Chapter 4

Perception, awareness, and film practice: A natural history of the "Doris Film"

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This chapter takes a close look at the film at the center of the influential interaction research project the Natural History of an Interview. The film, commonly known under the alias of its main character "Doris", was made in May 1956 by the anthropologist and cybernetician Gregory Bateson and the cinematographer David Myers. It was subsequently studied in detail by an interdisciplinary group of psychiatrists, linguists, and anthropologists brought together by the psychiatrist Frieda Fromm-Reichmann. Tracing the film's production history and analyzing its cinematic techniques, this chapter considers the film's integration into emerging research procedures, documentary film practices, and experimental film discourse. It is argued that the film formed a transitional object, marking a turning point in approaches to research filming, but also a critical intersection between research film, communication theory, and emerging observational styles in documentary film.

"[…] intelligibility, after all, is an extremely loose concept."
– Hollis Frampton, Annenberg School for Communication, March 28, 1972

1 Creating a Specimen

One afternoon in May 1956, the anthropologist Gregory Bateson and his cameraman David M. Myers visited the home of a woman in Palo Alto who came to be known under the alias of "Doris". They wanted to film an interview between Bateson and Doris for a research project on interaction and communication in family situations. Yet, at the appointed time Bateson and Myers "found the house

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empty" (Bateson 1971b: 1). When they phoned Doris a quarter of an hour later, she had returned from a session with her psychiatrist, picked up her five-year-old son "Billy" at a friend's house, and reluctantly invited the researchers into her home. In principle, she had agreed to being filmed. A few weeks before, Doris and her husband, "Larry", had attended a lecture by Bateson on nonverbal communication and family interaction; Doris later told Bateson that she "was quite fascinated with the films we saw in your lecture" (quoted in Birdwhistell et al. 1971: 27). Following the lecture the couple contacted Bateson to express their interest in participating in the project. Doris was aware of the general direction of Bateson's research, relating to him that she had spoken to a group of women after his lecture, who had talked about "how they did or didn't approve of what some mother or other was doing with […] her child", but failed to "understand what nonverbal communication was" (Birdwhistell et al. 1971). Still, she was obviously surprised when the researchers showed up at her doorstep that afternoon. Bateson ascribed her flustered appearance to the haste in which she prepared for being filmed, "exhibiting the expectable response of a housewife unprepared to receive her visitors – let alone cameras and lights" (Bateson 1971b: 1). During the interview, Doris was "markedly distressed" by the noise of commuter trains passing by the house (Bateson 1971b: 3).

Forming the core of the influential research project the Natural History of an Interview (NHI), this fraught encounter resulted in one of the most intensely analyzed documents in the history of social interaction studies (and film studies, for that matter). With some delay, Myers eventually filmed Bateson interviewing Doris and Billy playing nearby, occasionally interrupting the two adults. A few weeks later, Bateson and Myers again visited Doris' house, filming Billy playing in the garden and being bathed, as well as an informal party with neighbors. On a third occasion, they also filmed an interview with Doris' psychiatrist Robert Kantor. Rather than getting used to being filmed, Doris' discomfort grew. Her reluctant consent to the initial interview became something of a pattern. In the film of the party at her house, she asked Bateson about his plans to film her in a therapy session with her psychiatrist. She had heard about "this new project" from Kantor and expressed her doubts, since it "didn't seem very feasible" to have two other people, Bateson and Myers, in the room during the session. Bateson assured her that there wasn't "any need for that". Doris then agreed, "Yeah, it's okay with me". When the therapy session was actually filmed shortly after, she was, however, "very upset" (*Therapy session, July 28* 1956). Bateson and Myers indeed left Kantor's office after having set up and started the camera. But this did not mitigate her anger. She "felt worse than she had for a long time" and she

was "angry at Bateson for turning up at this point when she did not want him" (*Therapy session, July 28* 1956).

