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Aquarium Reveries: Early Cinema’s Fish Tank Films

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This video essay encourages us to look closely at early cinema’s aquariums. First, seeing the fish and aquatic effects as a “distraction” in the age of the cinema of attractions (Georges Méliès), then watching as the aquarium became a subject of cinematic “photogénie” in the 1920s and 1930s (Jean Painlevé, Jean Epstein, Man Ray).

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Creator's statement

Georges Méliès made six films that simulated an underwater vantage point using an aquarium—a fact that has been cited frequently in literature but has not been explored as the subject of its own interest. For this trick, he arranged an aquarium tank before the camera and then filmed through the transparent glass tank, filled with fish and transparent water, making it so that his actors behind the aquarium appeared to be submerged.

When we watch these films—many of which recount daring journeys—we can be absorbed by the cinematic attraction of being underwater in a submersible or watching as a space capsule plummets from the moon back into Earth's sea. Alternatively, we can watch what is on screen in a different way: seeing the aquarium as an aquarium. In fact, a fish tank is literally in the foreground of each of these shots. I suggest that we should allow ourselves to be distracted by the various fish in the foreground—captivated by the intrusion of chance that the animals and aquatic medium introduce, attuning us into a "cinema of distractions" (Tang 2017).

This viewing practice is not antithetical to Méliès's intentions; he was aware that the aquarium provided visual pleasure on its own. His first film using the trick showed a recreation of the underwater wreckage of the USS *Maine* battleship, but it nonetheless also advertised a more mundane attraction, mentioning "live fish" in a parenthetical subtitle in distribution documents.

Watching the films attuned to the aquarium permits us to see new facets of his films, like how various fish get sick and fall to the bottom of the tank or how one fish briefly blocks an actress's face. We see underwater creatures wiggle and float through early cinema, not just in the foreground of Méliès's films, but in at least three films by the Lumière brothers. The video essay format is essential for conveying the attraction

of aquariums since many of the strange effects these filmmakers record sound simple until they are witnessed firsthand. These films reveal an interest in nature on the part of filmmakers and audiences in this period—with this essay advocating to include fish tank films in the pantheon of captivating natural subjects on screen, joining the famed rustling of leaves in the wind in the background of 1895's *Le repas de bébé* (Baumbach 2013).

Crucially, this interest in aquariums would return to cinema decades later. In a 1937 discussion of Méliès, the critic Leo Sauvage recalls his early underwater films and draws a direct connection to the contemporary filmmaker Jean Painlevé who popularized the marine documentary genre in the 1920s and 30s (Sauvage 1937; for more on Painlevé, see Cahill 2019). In Painlevé's films and others by Man Ray and Jean Epstein, the aquarium was not in service of another trick but it was itself the direct focus of our sustained visual attention (Cohen 2014). In particular, the aquarium's fluid motions relate to effects of light, shadow, and animacy that captivated filmmakers and other artists in this period. In fact, Epstein ([1924] 2012) described "photogénie" as a characteristic of film that enables viewers to study the "mysterious" lives of animals such as the fish he put on screen in the opening of his 1933 film *L'or des mers*.

Since its invention, the aquarium has been a popular visual entertainment, which offered some of the first glimpses of the underwater world. The domestic aquarium was introduced into homes in the 1840s and the first public aquarium in Paris was built in 1861, the very year Méliès was born (Brunner 2005; Hamera 2012). The aquarium is a complex system—with water, light, and aeration infrastructures that keep fish alive—a subject that I explore in in my dissertation (Zivkovic 2025) and a recent article on the connections between Méliès and the rise of artificial nature in Haussmann-era Paris (Zivkovic 2026).

