those of Tower and Roberts appear harmless and irrelevant today. Yet, such publications about the oil industry that were aimed at a broad audience were the textual and visual representations "by

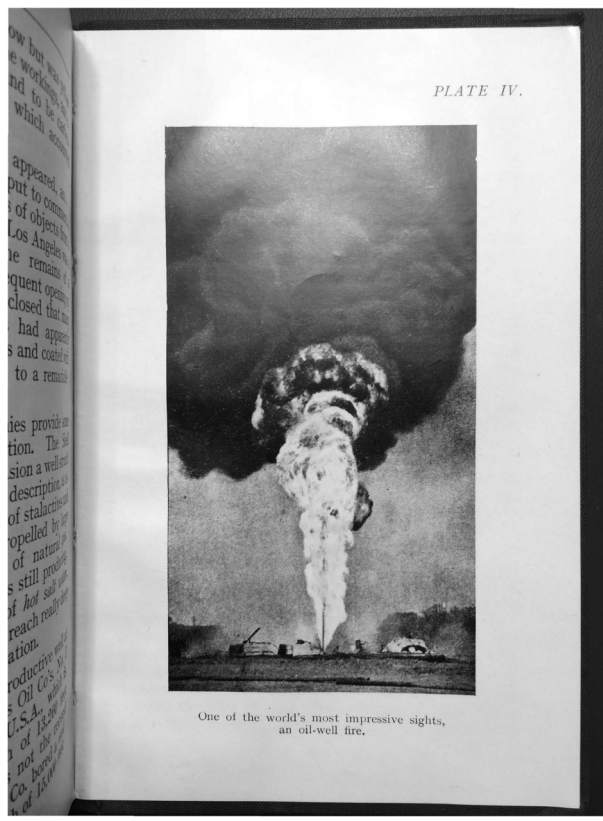

FIGURE 2 Photographic book illustration of an oil-well fire. From *The Story of Oil* (plate iv), by W. J. Roberts, 1943, London, England: Lloyd Cole. Photograph taken by the author

[16]To the best of my knowledge, Roberts (1943) is the next publication with the same title as Tower's. More, similarly titled publications followed: Baylis (1947); Harrison (1955).

[17]Roberts (1943, p. 5), emphasis in the original.

which the public could be persuaded that the benefits would outweigh the risks."[18] If we contrast the photographic illustrations of crude oil in Tower's book in the 1900s with that in Roberts's book in the 1940s, we can see a shift insofar as the visual presence of crude oil had changed from being framed as a natural and organic occurrence to it being framed as undesirable and accidental. In the later work, photographs of crude oil were limited to a special chapter ("Some Freak Oil-Wells and Disasters"). Crude oil's varied natural formations were eventually portrayed as an exception to the rule, the rule being the efficient extraction of petroleum, symbolized by codifications or infrastructure concealing the raw material. Regimes of energy in/visibility had evidently shifted during the first half of the 20th century, possibly reflecting new conformist norms of petroleum's iconography. In the aftermath of World War II, as the demilitarizing oil industry anticipated reorienting itself in search of future civilian customers, the implicit rule of corporate conformity might have been that fossil energy was easier to sell if portrayed to the general public as beneficial, easy to use, harmless, and clean.[19] Oil companies and their governmental partners could justify their firm grip on the extraction industry and energy production sector if crude oil appeared to be in need of professional taming.

How was petroleum visualized by the mid-20th century, if not by showing the raw material? I argue that the iconography of oil came to rely increasingly on images of oil infrastructure and on context-specific depictions of living in petro-modernity or petro-culture, that is, lifestyles fueled by cheap fossil energy. Moreover, I argue that the changes in visual representations of petroleum mattered, but that any examination of the visibility of petroleum must take into account both the media through which petroleum became visually communicated and the motifs that this mediatization popularized.

In the following sections, I analyze three case studies from the mid-20th century: the evolution of popular science books such as *The Story of Oil* briefly introduced above; Kuwaiti postage stamps that show a transforming petro-landscape in Kuwait; and paintings of oil infrastructures in an exhibition in Zurich. By placing the case studies in their particular historical, sociocultural, and geopolitical contexts, the art-historical analysis of these examples indicates that, while oil experiences were not even and homogenous across time and space, they all display similar strategies of dematerialization in that there is no raw material visible; they disclose the crystallization of an iconography of oil as infrastructure and as petro-culture. They are also illustrative of three different strategies of the mediatization of petroleum in modern visual culture, by which I mean that petroleum had come to constitute modern visual media in itself. Thus, before turning to the case studies, I would like to examine in more detail how oil can become in/visible as media.

2.1 | Oil media: Petroleum mediated in visual representations and as media

In their 2020 special issue of *MediaTropes* titled "Oil and Media, Oil as Media," Jordan B. Kinder and Lucie Stepanik conceptualize petroleum's invisibility not only in terms of its media-based, visual representation, but also in terms of oil itself as a form of media, combining "the ways in which oil is mediated" with "the myriad ways in which oil mediates social, cultural, and ecological relations."[20] Bart H. Welling takes this premise head-on and argues that because petroleum is mostly read as a medium of exchange that has monetary impacts, "oil is a rarely- or never-seen substance that we do not so much *burn* as *trade* for speed, comfort, food, prestige, vacation fun, and much more."[21] Therefore, petroleum's invisibility becomes problematic insofar as it results in our not physically seeing and not being aware of the burning of fossil fuels, with all its hazardous ecological and social consequences. Part of the problem,

[18]Bowler (2009, p. 265).
[19]This shift can also be observed in relation to other historical oil sites such as Baku, Azerbaijan. See, for instance, Blau (2018). For a general discussion on oil's and electricity's "cleanliness," see, for example, Buell (2012). It seems worthwhile to note that, by the 1950s, fossil fuel energy competed with a new player, nuclear energy, which was also publicly perceived as "providing new power as if by magic." See Bowler (2009, p. 269).
[20]Kinder & Stepanik (2020, p. vii).
[21]Welling (2020, p. 145), italics in the original.

