# Introduction: Four and a Half Film Fallacies

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Logically, every theory of cinema should address the problem of film sound. Practically speaking, such has hardly been the case. On the contrary, a surprising number of theoreticians blithely draw conclusions about the nature of cinema simply by extrapolating from the apparent properties of the moving image. If this were just a question of oversight, the problem would be rapidly corrected. In fact, the theoreticians who overlook sound usually do so quite self-consciously, proposing what they consider strong arguments in favor of an image-based notion of cinema. Indeed, some of these arguments have reached the level of truisms, uninterrogated assumptions on which the entire field is based. In the pages that follow, I propose to reopen the cases of these arguments, cross-examining the very assumptions that have guided cinema theory over the years.

### The Historical Fallacy

The late twenties' worldwide conversion to synchronized sound was received by many film-makers as an affront (Clair, Eisenstein, and Pudovkin, among others). Intent on exacting satisfaction, they found a clever method of disenfranchising the offending sound track. Cinema was cinema before the sound track was added, they said, so sound cannot be a fundamental component of the cinematic experience. Historically, sound is an add-on, an afterthought, and thus of secondary importance.

Ironically, it is precisely because of insufficient historical knowledge and reflection that these avengers err. As a purely historical argument, the notion of sound-as-afterthought cannot stand careful scrutiny. Apparently convinced that "silent" film had always conformed to the mid-twenties model of standardized organ or orchestral accompaniment, sound's critics

set up an all-or-nothing opposition that has been perpetuated by generations of critics. On one side an ethereal cinema of silence, punctuated only by carefully chosen music; on the other side, the talkies, with their incessant, anti-poetic dialogue. Too heavily dependent on the practice of the twenties, this is an unacceptable assessment of the first thirty years of cinema history.

Here, for example, is a pop quiz that is not likely to be passed by sound's detractors. In what year did the following editorial appear? "In our opinion the singing and talking moving picture is bound sooner or later to become a permanent feature of the moving picture theater." 1926? 1927? 1928? Wrong by a wide margin. This 1910 *Moving Picture World* editorial came at the height of sound film's expansion. Cameraphone, Chronophone, Cinephone and dozens of other competing systems were not only invented in this period; during the end of the century's first decade they were installed in hundreds of theaters across Europe and from coast to coast in the United States. Their competition came, by the way, not from silent films, with or without musical accompaniment, but from road shows with extremely sophisticated and carefully synchronized effects (a technique originated by Lyman Howe), and from the many "wheels" (vaudevillelike circuits) of human-voice-behind-the-screen companies, with colorful names like Humanovo, Actologue, Humanophone, Humanoscope, Natural Voice Talking Pictures, Ta-Mo-Pic, and Dram-o-tone. In short, the world did not wait until *Don Juan* and *The Jazz Singer* to discover the entertainment (and financial) value of synchronized sound. From a purely historical point of view, the notion that sound is a Johnny-come-lately add-on to a thirty-year-old silent medium simply will not stand.

Even if the historical information had been correct, however, the claims of sound's early critics would still have been fallacious. Though their appeal is apparently to history, these unconditional lovers of "silent" cinema actually close themselves off from history, refusing to recognize that the identity and form of the media are in no sense fixed. Why do we identify the human appendix as vestigial? Because we recognize that it is possible for evolution to redefine the structure and even the nature of the human body. How can we tell when one system has given way to another? This we can do only by analyzing the functioning of the system. The fact that one element appeared before or after another carries no weight in this evaluation. At stake here is the very ability to take into account historical change in theoretical arguments. It is regularly assumed that a single term (like cinema) covers a single object. If our theories are to become sufficiently sensitive to historical concerns, we must abandon that assumption, recognizing instead that historical development regularly occurs within an apparently single object, thus often hiding under a single name



two or more historically distinct objects. In other words, even if silent film were the object that sound's detractors claim, the sound-as-afterthought argument would still not hold up. Cinema changes, and the action of sound is one of the prime reasons for that change.

### The Ontological Fallacy

Though they continue to influence cinema studies, historical fallacy arguments were especially popular among the filmmakers of the late twenties and early thirties. Later in the thirties, a new argument appeared in the writings of such influential critics as Rudolf Arnheim and Bela Balazs. Eschewing historical arguments, they make the formal case that the image without sound still constitutes cinema, while sound without an image is no longer cinema. Clearly assuming that cinema is a firm, unchanging category, immune to history, these critics present their arguments as logical and permanent. Indeed, so strong is the apparent appeal of this ontological claim that it regularly reappears in the writings of current theoreticians.

