

INTRODUCTION

A Shadow History of the Moving Image

In 1968, Basque artist José Antonio Sistiaga set aside his canvases and began painting on film. He labored twelve to seventeen hours a day for the next two years, emerging from this period of intensely focused creativity with the first feature film made entirely by hand, without a camera. Composed of 108,000 abstract painted frames left to dry in the heat of the Ibiza sun, the seventy-five-minute 35mm . . . *ere erera baleibu izik subua aruaren* . . . remains a startling cinematic experience. Sistiaga had been inspired by one of Norman McLaren's handmade animations that he had seen in Paris in 1958. Following McLaren, he painted directly onto transparent film, composing some sequences frame by frame, and others across frame lines. He employed an array of painterly and everyday materials—brushes, felt-tip pens, India ink, sand, soap bubbles, and even a cardboard tube—in order to craft an ethereal, even blinding, vision: a furiously shifting squall of effervescently mottled color. In its hailstorm of painted imagery, the piece makes literal early film theorist Ricciotto Canudo's claim that the cinema is "plastic art in motion."¹

Created without recourse to photography, Sistiaga's welter of pulsating colors nevertheless commingles representations of interiority and exteriority; it is a depiction of a cosmic circulatory system as well as the firing synapses of a galactic mind. The film is also rife with metaphor, as hints of landscape and natural phenomena—what could be the flow of electrons, snowstorms, or meteor showers—enter and leave the frame. . . . *ere erera* . . . presents an additional phenomenological challenge: we are confronted by a filmic space, an ongoing event of movement and color, which is almost too much to process. Sistiaga uses cinematic spectacle to overwhelm the viewer's senses, to bring us



FIGURE 0.1

José Antonio Sistiaga, . . . *ere erera baleibu izik subua aruaren . . .*, 1968–70. Hand-painted 35mm film, color, silent, 75 min. Image: courtesy the artist.

in and out of our minds. He transposes the natural world, forever in flux, into the indoor space of the theater. There, the light of nature is abstracted, reordered, and subjected to a Cagelan indeterminacy of choice and chance. Sistiaga himself describes his films as an opportunity to “take the blindfold of rationalism off and enjoy the unknown.”²

Just as his compositional techniques frustrate the utility of basic filmic conventions, such as the separation between frames, widely understood as a way to allow the human eye to rest and make sense of what has been and is being seen, Sistiaga recasts fundamental principles of painterly composition through his continually evolving use of negative space, relationships among colors, and highly complex figure-background relations. Composition here cannot be understood on the level of a shot or sequence, as in a conventional photographic film. Nor can it be understood in terms of a still image. For Sistiaga, composition entails the arrangement of form and color in time. His art is constituted by a series of frames that retain their unique features, even as they are transformed by the cinematic apparatus into single work of perpetual transformation that takes more than an hour to complete.

The film is intentionally silent, although Sistiaga contends that it represents a kind of music. Made in the waning years of Franco’s rule, . . . *ere erera . . .* is also a *cri de coeur*, a score-settling, silent scream of protest:

Firstly, I felt the need to revenge myself on everyone, all the organizations and people who had thrown obstacles into the path of creation; I wanted to take revenge for their lack of sensitivity and love, for their cowardice and terror of everything that is not a consumer product or does not promise immediate material or political gain, everything that escapes their control of the economy. I felt profoundly oppressed. I had no economic resources. I felt desperate, after a long battle in the field of teaching, trying to apply, through practice, other, more human and creative educational approaches.³

Sistiaga's painterly abstractions, then, resulted from his frustrations with the limitations of political rhetoric, and were born of penury. Far more than a *mélange* of color and form, the work endures, somewhat incongruously, as a protest film that cannot articulate its rage through language, or even sound. At the time it was made, Basque nationalists had been engaged in a prolonged and violent struggle with Francoists. The year 1968, when Sistiaga commenced work on the film, marked the first confirmed assassinations by the separatist group ETA (an acronym for Euskadi Ta Askatasuna, meaning Basque Country and Freedom) and the legal restriction of the Basque language. Consequently, any readily identifiable representational compositions—in terms of either image or sound—would be subject to censorship. Sistiaga's use of abstraction can thus be understood as not only an aesthetic strategy, but also a pragmatic one. The title is an additional nose-thumbing at the Spanish authorities, who demanded that any Basque film be translated into the ruling tongue. Sistiaga responded by giving them a title that could not be subsumed into Spanish, a string of nonsense that stubbornly retained the film's independence and identity as a Basque signifier.