Welling suggests, is the "myth of Energy."[22] Hydrocarbons have increasingly become represented not as sticky black stuff or oil spills, but rather euphemistically as "Energy"—something pleasant, magical, or technically sublime. Consequently, the mechanisms behind the burning and consumption of oil are regimes of in/visibility that represent fossil fuels as something different in visual media, while at the same time also obscuring the fact that petroleum as matter is effectively co-constituent of the very media used to represent it.

At this point, I propose turning to the thought of French philosopher Maurice Merleau-Ponty, even if energy was not his prime concern. As part of the unfinished and posthumously published book project *The Visible and the Invisible* (1960), Merleau-Ponty concluded that "one has to understand that it is the visibility itself that involves a non-visibility."[23] For him, thinking the visible and invisible together was no contradiction, and also not an act of grouping opposites. Rather, he found that the two necessitate each other as part of the same experience of engaging with the world. He detailed that:

> *What* it does not see is what in it prepares the vision of the rest (as the retina is blind at the point where the fibers that will permit the vision spread out into it.) *What* it does not see is what makes it see, is its tie to Being, is its corporeity, are the existentials by which the world becomes visible, is the flesh wherein the *ob*ject is born.[24]

One could say that the invisible is the very media of visualization.

Along diachronic but similar lines, Kinder and Stepanik have highlighted that "this dual characteristic of oscillation between visibility and invisibility is in part what veils oil's presence as a *social relation*."[25] Integral to crude oil (as matter) and fossil energy (as a factor in the making of modern visual media) is a carefully curated, disciplined in/visibility on the one hand, and a stark visuality as well as a material and energetic omnipresence on the other. It is challenging to capture the oscillating interactions caused by the visual media-based mechanisms behind the hide-and-seek around petroleum as social relation. I have elsewhere suggested the term "iridescent effect" in an attempt to define petro-aesthetics as constantly fluctuating and genuinely ambivalent—overwhelmingly beautiful at times yet haunting at others.[26] The aesthetic negotiation of petroleum through such iridescent, media-based visual representations is crucial for the disconnection of fossil matter from fossil energy in the public imagination.

Assuming that fossil energy as media is something that can help us see, it is also that which we do not see. It is the blind spot, the plastic of one's glasses that enable vision, as well as the fossil energy necessary to produce them. Along similar lines, Pendakis and Wilson highlight that "the very image-technologies that allow us to conceptualize our relationship to energy and petroleum are a product of oil."[27] In the process of its production, visual media necessarily becomes invisible in order for us to be able to see the world. The worldview enabled by petroleum-as-media has become our vision of the world by adaptation, habit, and normalization. In summary, petroleum's in/visibility not only plays out in media-based visual representations: petroleum and fossil energy are—aesthetically, technologically, and materially—co-constituent of modern visual media itself.

Various studies, among them Ursula Biemann's investigative artistic research in particular, have shown that the resources for producing fossil energy often come from "the messy, remote and unstable resource fringes," areas that are often disconnected from the oil companies' chic headquarters in Western capitals.[28] I argue that the petroleum industry's regimes of in/visibility worked to "decouple" petroleum from its sites of extraction and production—basically from what happened elsewhere—by representing oil in certain visual media that tied it to the realm of urban culture. This decoupling also served to "dematerialize" oil through a selection of motifs that were not directly

[22]Welling (2020, pp. 146–148).
[23]Merleau-Ponty (1969, p. 247), entry dated May 1960.
[24]Merleau-Ponty (1969, p. 248), italics in the original.
[25]Kinder & Stepanik (2020, p. iv), my emphasis.
[26]Hindelang (2021).
[27]Pendakis & Wilson (2012, p. 4).
[28]Biemann & Pendakis (2012, p. 10).

connected to crude oil. Dependence on fossil fuels has become culturally normalized, while the geopolitical power game it depends on, as well as the multi-layered material and ecological entanglement of its plural sites, have become obscured and uncommon, basically invisible. How have oil-related images, media, and iconographies—what I call oil media—contributed to this decoupling and dematerialization of petroleum?

2.2 | *The Story of Oil* as oil media in mid-20th-century print culture

In the mid-20th century, the number of English-language books and booklets titled *The Story of Oil* grew, and these types of publications promoted lifestyles and worldviews in which petroleum was indispensable. They listed more and more sites of extraction, new extractive technologies, and a quickly growing palette of oil-derived synthetic materials and products. They also emphasized the use of "clean" fossil energy. The ostensible purpose of such popular literature was to provide information on what petroleum was and how humankind was benefiting from its production and consumption; however, the underlying goal was to generate support for the continued extraction of oil and to stimulate a desire for petroleum products and fossil energy. By translating petroleum (industries) into various aesthetically and socially relatable images, Western oil companies and related stakeholders produced a broad range of media, such as documentary films, photography, children's books, and board games. This loose corpus of popular science publications, which all had the phrase "The Story of Oil" in their titles, is part of what one could call "oil propaganda," as the producers of popular science "often have their own agendas to promote, including both direct involvement with particular areas of science and technology as well as more general concerns of a moral or ideological nature."[29] Thus, these "stories of oil" are just as much corporate public relations material as they are popular science accounts.