By contrast, this video essay attends to what we can see directly on screen, asking us to watch the aquarium-on-film anew, perhaps in the very way Leo Sauvage and the surrealists might have in the 1920s and 30s. Recent scholarship has situated the aquarium as being structurally similar to a cinematic screen: a flat, image-based medium (Le Gall 2022; Evans 2020). This video essay picks up that thread of visual analysis, encouraging us to watch films featuring aquariums as if they were aquariums. Instead of tracking Méliès's tricks and the complex production history of his studio, public aquariums, and home fish tanks, it lets us encounter the elemental medium of water and the fleeting agency of these long-gone fish, lobsters, and newts. With extended clips and slow zooms that invite us to look differently, to look elsewhere, what can we now see that we hadn't before?

Part one looks at other ways the underwater world was represented in the nineteenth century—in home aquariums, praxinoscopes, chronophotographs, actual underwater photographs, actual underwater films, and filmed aquariums. Part two looks at Méliès's underwater films anew, encouraging us to be distracted by the aquarium's fish and water in the foreground. Part three looks at aquariums in 1920s avant-garde films, where the directors stage the aquarium as its own attraction, reveling in the strangeness of fish and the effects of water and light. Viewers will get to see firsthand why aquariums were an early cinematic preoccupation, a source of reverie and reflection for these directors and their audiences since the first ten films screened in 1895.

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Biography

Alex Zivkovic is an art and media historian writing about ecological media, early cinema, and surrealism. He is currently a postdoctoral fellow at the Leonard A. Lauder Center at the Metropolitan Museum of Art. In Fall 2026, he will start as an Assistant Professor in the Art & Art History Department at Hunter College, CUNY. His essays have been published in *Afterimage*, *Nka: Journal of Contemporary African Art*, *Modernism/Modernity Print Plus*, and the *Journal of Cinema and Media Studies*.

Reviewed by James Leo Cahill, University of Toronto

Aquariamania

Cinema, as Natascha Adamowsky (2015), Jon Crylen (2021), and Margaret Cohen (2022), among others, have argued, may be situated within a media genealogy that passes through the aquarium. Early public aquariums in Brighton, UK, and Naples, Italy, as well as the Paris aquarium, the Musée Aquarium d'Arcachon, and the Aquarium de Banyuls-sur-Mer (part of the Laboratoire Arago) in France, situated their large-scale aquariums within grotto settings, producing a dramatic contrast between the illuminated marine habitat and the dark space of spectatorship. The large plate glass construction required for aquariums—the same materials involved in the emerging consumer culture of window shopping in the metropolises—invited a direct voyeuristic gaze (also trained through the parallel development of modern zoological parks, which along with the cinema, cabarets, and fairground midways, were key places of sanctioned staring). A visitor to the aquarium at the Stazione Zoologica Napoli described the experience as such: "Each aquarium is built into the wall, and all the light comes from above, so that the observer standing within the darkened room sees the animals as though himself submerged among them. The effect is indescribably beautiful" (Morgan 1896: 17).

Aquariums are not just artificial milieux but sites of mediation and encounter, bringing together into seemingly incompossible copresence the elements of air and water, terrestrial and aquatic life; they also function as framing and viewing devices for studying, at human scale, the mysteries beneath the surface. They bring an elsewhere—the depths (regardless of how shallow)—to us and also bring us elsewhere, at least in our imaginations. Aquariums are microcosms of worlds—often suffused by fantastic touches such as the mixture of species that otherwise would not cohabitate and a *mise-en-scène* of miniature ruins, such as the castle at the bottom of a fishbowl—but they are also windows onto the world or worlds "out there." In this way, aquariums were already playing with the so-called "two tendencies" of the jumble of techniques and aesthetic practices scholars belatedly call "early cinema": a drive to document the

world, associated with Auguste and Louis Lumière and their team of cinematographers, and a desire to build or invent worlds, exemplified by the magician Georges Méliès. Alluding to this broader media genealogy with a clever cut between a diagram for a home aquarium from 1840 and a recent fish-tank TV video on YouTube, Alex Zivkovic invites us into a set of "aquarium reveries"—dreams before the fish tank of early cinema that beautifully demonstrate the potential of a touch of surrealism for historical reflection.