Two primary considerations undermine the ontological argument. The first is a practical concern relating to the way in which ontological critics use their claims. Like the historical case, the ontological argument seeks to disenfranchise sound, to prove that sound has (or should have) little effect on overall film structure. Even if we were to accept the notion that film is a fundamentally image-oriented medium, this conclusion begs the larger question of the relationship between ontology and structure. May we affirm with confidence that an object's structure can be predicted from its nature? The answer to this question depends on the way in which we construe the term "nature." If nature is defined through structure, that is, if all claims about the nature of a class of objects are derived from analysis of the structures characteristic of the objects, then we can treat nature as predictive of structure. But this is precisely what sound's ontological critics do not do. On the contrary, they base their claims about cinema on a single surface aspect rather than on a careful inspection of the structure of actual films and the system that produces them. Indeed, the acerbic vocabulary and prescriptive exhortations of these critics suggests that they are more interested in influencing the structure of future films than they are in analyzing the structure of existing ones.

What about the truth value of ontological critics' claims? The problem with these apparently rock solid claims, I would suggest, is that they are actually built on sand. Presented as absolute and unchanging, appeals to the nature of cinema appear to be independent of history. In spite of appearances, however, the evidence actually offered is all historically specific. To say that a particular configuration would not be recognized

as cinema, while another would, is to affirm that *in the present conditions* these conclusions would be reached. Present conditions, though, have to do with the way in which a given configuration has been used, and not with some transhistoric category. The ontological argument, it turns out, is only falsely ontological.

Even in the absence of a properly ontological argument, however, the historical claim would remain: cinema has indeed been exploited as a visual medium, to the point where audiences identify the medium with the image rather than the sound. To the extent that it represents a carefully documented historical argument, this position has a certain amount of merit (however unontological it may be). Even when the ontological argument is reduced to its historical evidence, however, hesitations must still remain. For the historical circumstances assumed by ontological critics have not always obtained. During the many periods when cinema was heavily marked by its relation to the music industry, for example, music accompanied by a blank screen has regularly been recognized as cinema: the long overtures to the early Vitaphone sound-on-disk features, the introduction of a film's theme song before the images or its continuation after the post-credits (as in *Nashville*), and the use of a totally black screen in recent music videos. These examples hardly prove that cinema is regularly taken as a sound-based medium, but they do suggest the *historical* possibilities of cinema as an audio-visual medium, in which sound-oriented proclivities regularly confront image-based tendencies, thus producing a varied history belying claims of a solely image-oriented ontology.

Since first pointing out the ontological fallacy in *Cinema/Sound*, I have become aware of an even more problematic appeal to ontology in the study of sound. Surprisingly, this dependency on ontological arguments comes not from the enemies of sound, but from its greatest defenders. In their celebrated book on *Composing for the Films*, Theodor Adorno and Hanns Eisler attribute to hearing a privileged relation to pre-individualistic collective times; music thus has a pre-capitalistic nature, being more direct and more closely connected to the unconscious. While their other arguments are by and large well attuned to historical differences, this approach to hearing and sound edges dangerously close to an ontological claim, apparently capable of predicting sound's nature in any given situation, but actually able only to locate sound's action in certain past situations.