By issuing branded versions of *The Story of Oil*, oil companies in the US and other Western nation-states became more visible. The publications began to focus on particular countries, for example *The Story of Oil in Ireland and the World*, published by the Esso Petroleum Company in Dublin.[30] The Petroleum Information Bureau in London—an oil company lobbying institution—also published such booklets, and provided information and visual material for companies, journalists, and other stakeholders.[31] Although the companies developed individual promotional and visual strategies for each site or region they operated in, a certain Anglo-American and thus English-speaking hegemony prevailed, which is manifested in oil propaganda such as *The Story of Oil*.

Most importantly, however, the form and materiality of these oil publications changed over time. In later years, many of them appeared as colorfully illustrated and extravagantly printed booklets with different kinds of paper and paper surfaces.[32] Through the haptics of the different kinds of paper and the aesthetics of colorful yet transparent separator pages and multi-color illustrations, the quality of the print product conveyed the quality of the refined oil products on sale. Moreover, in addition to the move away from visual representations of crude oil, petroleum (whether as synthetic printing color, plastic book cover, or fossil energy to print and ship the publications) can be seen as manifested in the modern media itself. Visually, as a photographic motif, crude oil had almost completely vanished from these publications—unless it demonstrated historical occurrences or examples of inefficient extractive industries, such as gushers in 19th-century Baku. Instead, the publications, in their multitude of colors and surface textures, sought to promote and resonate with new lifestyles made possible by oil-derived products and fossil

[29]Bowler (2017, p. 240).

[30]Esso Petroleum Company (Ireland) (n.d. [after 1956]).

[31]Not much is known about the Petroleum Information Bureau in London, which worked closely with oil companies such as British Petroleum. A 1965 British chemical business directory states that "the Petroleum Information Bureau, 4 Brook Street, Hanover Square, London, W.1, is designed to give information, mostly of a non-technical nature, to all interested in the petroleum industry to whom literature and visual aids are supplied free of charge. The Bureau is responsible for a small body of part-time lecturers scattered in a few districts of Britain who give talks to political and social organizations. Another organization, Petroleum Films Bureau, of the same address, is concerned with lending films on a large number of subjects to educational bodies, and publishes a catalogue of films available." Burman (1965, pp. 188–189).

[32]See, for example, Chevron Oil (UK) (1972); Mobil Oil Southern Africa (1962); Petroleum Information Bureau (n.d. [1953?]); Petroleum Information Bureau (1960).

energy. The implicit message was that the modern, colorful, consumerist world pictured in these publications owed its existence to petroleum and, as a result, to the oil company, thereby justifying the company's operations at home (in the case of an oil-producing country) but also elsewhere.

To sum up, at the beginning of the 20th century, crude oil figured in photographic book illustrations as a natural phenomenon. As the industrial efficiency of oil production increased and the infrastructural system of extraction, transportation, and refining expanded (which Christopher F. Jones has examined in *Routes of Power*), crude oil featured less and less as a (photographic) motif in telling the story of oil.[33] In a way, petroleum's iconography shifted from fossil matter to fossil medium, insofar as the increasingly colorful and appealing books issued by Western oil companies themselves became oil-synthesized, color-enhanced products. As suggested by Imre Szeman, investigating petroleum's in/visibility should also be done along the lines of visual forms or media—one should ask which medial forms facilitate images of petroleum. Even though the number of samples discussed here is small, the English-language popular-science publications generically titled *The Story of Oil* do indicate broader changes in the visual regimes of petroleum's visibility under the influence of Western oil companies.

Shifting now to oil-themed postage stamps as well as oil-themed paintings in art exhibitions, the following case studies show two things. Firstly, for various reasons and towards various ends, oil industry infrastructure (as well as images related to living in petro-culture) served as popular forms of petroleum iconography in the mid-20th century in such diverse contexts as Kuwait and Switzerland. Secondly, at the same time, the increased presence of oil infrastructure and petro-culture lifestyles as motifs also fostered strategies of *dematerialization* and *decoupling*. The use of fossil energy became increasingly portrayed as disconnected from the ecological, social, or geopolitical context of extracting crude oil and its networks of social relations. This contributed to what could be described as the epistemological invisibility of the global normalization of fossil fuel dependence.

3 | MODERNIZATION AND NATION-BUILDING: THE PETROLEUM PANORAMA ON KUWAITI STAMPS

Postage stamps are a fascinating and academically often-underestimated type of media with which to analyze the visual regimes and image strategies that mediated petroleum in the mid-20th century. Oil-producing countries in particular displayed and disseminated their status in these circulating miniatures as part of their national iconography and national symbols. A case in point is the first official set of postage stamps issued by Kuwait, a rising star amongst oil-producing countries, in 1959 (Figure 3). Emmanuel Sivan, one of the few historians of the Middle East who have taken stamps seriously as historical evidence, has stressed that stamps "can tell us something about the official discourse of the state, the one for which it attempts to ensure ideological hegemony."[34] Specifically, a postage stamp "can become a *visible objectification* of a whole discourse" and thus a valuable source for (art) historical research.[35] In this case, the 1959 set of Kuwaiti stamps manifests as a visible objectification of the Kuwaiti government's ideological position on petroleum. They reveal the extent to which Kuwait's modernization and nation-building were officially portrayed as petro-modernity, that is, as a modernity materially and financially enabled by petroleum. What were the historically contingent motifs and iconographies of visualizing fossil energy? What narratives and regimes of energy in/visibility can be identified in the Kuwaiti stamps? And what role did stamps as oil media circulating in foreign contexts play?

The dark-blue 40-*naye paise* Kuwaiti postage stamp depicts a traditional two-masted dhow at sea (see Figure 3).[36] Bitumen, a raw fossil material similar to crude oil, was harvested manually even prior to oil

[33]Jones (2014).