Steeped in a tradition of radical painterly abstraction, made by hand (and with no extant budget), and, evidently, incredibly polysemic, . . . *ere erera baleibu izik subua aruaren* . . . demonstrates the allure and the complexity of the handmade film. It stands as an exemplar of how handmade cinema's generative confluence of cameralessness, abstraction, and the questioning of distinctions between art forms reveals a new conception of the moving image—one that radically reorients how we think about its practices, technologies, and meanings. This rethinking expands the site of cameraless moving abstraction from film to an array of other media by illuminating how artists have shared goals of creating works of light in time.

In the popular imagination—and in the majority of criticism on the subject—the power of cinema is rooted in its photographic representation of the world and its ability to marshal images in the service of narrative. I contend that handmade moving images like Sistiaga's that favor abstract form, otherworldly color, textural richness, and sensory depth serve as ideal objects with which to challenge—and subsequently to reshape—this commonplace of cinema. Think of a Jackson Pollock or Wassily Kandinsky that *moves*, a mixture of oils and dyes in a glass clock face, or a unique mechanical apparatus that fractures light and bends time. By providing a conceptual and historical framework for understanding these handmade moving-image works as well as the technologies and

tools used in their making, *Making Images Move* reveals how this seemingly anomalous subset of experimental films, devices, and practices in fact illuminates cinema's close relation to the other arts and reorients our understanding of the moving image.

I use the term "handmade moving image" rather than "direct film," "direct animation," or "Absolute Film" in order to assert that my study encompasses media and practices beyond film-as-film. Rather than belonging to a master category of "film," the artists in this study find common ground through theoretical and material approaches across media. Indeed, my project maps a media geography that extends outward from an investigation of cameraless techniques such as drawing, scratching, painting, or bleaching images directly in or on the filmstrip to the construction of unique kinetic apparatuses designed to make paintings in time, to the hand-manipulated effects of the psychedelic light show, to the building of video synthesizers capable of generating images from electronic signals. I contextualize this range of innovations through discussions of contemporary art movements, art historical scholarship, and a synthesis of materialist cultural criticism and media theory. I demonstrate the influence of early modernist painting and theory on European moving-image artists and émigrés such as László Moholy-Nagy and Thomas Wilfred, U.S. artists such as video maker Steve Beck, and transnational artists such as Len Lye and Nam June Paik. I describe how Abstract Expressionism shaped the paint-on-film techniques of Stan Brakhage and Carolee Schneemann as well as the psychedelic light shows of Bill Ham. I show how these transmedial and transnational artisanal approaches to making moving images without cameras, in turn, provided the generative spark for a host of other art forms, including kinetic art, the light show, and computer-generated imagery. By recovering the range of forms, tools, and intentions that make up the moving image's shadow history, I seek to deepen our awareness of the intersection of art and media in the twentieth century and enrich our understanding—and appreciation—of what is to come.

As both a method and a value, the idea of the handmade has become increasingly prevalent in contemporary culture, and its conceptual ascendancy runs parallel to the escalating epistemological crisis over what it means to study cinema in the digital age. This is no coincidence. The dot-com boom of the 1990s shepherded the rise of digital video just as it provoked a resurgence of craft culture. As people started spending more time online and in front of computers, tablets, and phone screens, they were simultaneously prompted to rediscover artistic practices that might reconnect them with the physical world. The online retailer Etsy, which bills itself as "the world's most vibrant handmade marketplace," launched in Brooklyn in 2005 and is currently valued at more than \$4 billion—an indicator of just how much the people who sought out (and in some cases, themselves created) new forms of digital expression were the same who sought a return to objects and artifacts that retained a trace of the real.