A similar danger lurks in the work of Mary Ann Doane, Kaja Silverman, Michel Chion, Claudia Gorbman, and other critics who have leaned heavily on the psychoanalytic theories of Guy Rosolato and Didier Anzieu, who characterize the voice as archaic, based on the notion that we hear the soothing voice of the mother from the womb long before we are able to see. It is not surprising that such a transhistoric proposal, apparently predictive of sound's role in any situation whatsoever, should lead to such conclusions as Doane's claim that "the aural illusion of position constructed by the very approximation of sound perspective and by techniques which spatialize the voice and endow it with 'presence' *guarantees* the singularity and stability of a point of audition, *thus* holding at bay the potential trauma of dispersal, dismemberment, difference" (Doane 1980b, 171; my emphasis). Yet we know from actual listening that very few films construct an approximation of sound perspective. Can it then be said that "the subordination of the voice to the screen as the site of the spectacle's unfolding makes vision and hearing work together in manufacturing the 'hallucination' of a fully sensory world"? (Doane 1980b, 171) The problem here is that an apparently ontological claim about the role of sound has been allowed to take precedence over actual analysis of sound's functioning. (In my article "Sound Space," later in this volume, I suggest a different approach to the same question, based not on an assumption of unity and concordance, but on a perceived conflict between sound scale and image scale.) While it would be unreasonable to cut short speculation on the sources of sound's attraction, it is essential that such speculation not be taken as a prescription, as a binding assumption about the way sound must work in all cases. If we are fully to restore a sense of sound's role in creating our sense of the body, we must depend on historically grounded claims and on close analyses of particular films rather than on ontological speculations that presume to cover all possible practices.



### The Reproductive Fallacy

In spite of the fact that, as a storage medium, sound recording lags behind the image by tens of thousands of years, recorded sound has from its very beginnings held a great fascination for critics. Whereas the image, however carefully rendered, clearly reduces a three-dimensional original to two dimensions, sound appears to reproduce the original faithfully, in its full three-dimensionality. By no means limited to early admirers of the newfangled technology, this position was until recently held by a majority of sound critics (many of whose pronouncements are quoted at the beginning of Jim Lastra's article, below). By and large, critics remain convinced that sound is literally *reproduced* by a high quality recording and playback system, in spite of Alan Williams' demonstration of the contrary in his *Cinema/Sound* article ("Is Sound Recording Like a Language?").

Sound, it is worth recalling, cannot be construed independently of the volume of air (or other medium) in which it is heard. Typically, we notate sound (through writing or musical notation) as if sounds were ideal entities. But volume, frequency, and timbre cannot exist independently of several material factors which preclude reproduction as such. To be sure, in some

sense a G# is a G#, whether it is played at home or on stage, but that does not make the two sounds identical. By restricting our description of sounds to familiar musical terminology, we have bamboozled ourselves into believing that sound itself is restricted to those characteristics. Does the G# have a slow attack? a long decay? an echo? reverberation? Does it bounce around like a superball in a hollow cavity? Or does it rapidly lose its force, like a beanbag hitting a pillow? If all we want to know about a sound is that it was a G#, then all G#s are the same, but if we care about the material differences between two sounds, and the spatial configurations that cause them, then we must recognize that no recording can possibly reproduce an original sound.

Recordings do not reproduce sound, they represent sound. According to the choice of recording location, microphone type, recording system, postproduction manipulation, storage medium, playback arrangement, and playback locations, each recording proposes an interpretation of the original sound. To be sure, one of the common strategies involved in this process is an attempt to convince the audience that they are listening not to a representation but to a reproduction. We must not, however, be taken in by advertisements for "high fidelity" sound. The notion of "fidelity" is not a measure of success in reproduction, but a way of assessing a recording's adherence to a set of evolving conventions, like the parallel standards established for such culturally important qualities as "realism," "morality," or "beauty." The concept of fidelity is thus a strange hybrid of engineers' aspirations and ideology, serving to mask recording's representational nature.

Considered as a reproduction, recording seems to fall under the aegis of technology and engineering. Construed as a representation, however, sound inherits the double mantle of art. Simultaneously capable of misrepresentation and of artistically using all the possibilities of representation, sound thus recovers some of the fascination lost to its reputation as handmaiden of the image. Indeed, it is recording's very ability to manipulate sound that makes it so amply worthy of our interest.

**The Nominalist Fallacy**

In order to show that recording cannot possibly reproduce the original sound, critics (Williams, Levin, Altman) have regularly made the following points: (1) sound exists as pressure within a volume; (2) it is impossible to collect all the sound of a particular performance, since it disperses differently into the various parts of the theater or other surrounding space; (3) even at a live performance, different spectators hear different sounds, depending on where they are seated and which way they and the performers are turned; (4) sound systems always enforce a particular set of values in



selecting microphone type and location, frequency response, volume levels, and many other recording and playback characteristics; (5) playback involves the same set of differences and choices involved in recording.