[34]Sivan (1987, p. 21). Other notable exceptions are Badry & Niehoff (1988); Hazard (1960); Reid (1993).

[35]Smolarski, Smolarski, & Vetter-Schultheiss (2019, p. 14), my emphasis.

[36]"Dhow" is an umbrella term for (historical) wooden boat types built and used in the Gulf region and beyond. The *naye paise* (New Paisa) was introduced in 1957 as a metric unit equaling 0.01 of the Indian rupee. As a British quasi-protectorate and a long-standing trading partner with today's Pakistan and India, Kuwait used the (British-)Indian currency until Kuwait's independence in 1961.

FIGURE 3 1959 set of Kuwaiti definitive postage stamps. Private archive of the author and photograph taken by the author

drilling and used for sealing boats due to its water-repelling qualities. While dhows manufactured in Kuwait subsequently became symbols of its maritime past (for example in Kuwait's national emblem), the dhow also represents one of the pre-industrial local uses of crude oil in the region. The picture of an oil derrick on the 1 and 2 rupee stamps relates to the oil extraction taking place in the oil fields outside Kuwait City. This type of infrastructure thus signals the raw material's extraction. Moving further along, the red 50-*naye paise* stamp depicts a detailed view of the oil-loading pier at Mina al-Ahmadi, Kuwait's oil harbor, from which oil is exported.

The pictorial tour then shifts to some of the applications of fossil fuels and energy. The 75-*naye paise* stamp shows the first power and desalination plant, which ran on waste natural gas from the oil fields. Even today, Kuwait's electricity is produced entirely from oil and natural gas.[37] Not only Kuwait's electricity but also its private mobility and climate control—which Bob Johnson refers to as "ambient energy"—are fossil-fuel generated.[38] On the 10-rupee stamp, we see Safat Square crowded with cars. Referred to as "Kuwait's Piccadilly Circus," the square was one of the most sought-after locations to open a shop, an office, or a car showroom. In a country with several months of very hot climate, the (air-conditioned) car was attractive and quickly became one of the most important status symbols. Fossil energy was needed to build, and fossil-fueled mobility was required to reach the mosque of Shuwaikh Secondary School. This mosque, which was erected far outside the historical city center as part of the then-ongoing suburbanization, was introduced on the 5-rupee stamp.[39] Finally, the full-face portrait of Sheik Abdullah al-Salem Al Sabah (the ruler of Kuwait at the time), wearing official formal dress, is integrated on the six lowest-value stamps and in a small vignette on three others. In the stamps' function as the receipt of an advance payment made to the issuing body, Abdullah's "face value" vouched for the stamps' authenticity and validity. He did so not only as ruler but also

[37]Ritchie & Roser (2017), section on fossil fuels in electricity.

[38]Johnson (2019, p. 142).

[39]Given that this mosque was selected over other historic or newly built mosques in Kuwait's city center, its particular locality (and distance from the city center, which could only be overcome by motorization) seems to have played a role in its selection as a petro-affirming stamp motif.

as the sole receiver of the oil revenues paid to the sheikhdom by the Anglo-American Kuwait Oil Company.[40] Being the treasurer of Kuwait's oil revenues, Abdullah played a crucial role in supporting the belief in Kuwait's petro-modernization.

Under the leadership of Sheikh Abdullah (r. 1950–1965), Kuwait turned into something of a model oil-welfare state, one that other Gulf countries would come to follow. A British quasi-protectorate since 1899, the coastal sheikhdom of Kuwait gained independence in mutual agreement with Britain in 1961. Following the first oil exports in 1946 and enabled by massive oil revenues, the 1950s and 1960s saw the sheikhdom's rapid urban, demographic, and political transformation. At that time, Kuwait also developed its own political symbols, such as a government gazette (1954), a new emblem (1956, 1962), and a new flag (1961), as well as stamps.

The Kuwaiti stamps were a special case of political symbols as they offered a large amount of pictorial space and allowed for freedom and flexibility as new issues eventually emerged. However, compared to the previously used overprinted British and British-Indian stamps, the 1959 set was not just a regular set but a crucial one in the Kuwaiti context. It was a milestone insofar as it marked the very first appearance of stamps depicting Kuwaiti motifs, issued by Kuwaiti authorities, and valid for local and international use, marking the state's move towards independence. Against this background, what were possible reasons for the government, which approved the stamp designs, to claim petro-culture as a marker of Kuwaiti national identity?

In a 1987 article, Emmanual Sivan argued that North African and Middle Eastern Arab nation-states typically relied on stamp motifs and iconographies that portray the countries' histories; these could include cultural heroes, political and religious leaders, and architectural sites. However, Sivan also noted that "[t]he major exceptions are the Gulf emirates with no past, ancient or modern, to speak of," and he excluded stamps from the Arabian Peninsula from his comparative analysis.[41] This is unfortunate, as there exists a respectable philatelic history of the Gulf, and of Kuwait in particular.[42] Moreover, Kuwait's history goes back at least as far as the 18th century. Even if its architectural heritage cannot compete with Egypt's pyramids and Jordan's Nabatean village of Petra, the city-state could have drawn on its famous maritime trading, shipbuilding, and pearling heritage in its search for historical picturesque or identity-building motifs.

But instead of focusing on a "usable past," the Kuwaiti government approved stamp designs that confidently showcased the country's present. Sites of oil production (oil derricks and oil harbors) and other infrastructure projects that in one way or another were financed and powered by oil (and, in the absence of crude oil, petroleum) became the new iconography of Kuwait. Moreover, the petroleum panorama on the Kuwaiti stamps also showcased the human ability to transform natural resources into revenue and energy, which in turn enabled a drastic alteration to both urban and rural landscapes (such as Safat Square and the desert). Ironically, in a way, petroleum represented Kuwait's past, too, because the fossil hydrocarbons incorporated a "fossil" time that was much older than any of the long-established tourist attractions in the Middle East.