The turn of the twenty-first century saw the publication of key texts that sought to rethink the art-craft divide, a reflection of the desire to recuperate and elevate the handmade object. Paul Greenhalgh's edited volume *The Persistence of Craft: The Applied Arts*

Today (2002) sought to contextualize new developments in studio craft practices by exploring the ideas and materials used throughout the twentieth century, while M. Anna Fariello and Paula Owen's anthology *Objects and Meaning: New Perspectives on Art and Craft* (2005) offered a number of historical and theoretical perspectives through which craft could be understood, including labor, gender, and institutional contexts, and Howard Risatti's *A Theory of Craft: Function and Aesthetic Expression* (2007) argued for craft as a mode of creative engagement with the world distinct from fine art or design.⁴ In her 2008 book and 2011 documentary of the same name *Handmade Nation: The Rise of DIY Art, Craft, and Design*, Faythe Levine charted the development of this new artisanal culture.⁵ House-made pickles, hand-sewn iPad cases, hand-picked cedar slats reclaimed from an old barn and lovingly refashioned into a midcentury modern writer's desk: these are the "handmade" objects that signal a reaction to mass production, global commerce, and a generalized anxiety about the machine. As both a term and a practice, "handmade" is also a celebration of tactility as a particular mode of direct experience, one perceived to have been eroded by digital technologies and the exchange of invisible goods. Accordingly, "handmade" has been taken up alongside "organic" and "local" as a signifier of authenticity, independence, and quality, either real or imagined, and as a rebuke to assembly-line uniformity, exactitude, and snap-to-grid sameness.

With respect to the moving image, "handmade" film practices reflect a similar attempt to reinscribe the human within a field of machines and convey a similar set of anxieties about—and at times direct protest against—the perceived artificiality of digital imagery. The proliferation of digital technologies has indeed reshaped the production and reception of the moving image. But critics and scholars forecasting the "death of cinema" represent only the latest mortal blow to a medium that has already undergone numerous transformations and technological upheavals.⁶ However dire the situation, every announcement of cinema's death has been married to an invitation to explore or expand its possibilities. As will be shown, painters and other artists repeatedly turned to the moving image in order to enact—to borrow the subtitle from Austrian video artist Friederike Pezold's 1975 installation *Video Is Here*—"the expansion of painting by other means." The idea that the moving image would extend the frontiers of painting runs from the rhetoric of early film theory to applications of today's virtual-reality devices. Furthermore, cinema has *never* been entirely constrained by its practices, nor has it had its boundaries as a medium fully concretized, nor has it seen its status as an art go unquestioned. My intention in this book is to demonstrate that it may be more productive for the discipline of cinema studies—and in fact it may be essential to its future development—to leave behind André Bazin's famous question about what constitutes cinema and ask instead: What is a moving image?

Though it has struggled with its own identity for more than a century, the moving image has never been an exemplary modernist form. What Andrew Uroskie calls cinema's "hybrid and diffuse nature" indicates that the moving image was always a site of expansion.⁷ Indeed, it is in the admixture of painting and the moving image that we find

calls from artists across the twentieth century to extend the parameters of painting through the injection of time into the process. My primary interest lies in identifying this tendency toward time-based abstraction, and the ideas that accompanied it, across media. Because, as it turns out, there are many examples of artisanally derived time-based abstraction that exist outside of film. Rather than focus on the medium-specific features of each of these objects and technologies, this book explores how ideas about painting, its uses, and its limits engendered a flowering of cross-media expressions—expressions in which older aesthetic ideas gained increased purchase through new technologies, thereby opening up both the conceptual and the technological space to produce new forms and meanings.