Alex Zivkovic's marvelous and charming videographic essay and supporting statement "Aquarium Reveries: Early Cinema's Fish Tank Films" both trace the fascination with fish tanks and aquatic life among key figures of early cinema, and, through a thoughtful montage of key sequences from early films by the Lumière brothers, Georges Méliès, Ferdinand Zecca, among others, show how this fascination nourished early forms of cinematic special effects, including that most ambitious effect of all: sensations of immersion, which fuel the dialectical interplay between the cinema of attractions' direct address and narrative integration's envelopments, here taken to aquatic depths. But Zivkovic also invites us to reflect on the surfaces made by the interface of aquarium glass and screen—and to consider the layers of mediation built into them, as well as how they reflect, refract, and introduce us to new profundities of perception.

His videographic essay informs us that a fish tank film—*La pêche aux poisons rouges*—was among the first ten views shown as part of Auguste and Louis Lumière's first public screenings for paying audiences at the Salon Indien of the Grand Café on December 28, 1895—provoking a consideration of how these media histories converge. Among the most immediate effects of the presence of fish tanks across his juxtaposition of actualités and attractions is that they force some revisions of the all too tidy categorical boundaries of film history and productively put the Lumière brothers and Méliès and company back into conversation, and not simply as opponents but as sharing a key subject and stylistic touchpoint. This alone is a worthwhile intervention. Zivkovic models a reorganization of our historiographic perceptions of early cinema and demonstrates the values of what Heath Valentine (2024) has recently phrased as montage's heuristic of thought.

As but the first of a set of fantastic questions Zivkovic poses in the video essay's onscreen text and through his skillful montage, what happens when we take up his invention and direct our focus to these early cinematic aquariums? We encounter a history of special effects but also a genealogy of cinematic illusion, immersion, and the incursion of the real. The primary focus of the video is the six films Zivkovic identifies as Méliès' key "fish tank films." These include magic trick films such as *La Sirène* (1904), in which a fish tank and some unfortunate perch (I'm guessing) are props in an illusion in which the prestidigitator Méliès, reinterpreting a Robert-Houdin

stage trick, fishes the creatures out of a top hat and places them in a large aquarium. After the magician fills up the tank, he adds a grotto frame to the aquarium and the camera pushes in, slowly revealing a mermaid who appears lounging on the sea floor surrounded by living fish. This effect, one of Méliès' signature illusions, gives a sense of aquatic immersion, produced by filming human actors through a large aquarium filled with living creatures, whose unpredictable motions give an extra vitality and potential distraction to the proceedings.

According to Zivkovic, the effect was first used in *Visite sous-marine du Maine* (1898), Méliès' staged actualité of deep-sea divers recovering the bodies of the victims of the wreckage of the USS *Maine* from the bottom of Havana harbor. The illusion is used to good effect to create a sense of reality in the recreation, which is put in striking relief by setting it side-by-side with the poorly simulated deep-sea diver footage in Ferdinand Zecca's *Drame au fond de mer* (1901). But it becomes a signature of Méliès when it is used to merge reality and fantasy, lending credence to his fantastic worlds and scenarios, such as the plunge into subaquatic realms in *Royaume des fées* (1903), *Le voyage dans la lune* (1902), *Le voyage à travers l'impossible* (1904), and his Jules Vernes-inspired *Deux cents milles sous les mers* (1907).

Louis Boutan and Félix Nadar had successfully produced variations of underwater photographs in the 1890s (see Boutan 1900; Doucet 2026). But true underwater cinematography would not be realized until around 1914 with Carl Louis Gregory's *At the Bottom of the Ocean* (in which the hooves of a dead horse used as shark bait hauntingly dangle from the top of the frame). Zivkovic's video essay reminds us that fantasy, and the fantastic, are often the laboratory for technical and aesthetic discovery—they stage research programs, as Emily Doucet (2026) teaches us through her forthcoming study of Félix Nadar—and Zivkovic implicitly (and convincingly) sets Méliès among the key early innovators of aquatic cinema.