Kuwait's choice of motif is also remarkable on a quantitative level. Elsewhere I have compared the first sets of postage stamps of Arab oil-producing countries in the 1940s, 1950s, and 1960s and analyzed the motifs and serial iconography of oil stamps.[43] The comparisons indicate that often only one oil-infrastructure-related stamp was part of a country's regular set of definitives, and that the oil derrick was the favorite motif. When several stamps illustrating different aspects of the petro-industrial process were issued, these were usually part of a commemorative set, for example to mark the inauguration of an oil port. In its first official set, however, Kuwait presented oil infrastructure on three stamps and included many other references to petro-fueled modernization on the remaining stamps. Following Sivan that the choice of motif is a "political act," we can say that the Kuwaiti government proudly partook in petro-culture and deliberately showcased its new status as an oil-producer towards both its own citizens and audiences abroad—despite the fact that an Anglo-American company ran Kuwait's oil industry. Evidently, the Kuwaiti

[40]The company had a contract with the ruler of Kuwait, who was from the House of Sabah, and not with the state. Zahlan (1989, p. 30).
[41]Sivan (1987, p. 22). Interestingly though, Sivan discusses stamps from North and South Yemen.
[42]See Donaldson (1968; 1975); Jamal (1998).
[43]Hindelang (2021, Ch. 5).

government considered petro-culture the best possible image campaign to showcase the transformation and modernization of Kuwait. At the time, petro-culture had become part of an official national identity promoted through postage stamps.

The fact that the 1959 stamp set was a petroleum panorama—including pre-industrial use, the extraction and transportation of crude oil, and finally the production, circulation, and consumption of fossil energy and fuels—highlights the extent to which petroleum had expanded to impact everyday life in Kuwait, both within and outside the oil fields. "People do not consume energy *per se*, but rather the things energy makes possible, such as light, clean clothes, travel, refrigeration and so on," writes Harold Wilhite, emphasizing that lifeworlds can offer important insights into energy practices.[44] In fact, the stamps' iconographic program reveals the official state acknowledgment of the sweeping impact that petroleum had on Kuwaiti citizens' lives and the government's active promotion of fossil-fueled lifestyles. Postage stamps were the perfect media with which to convey this acknowledgment. Their quotidian presence made them "touch the everyday lives (and reflect the attitudes) of both governments and ordinary citizens more readily than grand political rhetoric or state ceremonial."[45] In this way, postage stamps worked to normalize petro-culture as the everyday (visual) culture of Kuwait.

Significantly, the 1959 set of stamp motifs hid crude oil—the raw material that made Kuwait an oil-producer in the first place—from view. No oil gusher, no gas flares in the oil fields (which contemporaries considered "typical" of Kuwait's industrial landscape), and not one drop of crude oil. Interestingly, excluding crude oil from Kuwait's image corresponded with the visual agenda and public relations campaign of the Anglo-American Kuwait Oil Company.[46] In fact, at the time, many people living in Kuwait had not visited the oil fields and were generally not familiar with the face-to-face, multisensory experience of crude oil.

Given that Kuwait was relatively new to the scene, the images on the Kuwaiti stamps competed with historical images of the onset of oil extraction elsewhere, such as in Baku, Azerbaijan, in the 19th and early 20th centuries, or with those of urban oil fields in Los Angeles, California, where private owners ran oil wells with a far greater loss of crude oil. Blackened, oil-drenched soil was characteristic of these pumpjack and derrick-pierced landscapes. In Kuwait, the government demonstrated in (inter)nationally traveling stamps that petroleum was put to good use for the nation, directly and effectively. This visual trope can be described as "de-materialization" in the sense that "the material qualities of oil are stripped away and reincarnated as abstracted oil money or abstracted state power."[47]

What relevance do postage stamps have as oil media? The 1959 set visualized the economic, sociocultural, and material flows of fossil matter and energy in detailed miniatures. Postage stamps are circulating objects: they certify a monetary transaction (proof of payment), and, as miniature images attached to letters and parcels, they become media for social and visual communication. Similarly, oil creates neither value nor energy by remaining in the ground. Only as a circulating material does it unfold its potential as "black gold."[48] Interestingly, the postage stamps did not just not-visualize crude oil, they also did not illustrate in imagery that Kuwait's petro-modernity ultimately depended on the export of petroleum, mostly to Britain. Yet, as illustrated proof of payment, the stamps traveled abroad and thus indirectly reflected the fact that petroleum extracted in Kuwait had to move elsewhere in its conversion from crude oil to revenue and ultimately energy.

In conclusion, the Kuwaiti postage stamps are both "visual objectifications" as well as abstractions of the power of the oil state and the extractive economy that links Kuwait with other nations, such as Britain. In terms of motifs, rather than picturing crude oil, the petrochemical industry and large infrastructural and architectural projects (together with petro-fueled lifestyles) became emblematic visual representations of oil. Therefore, this set of postage stamps reveals one of the mid-20th-century mechanisms of decoupling raw material from fossil energy and also sites of extraction from sites of conversion and consumption.

[44]Wilhite (2005, p. 2), italics in the original.
[45]Jeffery (2006, p. 46).
[46]Hindelang (2021, Ch. 4).
[47]Balmaceda et al. (2019, p. 11).
[48]Welling (2020, pp. 141–142).