In July, Bateson screened the original interview film and the additional films to a multidisciplinary group of fellows at the Center for Advanced Studies in the Behavioral Sciences (CASBS) at Stanford University.[1] Formed on the initiative of the psychiatrist Frieda Fromm-Reichmann, the group had previously studied the sound recording of a psychiatric interview. Besides Fromm-Reichmann, the initial group included another psychiatrist, Henry Brosin, and the two linguists Norman McQuown and Charles Hockett.[2] Their analysis resulted in an article, authored by McQuown, on "Linguistic Transcription and Specification of Psychiatric Interview Materials" that was published in 1957. Collaborating with linguists (and anthropologists), Fromm Reichmann hoped "to make psychiatry more scientific" by understanding the mechanisms underlying "psychiatric intuition" (Fromm-Reichmann, *My year's fellowship*: 8). She explained:

> As a practicing psychiatrist and psychoanalyst specializing in analytically oriented psychotherapy with psychotics, and as a teacher of psychotherapy, I have been interested for years in the investigation and understanding of those elements effective in the psychiatrist's psychotherapeutic endeavors which have so far defied rational formulation: I may call them, for lack of a better term, "intuitive" processes. (Fromm-Reichmann, *Tentative statement*: 1)

With the analysis of the sound recording almost completed, Fromm-Reichmann invited the anthropologist Ray L. Birdwhistell to join a meeting of the group held in February 1956. Her intention was to extend the initial focus on linguistic and paralinguistic data.[3] Birdwhistell, who at this time taught at the University

[1] The follow-up film was shot in May or early June 1956, the footage of the interview with the psychiatrist was filmed in June 1956 (Brosin 1971b: 1–2). The dates given by Brosin approximately match with Robert Kantor's statement that the first film (the Doris film) had been made in the fifth month of Doris' therapy, which had started in November 1955 (*Therapy session, July 28* 1956: 1, notes by Kantor). The films were made with funds provided by the Macy Foundation for Bateson's research on the etiology of schizophrenia at the Veterans Administration Hospital in Palo Alto (Fromm-Reichmann, *My year's fellowship*: 8).

[2] Two anthropologists, who, like the others, were fellows at the CASBS at this time, at first also contributed to the project. These anthropologists were Alfred Kroeber and David M. Schneider (Leeds-Hurwitz 1987: 5).

[3] According to Ray Birdwhistell, Fromm-Reichmann "was losing her hearing and knew she needed to see with more control" (quoted in Leeds-Hurwitz 1987: 5).

of Louisville, Kentucky, had done extensive research on body motion behavior, working toward establishing what he termed the science of "kinesics". Responding to this invitation, Birdwhistell suggested that Gregory Bateson, who worked on a project on the etiology of schizophrenia at the nearby Veterans Administration Hospital in Palo Alto, might also be invited to join the group of researchers. Fromm-Reichmann, Birdwhistell and Bateson already knew each other from the Macy Conferences on Cybernetics and the Macy Group Processes Conferences (Leeds-Hurwitz 1987: 21). Bateson and Fromm-Reichmann, moreover, shared an interest in understanding group processes involved in causing schizophrenia. It seems that Bateson was not present at the meeting in February. By July, however, when the next meeting took place, he had the films of Doris and her family at hand to show to the group. Bateson may also have screened earlier films made in the context of his research on family interaction and schizophrenia.

The addition of Birdwhistell and Bateson to the group marked the moment when the project shifted from linguistic and paralinguistic analyses of tape recordings, that is acoustic signals, to audiovisual data and sound film. Whatever else Bateson may have shown at the July meeting, the group quickly settled on the film of him interviewing Doris, which may have been made (besides its original function in the project at the Veterans Administration Hospital) with the incipient project at the CASBS in mind. This choice brought about another change in the direction of research, since, as Bateson observed, it "shifted the project from a study of linguistics and kinesics in psychotherapy, to a study of the natural history of these phenomena in the family constellation" (Bateson 1957: 5). Bateson, of course, was not a psychiatrist, nor was Doris his patient.