Méliès certainly merits credit for the popularization of underwater motifs, framing them as an extra-terrestrial space that echoes that of the moon and cosmos, and for whetting the public's taste for aquatic adventures onscreen. This is something scholars have remarked upon in passing, but as Zivkovic notes, it is rarely put at the center of their scholarly attention. It is difficult not to notice this—and want to know more—once it is brought to our attention in such a compelling manner. Zivkovic's well-selected illustrations from primary documents connect a line of research between Étienne-Jules Marey and the filmmaking magician (Marey 1890; Bessy and Duca 1945). Louis Poyet's illustration of Marey at work in his laboratory at the Stazione Zoologica Napoli, located right on the Bay of Naples, shows his chronophotographic device set up in a dark room trained towards an aquarium lit from above and the luminous seascape replete with sailboats beyond it. (Louis Poyet, through his role as illustrator-engraver for *La Nature*,

has shaped much of the visual archive of early moving image media: he depicted demonstrations of Émile Reynaud's praxinoscope, Marey's devices, the Kinetoscope, the Lumière Cinématographe, etc.) Marey filmed numerous aquatic creatures moving underwater (jellyfish, seahorses, starfish, comatulids, etc.), and while these were not initially screened for the public, their image sequences appeared in the scientific and popular press as photographic reproductions and illustrations.

The circulation of these images no doubt illuminated the imaginations of Auguste and Louis Lumière, Georges Méliès, and other first-generation filmmakers (and subsequently the cinematic avant-garde and surrealists when they were screened at the Théâtre du Vieux-Colombier in the 1920s). Another important predecessor, whom Méliès was surely familiar with, was Émile Reynaud, inventor of the praxinoscope and Théâtre Optique (which projected his animations onto a large screen installed at the Bon Marché), and a credible contender as one of the key innovators of animated motion pictures. The first series of praxinoscope strips he produced for public consumption was "L'Aquarium" (1877), which features a young woman gazing into an aquarium and attracting its fishy inhabitants to the surface with a small lure, which Zivkovic inserts after the images from YouTube and Nam June Paik's *Video Fish* to bring us back to an earlier moment of this history and set us on the course of the video essay's main focus in early cinema and its lessons for subsequent surrealist and surrealist-adjacent practices, exemplified by Jean Painlevé, Man Ray, and Jean Epstein, who all absorbed some of Méliès aquariumania. Zivkovic invites us to soak in some of it, too.

To conclude by returning to Zivkovic's key question: what happens when we focus on aquariums in films? As he points out in his comments, the construction of the films and their illusions become visible, and we also become attuned and attentive to the disposable subjects used as charming props before likely becoming ingredients in a bouillabaisse or the supper for neighbourhood stray cats. The sudden displacement of fish in the images, or their shift from laying in apparent distress on the bottom of the fish tank to springing back to life in *La Sirène*, reveal the almost invisible artistry at work as well as the points at which technique produces friction with forces of the nonhuman real (fish tanks are famously a nightmare for continuity editing). As animation scholars in the wake of Norman McLaren are fond of noting, the most important work often happens between the frames (Frank 2019). These fishy symptoms spur materialist inquiry about filmmaking and its larger economies and ecologies.

Watching Zivkovic's piece, I found myself wondering where or how did Méliès get these fish? Were they pulled from the Seine or did they arrive by rail from the seaside, or were they bred by a pet trader? We might follow up this question with why there seem to be so many fish tanks in the films of Méliès and other early practitioners? Were the aquariums microcosms of the larger filmmaking enterprise (a connection hard to

miss when Zivkovic cuts to Scorsese's recreation of the making of *Royaume des fées* at Méliès aquarium-esque glass-house studio in Montreuil in his 2011 film *Hugo*)? Is this a novel cultural and media convergence? A mode of remediation of pre-existing cultural fascinations? Let us recall that Jules Michelet's 1861 tome *La Mer* was in its fifth edition when Méliès was at work, Victor Hugo's 1866 novel *Les travailleurs de la mer* had transformed French language and given new attention to octopuses which appear frequently in Méliès' underwater scenes, and Jules Verne's *Vingt mille lieues sous les mers*, serialized across 1869–70 and published as a standalone novel in 1871, was a key cultural touchstone, and a rich tradition of ornamental fishkeeping was part of bourgeois life (Lorenzi 2009). Were they a democratization of aquariums and the life aquatic? Personal obsessions? Something else?