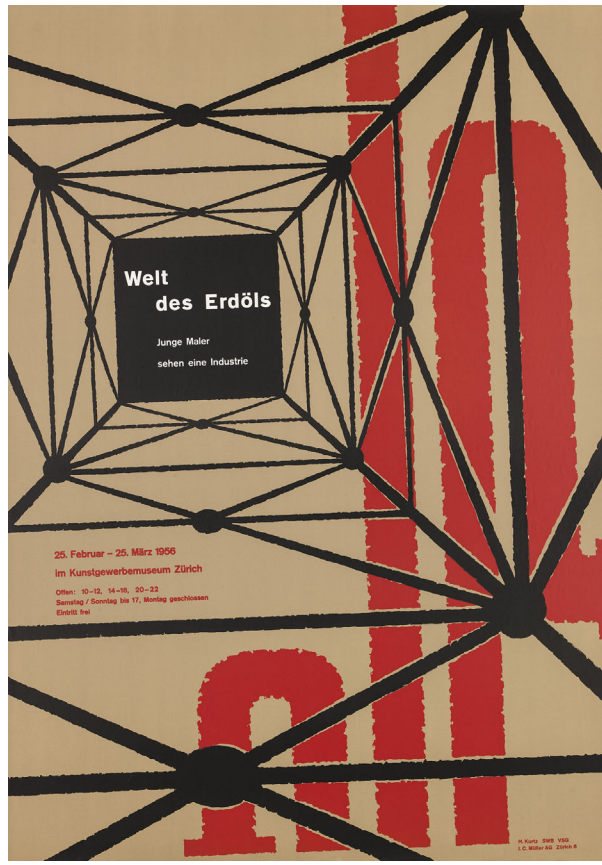

FIGURE 4 Poster of the exhibition *Welt des Erdöls*, 1956, lithography, 128 × 90.5 cm, designed by Helmuth Kurtz for the Kunstgewerbemuseum Zurich and printed by J. C. Müller AG, Zurich. M-0292, Museum für Gestaltung, Zürich, Switzerland. Courtesy of Jürg Kurtz

4 | THE TECHNOLOGICAL SUBLIME OF OIL INFRASTRUCTURE IN EUROPEAN LANDSCAPE (PAINTING)

As another form of oil media, art exhibitions on oil and its industry offered new and effective ways of stimulating social epistemologies of (un)seeing petroleum in a particularly iridescent way. In February 1956, the Kunstgewerbemuseum (Museum of Arts and Crafts) in Zurich, Switzerland, opened an exhibition titled *Welt des Erdöls: Junge Maler sehen eine Industrie* (*World of Petroleum: Young Artists See an Industry*). The show gathered over 50 artists from Britain and several other European countries under the patronage of the Shell Petroleum Company. The bold exhibition poster depicts the black metal construction of an oil derrick as viewed from within, and thick red lines trace the imaginary up-and-down of pipelines in the background—again an example of oil infrastructure as visual iconography (Figure 4).[49]

The touring exhibition had a unique history. Two years prior, in a campaign of "industrial patronage" initiated by the Arts Council of Great Britain to support emerging artists, Shell had invited around 40 British artists to interpret the oil industry.[50] A prestigious selection committee chose the artists. Integral to the commissions were visits to

[49]The poster's designer Helmut Kurtz had worked for Shell Switzerland as a graphic designer since at least 1937, creating several posters and brochures that advertised Shell products.
[50]Arts Council of Great Britain (1955, p. 26).

Shell's properties in Britain (refineries, research institutions, oil harbors, and pipelines), apparently with no restrictions on time and place. Thus, artists' visits ranged from a day up to two weeks, which some artists turned into some kind of "artist residency" at Shell's.[51] Apparently, the company did not interfere in any way, and determined neither the artistic message nor the artistic medium. Subsequently, Shell bought all artworks (paintings, drawings, and lithographs), and the selection committee chose about 90 works to feature in the resulting exhibition *The Artist's View of an Industry*, which was first shown at the Mall Galleries, London, in 1955.[52] Following Shell's initiative in Britain, Shell companies in France, Switzerland, and Belgium also carried out oil-industry-themed commissions. The resulting artworks then joined the British exhibition (and sometimes substituted some works in it) as it toured through mainland Europe. With the exhibition title and the selection of artworks changing depending on the location, the oil exhibition moved to Paris in January–February 1956, then to Zurich in February–March, and subsequently to Brussels.[53]

In Zurich, 54 male and female artists exhibited almost a hundred paintings.[54] The exhibition booklet includes only 16 black-and-white reprints of artworks, and currently no photographic documentation of the exhibition is known. However, all artworks are listed by title, along with the artists' names and nationalities. With a few exceptions, each artwork had a surprisingly instructive and irritatingly standardized title that not only explained the motif depicted, but also named the specific location supposedly represented, like "Ardrossan Refinery, Ayrshire." Evidently, the visits to Shell's European facilities had starkly influenced the artistic "world of petroleum." In fact, the descriptive titles insinuate a direct representational relationship between the location visited and the subject of the artwork. However, artists had not observed the entire, multi-sited "world of petroleum," but instead only the European oil industry and, more precisely, Shell's facilities. While technologically advanced infrastructure took center stage, the sites, practices, and subjectivities of oil prospecting, drilling, and extraction remained decoupled and hidden from view, even though Shell would certainly not have existed without them.