Within this apparently coherent argument lurks a potential danger. Stressing the material nature of sound in order to counter fundamentally idealist assumptions, this approach fragments sound to the point where the emission of a single sound apparently gives rise to the perception of a multiplicity of different sounds. By concentrating on the differences between the sound as heard in the orchestra and the "same" sound as heard from the balcony, this argument has rendered the important service of sensitizing critics to the materiality, complexity, and context-based nature of sound. At the same time, however, these defenses against the reproductive fallacy have failed to address the problem of the communicative language used by auditors having heard the "same" sound to overcome the fact that they actually perceived physically different sounds.

This is an old problem, closely identified with the weaning of philosophy from theology in the latter part of the Middle Ages. When I pick up two different rocks and call them "rocks," what is the status of the name that I attribute to them? Is the name itself real? Or is the name just a convenient label? To put it another way, is the shared category to be understood as actually existing, or are the objects themselves the only things that exist? Is there such a thing as the category "rock," or are there only objects, on which for the sake of convenience we confer names (such as "rock") which have no existence independent of the objects they represent? The traditional position, usually identified with Plato and Augustine, is termed "realism," because it takes the general category as real; the radical position, championed by William of Ockham and generally thought to have been instrumental in paving the way for Renaissance individualism, is known as "nominalism," because it considers that the general category is just a convenient name. Especially concerned to recognize individual difference (and thus the value of the created world), the nominalists accused the realists of subordinating the entirety of creation to a set of preexisting universals.

This is precisely where we stand today with regard to sound. As Jim Lastra demonstrates so well in his article, below, the critics of the reproductive fallacy have edged dangerously close to an ultra-nominalism in which differing auditor perceptions make a single original sound appear like so many different rocks with no common identity save their common name. The very names used to identify sounds are suspect, disrespectful of sound's material heterogeneity. Yet we do discuss the film as we file out of the theater. In spite of the fact that we have literally, really heard different sounds, we still manage to find a common ground on which to base our conversation.

At this point in time, the study of sound shares the position of reception studies. I once witnessed an interchange that says a great deal about the project of reception studies. After demonstrating that neither the author nor the text can possibly determine readings, that each reader may read the text in differing ways, Tony Bennett opened the floor to questions. Said Paul Hernadi: "This is all well and good, but if what you say is true, how did I understand what you just said?" Taking an ultra-nominalist stance (which, by the way, he has toned down since), Bennett laid such heavy emphasis on our freedom of interpretation from textual constraints that he jeopardized the very notion of understanding. Even today, reception studies need to concentrate more fully on the bridges, the terms, the categories, the reading formations that permit a Paul Hernadi to understand a Tony Bennett.

A similar situation holds in sound studies. While not abandoning for a moment the notion that every auditor of the "same" performance actually hears different sounds, we need actively to interrogate the cultural phenomena that permit us to compose sentences, frame ideas, and ultimately communicate about the sounds which are heard. A decade or two ago, it would no doubt have been politically essential to defend at all costs the free play of the signifier; today it seems far more important to remember with Saussure that signification can occur only through the repression of the signifier and to call for increased sensitivity to the many strategies adopted by various cultures to assure the repression of sound's differences in favor of language's communicative value.

## Indexicality: Half a Fallacy Working on the Other Half

Inherited from photography, one of the most deeply ingrained notions about cinema is that it depends primarily on recording. Unlike painting or writing, it is commonly supposed, cinema uses motion picture photography and sound recording to fix and retain in memory a physical image of the pro-filmic scene. Whereas representational painting is based largely on iconic resemblances, and writing is built around symbolic relationships (according to the terminology of Charles Sanders Peirce), cinema is thought to depend especially strongly on indexical connections, that is, those revealing a particularly close existential relationship between the represented item and its representation (such as that which exists when light rays bouncing off an object expose motion picture film, or when sound waves either drive the stylus of a disk recorder or, once transformed into light, expose the sound track portion of the film). This close connection of course creates an iconic relationship between the pro-filmic object or sound and its filmic representation (that is, the object and its representation have the same shape), but critics and theoreticians have consistently stressed the indexical ties over the iconic resemblance. In particular, André Bazin's realist criticism has been especially influential in popularizing an indexical approach to cinema. For Bazin, cinema is like a mold that takes each scene's impression; cinema thus works like a death mask or the Shroud of Turin, recording as it were by sacred contact.