Making Images Move encourages this movement across moving-image media through a framework composed of three conceptual rubrics: cameralessness, abstraction, and intermedia. The notion of cameralessness loosens the moving image's ties to the photographic and serves as a structuring absence, one that holds open the space in which cinema can connect to other artistic practices wherein moving images are made without cameras. Abstraction likewise provides a link between handmade film practices and other attempts to inject time into abstract imagery. Tying these threads together is the notion of intermedia, which describes artworks that exist, operate, and inform one another across technological specificities. In the following sections I discuss each of these concepts in more detail. But first, let me further clarify how I understand the term "handmade," and explain how it will be employed throughout the book.

HANDMADE

While industrial and commercial filmmaking make use of specialized craftspeople such as sound engineers, set designers, and camera operators, handmade cinema fuses theory and practice, artistic imagination and technical *nous* into an integrated whole that is realized, in most cases, by a single practitioner. Although the vast majority of avant-garde filmmakers are themselves single practitioners, and many of these artists' works stem from an investigation of cinematic tools and materials (for instance, frame-by-frame editing, slow motion, experimentation with the camera's aperture or shutter speed, the use of different lenses, step printing, et cetera), I will not include every technical innovation or manipulation of an existing apparatus under the rubric of "handmade." Stan Brakhage's use of the handheld camera, for instance, can be considered a gestural or bodily referent closely related to Len Lye's scratched kinesthetics, one that helps animate other elements of his unique visual aesthetic. While Brakhage's use of this technique is a significant aspect of his work, my project is more concerned with how his direct manipulation of the film-strip through paint-on-film methods situates him in relation to other media artists, including painters and sculptors, who seek to extend the possibilities of painting.

Furthermore, my conception of handmade cinema does not include traditional cel animation, since that system involves an established frame-by-frame photographic

process; is often figurative and/or narrative in form and content; and is often collaborative. Similarly, while stop-motion animation, which has a rich history deserving of its own in-depth study, may involve the artisanal construction of imagery, the vast majority of such work (consider Ray Harryhausen's various monsters, Nick Park's *Wallace and Gromit*, or Wes Anderson's *Isle of Dogs*) falls in the service of narrative storytelling and traditional figuration. Even as beguilingly strange or oppositional as the stop-motion works of Jan Švankmejer or the Brothers Quay might be, their respective oeuvres address fundamentally different concerns than those of the handmade artists at the center of this project. Even experimental cinema that is the clear product of handicraft, including many of the films of animator Jodie Mack, whose work revels in the everyday psychedelia of place mats, blankets, and paper products, is nevertheless largely photographically based, and so is not considered here.

In truth, the idea of the handmade can be telescoped out to nearly any and every aspect of the moving image: hands splice and cement a cut in analog film, hands operate a Steadicam, hands steady a boom mic. So what distinguishes the artisanal approach I endorse from these others? Certainly, "handmade" cannot require that the artist fashion every element of her production by hand. We would not say, for instance, that a sweater knit by hand was not handmade because the person knitting the garment did not himself spin the yarn used to make it, or shear the sheep from which the wool originally came. A painter rarely sews her own canvas or mixes her own pigments. What I am sanctioning as handmade is not simply the laying on or use of hands, but rather a working method, one shaped in large part by the discourse put forth by the artist him- or herself. Indeed, the handmade is a mode of making with deep historical connections to prior methods of art practice. For example, filmmaker David Gatten argues that his attachment to handmade film is not steeped in a nostalgia for old media in a digital age so much as it represents a decision regarding what he perceives as the accelerated tempo of contemporary life. "The way one has to make sprocketed film in the twenty-first century is so slow," he explains, "and I want to be slowed down by my process. . . . [It is about] how I want to live, and how I can most align my art-making practice in the studio with how I want to live the rest of my life, which is slowly, and quietly, and with consideration."⁸ *Making Images Move*, then, offers a conceptual, material, and rhetorical intervention into the standard expectations, both technological and theoretical, about how moving images are made and how they are understood.

As a concept, the handmade offers a way of thinking about media that rejects, in part or whole, the range of industrial modes of moving-image making that hinge on mass production in favor of homespun technique, individual ingenuity, and idiosyncratic engineering. I therefore situate the handmade, and the moving-image works that result, not only within film but also within forms of kinetic art, in the practices of the light show, and in the design and use of video synthesizers. Doing so requires the wholesale rethinking of the moving-image apparatus, for the handmade moving image often requires the artisanal design and construction of a new or singular means of making images move.