Tellingly, Shell's oil explorations in Nigeria, Borneo, and Venezuela at the time were missing from these artistic oil pictures presented in Europe. Further lacking was a deeper reflection on complicated multinational corporate entanglements and the extensive geopolitical and historical journey that crude oil had taken in order to arrive at European refineries. In these oil media we find the mechanisms of separating crude oil from fossil energy at play. Because crude oil and its uneven journey are hidden behind technologically smoothly running infrastructure, the "elsewhere" of extraction becomes disconnected from the industrial production of fossil energy. To European museum audiences, the oil industry was displayed as pictorial, as artistic. The industry, and Shell as a company, had entered the realm of high-art institutions as both a motif of art and as an art patron. Consequently, the artistic interpretation of the "world of petroleum," or rather the "artist's view of an industry," worked to keep the politics of extraction and the burning of fossil fuels hidden behind European industrial sites that appeared technologically sublime in landscape paintings.

Interestingly, only paintings, drawings, and prints—that is, traditional "high art" media— were exhibited. In this way, this particular oil exhibition differed from other 20th-century oil company exhibitions, which usually combined "high art," popular visual culture, and displays of oil products in the tradition of world fairs.[55] Had other media or mixed-media art also been created but not selected?

Willy Rotzler, one of the Kunstgewerbemuseum's curators, repeatedly emphasized that Shell had refrained from demanding corporate advertising and had not interfered in either the artistic process or the committee's selection process. Nevertheless, the company would most likely still have expected works that would be commonly recognized as high art and whose figurative style would have provided a recognizable connection with the oil industry.[56] For

[51]Robin McClure, son of participating artist Robin McClure, refers to his father's "short period as an 'Artist in Residence' at Shell Petroleum's refinery in Ardrossan, Ayrshire." McClure (2019).

[52]McClure (2019); Arts Council of Great Britain (1955, p. 26). After London, the exhibition toured eight other industrial centers in Britain.

[53]In Paris, the exhibition was shown at the renowned Galerie Bernheim-Jeune. In Brussels, it was exhibited under the title *L'industrie du pétrole vue par des artistes* at the Palais des Beaux-Artes and included works by eight Belgian artists.

[54]The artists shown in Zurich were of Belgian, British, Dutch, French, German, Italian, and Swiss backgrounds.

[55]See Barrett (2012); Wereley (2020).

[56]The few abstractly titled paintings in the exhibition could be considered exceptions to the rule and an indication of the company's liberalism.

FIGURE 5 A page from the exhibition brochure of *Welt des Erdöls*, edited by Hans Fischli & Willy Rotzler, 1956, Zurich: Kunstgewerbemuseum. It shows a painting by Emanuel Jacob, titled "Betanken von Flugzeugen, Flughafen Kloten" ("Fueling Airplanes, Kloten Airport"). GAD 1956 N03, ZHdK/Archive, Zürcher Hochschule der Künste, Zurich, Switzerland

example, "Betanken von Flugzeugen, Flughafen Kloten" ("Fueling Airplanes, Kloten Airport") by Swiss artist Emanuel Jacob, a reprint of which is included in the exhibition booklet (Figure 5), is painted in an almost naïve style of flat and simplified forms. At the center of the painting, a parked airplane is surrounded by tow tractors for baggage transfer and a tanker truck labeled "Shell." Overall, the commission's setup was biased, given that "emerging" artists who might have hoped to be commissioned if the work pleased the buyer had been specifically invited. Otherwise, it would be difficult to explain why the exhibition did not include more experimental art styles or more comprehensive and "coupling" observations on the global interdependencies of petro-chemical industries and fossil energy.

The art exhibition not only offered a stage on which to display European infrastructural oil landscapes as clean, safe (even artists could visit!), and technologically advanced, it also gave the oil company a new social function. Charles Rosner, the organizer of the British exhibition, promoted the necessity of having industries act as art patrons. In his view, "the Shell Petroleum Company indicates a clear realization that industry is under a social obligation to the arts, if art is to be of service to industry on equal terms."[57] Shell Switzerland fulfilled its responsibility by commissioning (only) two artists and by sponsoring the exhibition, which took place at the Kunstgewerbemuseum (an esteemed public institution founded in 1873) on the occasion of Shell Switzerland's 50-year anniversary.[58] This was obviously not a philanthropic act but a public relations campaign. Given that Shell Switzerland's budget would have allowed for more than two commissions, it seems clear that the overall goal of the patronage was not to support emerging Swiss artists. Instead, the art exhibition, as well as the artworks themselves, served as specific normative forms of media that gave the oil industry access to the cultural-capital-rich world of arts and culture.[59] The museum exhibition and the landscape paintings of petro-infrastructures sanctified the theme of the "oil industry" for European audiences, thereby forming corporate-conforming social relations with a specific, well-educated audience.

[57]Rosner (1955, p. 237).

[58]The other Swiss artist was Jean-François Comment from Basel, whose paintings depicted the fossil fuel deposits at Basel's Rhine harbor. In the process of writing this article, I contacted Shell Switzerland for archival material and information, but my request was declined.

[59]Funding for the arts and museums such as the Tate London and the Louvre in Paris by large oil companies has in recent years become heavily criticized as "big oil's artwash"; see Evans (2015); Clarke, Evans, Newman, Smith, & Tarman (2011). Carola Hein has explored the history of the oil industry's influential philanthropic engagement for arts and health institutions for the case of Standard Oil founder John D. Rockefeller and his descendants. See Hein (2018, p. 894).