During the early history of photography, photographs could be produced only through indexical relationships. As photography matured, however, photographers discovered various methods of "correcting" nature, typically adding painted-in iconic details to the photograph's indexical base. From the very start, however, such techniques were roundly condemned. Offering ontological arguments about photography's nature, critics insisted that certain types of retouching constituted a highly undesirable form of "cheating." The moralistic tone of this argument carried over intact to motion picture. In spite of early cinema's non-indexical display of color, "silent" cinema's iconic and symbolic approach to sound, or the late twenties' creation of the falsely indexical playback system, critics and theorists continued to stress the ability of the motion picture camera, like that of its still picture cousin, to take snapshots of reality. As cinema developed, to be sure, the scenes recorded by the camera began to depend on an increasing amount of manipulation (through set design, costuming, makeup, and so forth), and the final film image was increasingly constructed from a combination of separate images (through mattes, background projections, and other processes). For all this prestidigitation, however, the basic assumption was never jeopardized: cinema is primarily an indexical medium, directly dependent on the photographic recording of each pro-filmic scene (or scene fragment).

Throughout the history of cinema, the image has by and large corresponded to this indexical, recording-oriented definition (with the exception of special cases like scratch-animation, computer graphics, or electronically generated images). Cinema sound, on the other hand, has rarely been the result of straightforward indexical recording. Long before the cinema industry converted to sound, the market for telephonic communication, phonograph records, public address systems, and radio entertainment had led engineers to investigate the possibilities of "enhancing" sound in order to achieve greater volume, presence, or intelligibility, while reducing unwanted characteristics. At first, engineers concentrated on the recording process itself, laboring to increase the indexical fidelity of the sound recording apparatus. Soon, however, sound's capacity for post-recording transformation became apparent. Why *record* the reverberation associated with sounds produced in a large hard-walled room if you can simply process the reverb in later? Throughout the thirties, parallel

developments in electronics and film sound led to the creation of myriad devices designed to produce final-release sound differing radically from the sound originally recorded on the set.

Little by little, the indexical nature of film sound became compromised by the ability of acoustic networks and electronic circuits to alter or simulate sound. Once the sole province of high-end sound production facilities (such as those found in New York, Hollywood, and a few other important centers around the world), the electronic revolution has now made it possible to produce all the music and effects for a film sound track without recording a single cricket or musical instrument. For a decade, film sound has been heavily influenced by digital systems like MIDI and the Synclavier. Even the most inexpensive films feature sound tracks that are no longer primarily recorded. In cinema, television, and disk production, sound has definitely surpassed the era of indexicality.

Today, the customary electronic manipulation and construction of sound has begun to serve as a model for the image. Though the film image currently depends primarily on a chemical (and thus indexical) technology, the electronic nature of the television image provides a different model, whose influence is increasingly felt in the cinema world. In order to create Mickey Mouse, Walt Disney had to do more than just make thousands of drawings; he had to record them with the same (indexical) motion picture process used for live actors. Today's animators work in an entirely different fashion. While most still depend in part on drawing, they make heavy use of electronics and its ability to produce iconic relationships without depending on the indexicality of recording. A similar shift has taken place in color technology. Whether two- or three-strip, whether additive or subtractive, traditional color processes systematically depended on indexical relationships: the color was fixed by the existential contact of the object with the film. Today, films are colorized by an electronic process that owes nothing to recording. It is only a matter of time before the plunging prices of all electronic processes turn colorization from a postproduction technique into a production device.

In short, the recording medium that cinema once was has now been massively transformed and risks ultimate obsolescence. However accurate it may once have been to understand cinema as recording its object by sacred contact, we must recognize that three-quarters of a century of electronics has radically desacralized cinema, substituting circuitry for direct contact, constructed iconicity for recorded indexicality, and the infinite imagined possibilities of the keyboard for the restricted immediacy of recording reality. Not so very long ago, treating cinema as *écriture* was a radical move; the technology itself is now turning this metaphor into a reality. Once, cinema was recorded with a camera; now, it is increasingly written with a keyboard.



So far, it is only half a fallacy to treat cinema as a recording medium. By the end of the century, however, cinema will be well on its way toward full digitalization. The end of the indexical era looms large. Perhaps it is time to revise our theories and our vocabulary to take this transformation into account. More experienced in this domain than the image, sound must lead the way.