Unlike the cinematic apparatus, which is largely standardized as a capture-and-projection mechanism, other handmade apparatuses behave differently. They carry indicators of their creators' signature styles as strongly as those made by a paintbrush, stencil mark, or stylus scratch. San Francisco light-show pioneer Bill Ham referred to the set of overhead projectors onto which he mixed colorful liquids as "my painting tool—my brush, so to speak"—a substitution of media and methods that retains the handmade approach to image making.⁹

While "handmade" commonly means "made by hand," in contrast to "made by machine," a machine can itself be made by hand—as is the case with many of the moving-image technologies described in this book. And so I favor a definition of handmade that takes into account a number of materials and methods that result not only in images "made by hand," but also in those that are "hand-processed," "hand-altered," "hand-assembled," "hand-tooled," or "manipulated by hand." The emphasis, again, should not solely rest on the mark of the hand, but rather on the significance that the artist's hands play in designing, constructing, or producing their moving imagery.

This emphasis on meaning produced by tactility clarifies the relation of the handmade moving image to craft, a term (and concept) that has become shorthand for the way of making things. The word "craft" connotes a qualitative valence, a level of skill with respect to the tools and materials at hand—the "well-made-ness" of an object. The understanding of the meaning of craft has inspired a great deal of debate over the last two hundred years, if not longer, and while the question of craft's relation to art persists, the two categories are no longer necessarily viewed in binary opposition.¹⁰ As craft theorist Paul Greenhalgh explains, the various historical understandings of craft are currently "combining, melting and dissembling into one another, while others intensify around a set of principles and practices pushing to ever higher levels of poetic exactitude."¹¹ Without entering into this debate regarding craft's art historical status, I endorse Alison Pearlman's definition of craft as "the kind of artistic approach that requires an artist to develop, over time, attention to and respect for a material other than his or her ego, an empathy with another matter's distinct properties, laws, or conventions."¹² Martin Heidegger's conception of *techné* not as a "practical performance" of skill but instead as a "mode of knowing" that engenders a bringing forth, or a change in the object being worked upon, one that was initially foreign to the nature of the object, also provides a useful heuristic for a handmade approach to moving images.¹³ This discussion is not to suggest that I will argue for the handmade moving image as a craft object in the same manner that one might consider a ceramic jug or a wooden table—only that a consideration of craft, as a material investigation into methods of producing time-based images, provides a valuable means of understanding this long-neglected strand of artistic practice.

In addition, the notion of craft helps further secure the creation of artisanal moving images as an oppositional practice. As James Plaut of the World Crafts Council noted in 1974, "The hand-produced object is different from the industrial product, differently conceived, differently made, differently used."¹⁴ Constructed with small budgets and preoc-

cupied with formal innovation, handmade moving-image practices carry similar economic and even political valences with respect to mainstream film and video production. The handmade mark also carries cognitive weight because it is often invoked with regard to notions of authenticity or the real. In the words of material culture theorist Thomas Schlereth, the handmade moving image might be said to provide “concrete evidence of presence of a human mind operating at the time of fabrication.”¹⁵ Indeed, the handmade film offers a recording of the bodily processes that made it, leaving us with a document/object from which we might gain a better understanding of art making as well as the ways in which creativity intersects with, and even reshapes, media technologies.