The exhibition's curator Willy Rotzler, in agreement with his British colleague, euphemistically praised Shell for rediscovering the artist as "interpreter of the industrial world." However, reflecting on how the selected artists had iconographically engaged with the "oil industry," Rotzler also made a crucial observation: while artistic styles and motifs varied, "the human, the working human is either completely lacking in these pictures or, apart from a few exceptions, is merely staffage."[60] This observation was also made in several Swiss newspaper reviews.[61] In an article in the Swiss art and architectural journal *Das Werk*, Rotzler suggested that the reason for this human absence was either that humans were in fact of incidental relevance in most industrial oil plants, or that this absence was a shocking sign of a lack of contact between the artist and society.[62] Recalling Kinder and Stepanik's observation that "this dual characteristic of oscillation between visibility and invisibility is in part what veils oil's presence as a social relation," the absence of people in the artworks shown at *Welt des Erdöls*—as well as in the 1959 set of Kuwaiti postage stamps (except for Sheikh Abdullah)— becomes a signifying thread. While the pictorial absence of people effectively hides the social networks necessary for the production of fossil energy, the choice of artistic media and the context of the museum display foster other, more corporate-conforming social relationships with selected audiences instead.[63]

Both the Kuwaiti government and, in the Zurich case, the oil company favored forging social relations with the audiences consuming the stamps or visiting the exhibition over portraying the oil industry as the contested multi-sited, transnational social network of workers and employees it had always been. In the postwar period, when petroleum-based consumer products such as cosmetics and fossil fuels found their way into Kuwaiti and Swiss households and became embodied or integrated into everyday life, the social, geopolitical, and ultimately ecological "making-of" of petroleum was disguised by strategies of dematerialization and decoupling that created several invisibilities (crude oil, workers) in visual culture from stamps to art exhibits that strongly influenced the viewers' imagination.

Although the artworks exhibited in Zurich and the Kuwaiti postage stamps conveyed a sense of public accessibility to the industrial sites and, through the iconography of oil infrastructure on display, also to the oil industry, they effectively worked to conceal highly safeguarded facilities and transportation networks behind purposefully selected motifs. Sociologist Andrea Brighenti writes that:

> in the absence of dissonant messages, representations tend to settle down and stabilize themselves. That is why the issue of access to the places of visibility is a central political question. To access these places is the precondition for having a voice in the production of representations.[64]

Evidently, oil companies like Shell and oil states like Kuwait paid much attention to limiting and defining physical access to sites of crude oil extraction that took place "elsewhere." Moreover, in the absence of the human image and of the human body, dissonantly embodied experiences of petro-culture could effectively be suppressed. Oil media that permeated the fields of education (popular science books), the arts (art exhibitions, paintings), and everyday culture and communication (stamps) stimulated and broadly disseminated the iridescent appeal of petroleum in the mid-20th century.

5 | CONCLUSION

By exploring three case studies of oil media that shed light on the official side of petroleum in/visibility regimes in the mid-20th century, this article has sought to show that there existed an overall tendency to highlight and visualize

[60]Fischli & Rotzler (1956, introduction).
[61]Press reviews of the exhibition *Welt des Erdöls* (1956), collected by the Kunstgewerbemuseum, VAQ-19XX-P01-026, ZHdK / Archive, Zürcher Hochschule der Künste, Zurich, Switzerland.
[62]Rotzler (1956, p. 331).
[63]This could be explored further with regard to recent research on "disappearing the workers" and the visibility politics of labor relations in 20th-century discourses on oil (industries). See Atabaki, Bini, & Ehsani (2018).
[64]Brighenti (2007, p. 333).

consumptive practices and fossil-fueled lifestyles typical of petro-cultures as well as extractive infrastructure as oil iconographies. Simultaneously, crude oil as a raw material and the spatial geopolitics of extractive practices were hidden from view. Visual representations of oil, from those disseminated in popular science books and booklets entitled *The Story of Oil* to Kuwait's first set of postage stamps (1959) and the Zurich art exhibition *Welt des Erdöls: Junge Maler sehen eine Industrie* (1956), have paved the way for our intimate relationship with fossil-energy-dependent ways of living and also the oil industry—especially as these lifestyles have morphed into national and even global culture. The visual representations discussed in this article coincided with the growing prohibition of free physical and visual access to sites where oil naturally existed, as these sites increasingly became corporately shielded localities of oil extraction and production. These tendencies are also telling in light of crude oil's staggering visual comeback for local and international audiences in the form of large-scale oil spills like the Exxon Valdez oil spill in 1989 and in photographs and videos of burning oil wells during and after the 1990–1991 Gulf War.

Petroleum, on its way from crude oil to fossil energy, has not only been subjected to a chemical refining process but has also been molded socio-culturally and aesthetically. Oil media—that is, visual representations of oil and their media—have been an essential tool with which governments, oil companies, and other stakeholders sought to influence the public image of petroleum in the 20th century.

Looking back on the 20th century, the idea that energy visibility equals awareness of burning fossil fuels does not hold true. In the mid-20th century, what was hidden from view was not the "burning of fossil fuels" in particular, as this had not yet become a social or political concern. Instead, crude oil as a raw material "in the wild," which had been a common photographic motif in the early 20th century, became increasingly concealed for various reasons. Its absence in visual representations helped to simplify petro-cultures as a beneficial consumerist experience for specific audiences and to decontextualize and decouple lifeworlds of extraction from lifeworlds of production and consumption. In this context, such diverse oil media as illustrated popular science books, postage stamps, and art exhibitions visually represented oil as culture to the world. They played a pervasive role in erasing some social relations while fostering and celebrating others, and thereby helped normalize the global influence of extractive fossil industries and the seemingly uncomplicated presence of their products in both popular and "high art" visual culture. In the long run, this development might also be a factor in why we have long overlooked the ecological consequences of our ongoing daily burning of fossil energy and the difficulty we have in imagining alternatives.

Clearly, more research on energy visibility is needed to analyze, compare, and disclose the visual languages reappropriated and developed in the name of oil. This includes examining the ways in which images have related to one another across time and space. It also means disentangling national scopes, corporate strategies, artistic agendas, and the transregional networks of actors and companies employed in the world of image-making from the onset of petroleum extraction to today.

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