Analysis of the film commenced almost immediately. Repeated viewings of the Doris film by the whole group of researchers, a process they termed "soaking", led to a selection of scenes which appeared most promising, or most suitable, for the initial microanalysis (Fromm-Reichmann, *My year's fellowship*: 9). Birdwhistell stayed at the Center for the remaining three months of Fromm-Reichmann's fellowship, instructing the group in methods of microanalysis and working on the kinesic transcription. At the same time, McQuown and Hockett began to analyze the linguistic material. By the end of the summer, the group was able to summarize preliminary results. During the next meeting at the University of Buffalo in October 1956, the researchers began to collate their findings and they also devised a plan for a book publication. It would, however, take several more, increasingly scattered, meetings and another ten years until a final version was completed. Changes in the composition of the group, resulting from internal conflicts and changing research preferences of individual members, caused setbacks. But it was above all the extremely time-consuming work of microanalysis and

microanalytic transcription that caused the delay.[4] In the end, the resulting, massive manuscript, including hundreds of pages of highly technical linguistic and kinesic transcriptions, turned out to be all but unpublishable. A microfilm version of the manuscript was finally deposited at the Joseph Regenstein Library at the University of Chicago in 1971.

Despite its unfortunate publication history, the NHI exerted a substantial influence in such diverse fields as interaction studies, family therapy, sociology, and visual anthropology. As Wendy Leeds-Hurwitz observes in her 1987 social history of the project, it had, by the 1980s, "become well known through the academic grapevine" (Leeds-Hurwitz 1987: 1). Leeds-Hurwitz points out four major innovations: its character as a model for sustained multidisciplinary collaboration, its extensive use of microanalysis and film in research on communication behavior, its seminal contribution to the development of kinesics and paralinguistics, and its role in establishing "the structural approach to communication" (Leeds-Hurwitz 1987: 2). Adam Kendon, whose own research built on and extended the natural history approach and was based on the use of film and video, points out that the NHI marked a turning point in the use of film in communication interaction studies. The project initiated a shift from film as a means of capturing individual expression to a perspective, informed by cybernetics and systems theory, and based on filmic "specimens", that regarded the actors in human communication "as participants in complex systems of behavioral relationships instead of as isolated senders and receivers of discrete messages" (Kendon 1979: 69).

Procedures of highlighting and coding features in the filmic record established an influential form of what Charles Goodwin (1994) has termed "professional vision". This professional vision was, as I will discuss in this chapter, connected to other ways of seeing – specifically, ones that emerged in documentary and experimental modes of filmmaking. In recent years, the NHI and related projects have received renewed scholarly attention across a range of disciplines, including sociology, film and media studies, and literary studies. One reason for this is that the project suggests a connection between media epistemologies, observational practices and interaction theory that appears to speak to present digital culture. Bringing together human observers, technical apparatuses and notational procedures in an "integrated process" (Watter 2017: 37), and looking at social actors as

[4] Estimates by various group members of the ratio between screen time and analysis time vary from six hours to 100 hours for a one-second segment (Fromm-Reichmann, *My year's fellowship*: 9; Birdwhistell 1970: 12). Birdwhistell remarks that, with improved techniques of analysis, the latter number could eventually by reduced to "less than one hour" per second of screen time (Birdwhistell 1970: 12).

"mere nodal points within a wider matrix of continuous communications" (Watter 2017: 45) resonates with contemporary debates on algorithmic agency and posthuman subjectivity. It also has reverberations in sociological practice theory as well as the turn toward "surface reading" in literary studies. "[F]oregrounding observation and description" brings into awareness, as Heather Love argues, "the complex links between texts and social worlds" (Love 2013: 412).