CAMERALESSNESS

However hotly debated the ontological properties of the photograph or the differences between analog photography and digital capture have been or may be, the idea of the evidentiary status of the filmic image stubbornly endures—an implied assurance that that which was placed in front of a camera was in fact actually there. Film theorist Gregory Currie, for example, maintains that pictorial representation is still a defining characteristic of the cinema, and as a result, largely dismisses directly animated and abstract films from his consideration of film’s supposed essence.¹⁶ The persistence of this idea is encapsulated by Francesco Casetti’s recent account of cinema as “the prisoner of a tradition that sees it as the closest art to reality.” Cinema, he explains, “continues to be, both in the collective imaginary and the intentions of its authors, a trace of the world: its images, even when they serve to narrate fiction, continue to possess a strong documentary value.”¹⁷ But cinema’s “documentary value” need not stem from its relationship to photography. Stan Brakhage offers one alternative conception of film’s potential: “Film ought aesthetically to exist flickering electric and free of photographic animation, free of the mechanical trickery of, the outright fakery of the illusion of movie pictures.”¹⁸ Cameraless handmade films offer a direct realism beyond the photographic. In the example of Sistiaga’s epic cameraless film, the actual sun and seawater leave their material traces as well as a precise account of the artist’s hand, his application of paint across the frames.

Tess Takahashi argues convincingly for the documentary power of such handmade referents: celluloid film’s lasting marks—its “flecks, blurs and scratches”—indicate the physical and material conditions of the “particular context of its production, travels through the world[,] and association with the artist.”¹⁹ In this way, handmade film can be understood as an indexical carrier par excellence—a form of documentary practice wherein the traces of an artist’s physicality are imprinted on the celluloid, thereby providing a guarantee of bodily presence in both space and time: *an individual laid her hands on this material*. We can see evidence of this process when we look at the filmstrip with the naked eye as well as when it is projected in front of us on a screen or surface. Even with the collection of indexical indicators afforded by digital photography, such as geo-tracking and time stamping, the appeal of the handmade film lies in part in its ability to provide a more immedi-

ately recognizable link between artist and the world. The embedded materiality endemic to handmade cinema—its ability to capture bits of paint, blood, acid, or sand—in fact hews closely to the original conception of the index as formulated by semiotician Charles Sanders Peirce, in which a sign's relationship to its referent is characterized as “being really and in its individual existence connected with the individual object.”²⁰ It is in this way that the handmade film contests the binary between abstraction and representation, arguably even usurping traditional photography's capacity to render the world.

As discussed in the conclusion to this book, cameraless filmmaking is also a concept that provides a link between analog avant-garde practices and today's computer-generated imagery, much of which is constructed without photography. Granted, the media, means of production, and aims of a single artist operating on the fringes of cinema like Sistiaga may be radically different than those of the thousands of digital animators working together to create a virtual camera movement swooping through a digital backlot in a Marvel superhero movie, but interrogating these differences offers an unexpected means of productively complicating the history of both the handmade and the digital moving image.

Cameralessness also heightens the element of chance that inheres in the creation of handmade film, which includes the necessary trial and error that comes from making moving images by painting on tiny individual frames, or by submitting the emulsion to strange substances, or by purposefully decaying the film. Friedrich Kittler has observed that in the photochemical process, the filmmaker often finds happy accidents redolent of alchemical experiments.²¹ But the cameraless film embraces an even higher degree of chance than do its photographed brethren; a splattering of paint becomes a dazzling display of motion and color that challenges the perceptual faculties of the viewer. The promise of handmade cinema is the unexpected transformation of the quotidian into the wondrous.

The handmade film's allure may also be linked to how it complicates the idea of cinematic ontology. Before it is photographically printed and made multiple, the handmade filmstrip exists as a singular piece of art in a way that a traditionally photographed and edited reel of film does not. Pressing the issue further, some artists, such as Luther Price and David Gatten, have in certain cases chosen to show handmade work as originals—that is, they project their masters. Price's *Inkblot* series (2007–12) of films was made on a light table, with the artist first scraping at the emulsion from salvaged found footage with a razor blade or removing it with chemicals, then applying thick inks to the surface with a customized roller, a process that makes the work, he says, “more three-dimensional or like a piece of stained glass than, say, a film surface.”²² When one is played, dried paint bursts off its surface as it moves through the projector, producing a colorful nimbus around the apparatus. Powdery residue sticks to the projector's mechanisms and can cause it to stop working properly, or altogether. The fragility of the master and the concomitant loss of image quality that is compounded each time the film is screened contributes to a sense of the master as a singular artwork, while also directly engaging