Ultimately, Zivkovic inspires us to keep wondering what else we can learn from aquariums in early cinema. What can they help us think regarding cinema and media, aquatic life, aesthetics, and cultural fantasies about them? Or, to cite Jean Painlevé (1936), an avowed student of Méliès and perhaps, along with Geneviève Hamon, among the finest cine-aquarium auteurs: what can the aquariums in early cinema teach us to unlearn and perceive differently?

Despite having spent a good part of my own professional life looking at cinematic aquariums in practice and theory, admittedly mostly in the slightly later historical moment with which "Aquarium Reveries" concludes, I found Zivkovic's video essay to be eye-opening in retraining my attention to their presence and effects onscreen, sparking some fresh aesthetic and historical reflection. And through this, he has provided an alluring invitation to voyage across the glistening surfaces and into the depths of early cinema and the inexhaustible surrealist powers contained therein.

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Reviewed by Jennifer J. Wild, University of Southern California

In "Aquarium Reveries: Early Cinema's Fish Tank Films," Alex Zivkovic invites the viewer to discover early cinema's aquariums and underwater displays as part of a long history of viewing and entertainment practices including those that found their way into domestic space: the Victorian-era fishbowl and twentieth-century television. Even as early fish tank films belong to the new public space of cinematic exhibition venues, Zivkovic's video essay encourages us to consider how their images nevertheless activate a kind of spectatorial activity that might be considered more private or domestic: the distracted mode of reverie.

For the philosopher Gaston Bachelard, reverie denotes the phenomenological experience of not just imagery, but poetic imagery and its capacity to generate wonder in the spectator. Distinct from the dream state, poetic reverie "gives us the world of worlds. Poetic reverie is a cosmic reverie [...]. Cosmic reveries situate us in a world and not in a society. [...] [Cosmic reverie] helps us escape time. It is a state [...] it is a state of mind" (Bachelard 1969: 13–14). "Aquarium Reveries" attends to the "attractive" qualities of early experiments with filming (through) aquariums, elaborately staged underwater scenes of exploration and disaster, and the filmic addresses of actualité, comedy, and fantasy. Yet the video essay's aim is to refocus our attention on what takes place as the constructed, self-conscious filmic "attraction" gives way to the distracting and inattentive force of the natural world's autonomy in motion. When we visually attend (consciously or not) to the circuitous meandering of fish as we would

to the “wind in the trees” in a Lumière brothers early short, we attend to the cosmic immediacy of the world whose image becomes a shelter, a home, a “unity of reverie, a unity of world” (Bachelard 1969: 175).

By way of its form, “Aquarium Reveries” advocates for close looking, repeated viewing, comparative visual analysis, and archival curiosity while incrementally guiding the viewer further into the theoretical and aesthetic logics, legacies, and possibilities of “aquatic reverie” on film and as film. By placing Jean Epstein’s concept of ‘photogénie’ alongside the immersive underwater films by Jean Painlevé, the video essay productively weaves a critical framework for discovering the underwater shots and sequences of early (and later) avant-garde films anew. Rather than telling us how to understand Man Ray’s aquatic images within the accepted terms of Surrealism, for example, Zivkovic’s video essay instead encourages the viewer to imagine *L’étoile de mer* (1928) and *Emak Bakia* (1926) as part of a web of cosmic, underwater images where “the reverie of one calls up the reverie of the other,” and where cinematic spectatorship “constitutes itself as the home of our reverie” (Bachelard 1969: 121) just as Epstein wrote in 1955: “The cinema’s darkness, forced immobilization, and exclusion of all other shocks to the sensibilities except that which derive from the film put the spectator in a state of rupture from exterior contingencies and suspension from superficial activities, which is the condition of all reverie” (2012: 342).

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Competing Interests

The author has no competing interests to declare.