Such a crossing-over between social science methods, humanistic/aesthetic concerns, and "social worlds" was already, if implicitly, inscribed in the analytic procedures and the film practice of the NHI. In the interstices between professional vision, filmed document, and microanalytic practice, there emerged an aesthetics and an epistemology of film, connecting social research with concerns of film practice but also contemporaneous film theory. This is another aspect of the media archaeological implications of the NHI – an aspect that brings into view interrelations between practices of analyzing body motion interaction and filmic bodies, temporalities and identities. It also affords a look at the intersecting histories of research film and film studies. But back to the Doris film, on which my considerations are based.

2 Watch and Learn!

The use of film was crucial for the NHI, because film was to bring into awareness what was always already in plain view – continuously unfolding, and intuitively registered by us all – yet too complex and too fleeting to be consciously apprehended. Film thus responded to one of the principal theoretical tenets of the project, succinctly stated in Bateson's introduction:

> It is necessary again to insist upon the *unconscious* character of most communication. We are mostly totally unaware of the process by which we make our messages and the processes by which we understand and respond to the messages of others. We are commonly unaware also of many characteristics and components of the messages themselves. (Bateson 1971a: 24)

Countless repeated viewings of brief film segments at various speeds were necessary to perceive, separately, one at a time, the multiple "channels" through which interaction signals were constantly exchanged, revealing ever more complex interrelation patterns. Simultaneously exhausting and intriguing, the process of analyzing and transcribing the filmic record in different linguistic and kinesic registers became, as the group members described it, a source of perpetual discovery:

> Each succeeding listening or viewing will bring additional features to [the observer's] attention, and, if he attempts to tie his transcription to auditory or visual reception, he will be forced to bring into conscious focus items of which he, without such aids, would only be subliminally conscious, or, in the extreme case, totally unaware. (Birdwhistell et al. 1971: 3)

Despite their focus on microanalysis, the researchers did not pay equal attention to all clues and all levels of signals the film encompassed, nor did they assign equal weight to all types of contextual information. Curiously, Doris' discomfort and subdued anger are never discussed, even though Bateson, at least, was keenly aware of these emotions and they are clearly, if intuitively, noticeable in the footage. This is all the more striking, since placing signals in context formed the core of the natural history method. Context was crucial in moving from microanalytic findings to ever larger patterns of behavior from which, eventually, something like meaning might emerge: "As we climb the hierarchic ladder of Gestalten from the most microscopic particles of vocalization towards the most macroscopic units of speech, each step on this ladder is surmounted by placing the units of the lower level *in context*" (Bateson 1971a: 16). If context was a communication theoretical concept that described how messages of different logical types interrelate, it also manifested itself in the filming situation: "the context of a signal emitted by Doris is not merely those other signals which she has recently emitted plus those which she emits soon after; it is also the room in which she is speaking, the sofa on which she is sitting, the signals emitted by Gregory with whom she is talking, and by the little boy Billy, and the inter-relationships among all of these" (Bateson 1971a: 20).

Doris' effective inability to refuse being filmed obviously reflected contemporary gender roles, including her actual or perceived powerlessness facing the researchers. The fact that they "found her quite flurried" (Bateson 1971b: 1) did not discourage Bateson and Myers from proceeding with their plans that afternoon. We can see in this another manifestation of the configuration described by Geoghegan, in which "family therapy's emphasis on the home as the site for nurturing personality and the role of 'the schizophrenogenic mother' in producing mental illness aligned it with a coterie of postwar technologies of gender that produced the home as a site of feminine care and semipublic 'workplaces' as a site of masculine labor" (Geoghegan 2017: 84). It would, perhaps, be too strong to assume that Bateson and Myers inadvertently put Doris in a "double bind", leaving her with no real choice. A certain pressure is, however, undeniable. But ignoring Doris' misgivings also had to do with the researchers' wish to exclusively study *filmed* interaction. The film, in fact, became their prime object of

study. Their focus was on looking at this film as if it preserved traces of "naturally" occurring behavior. In principle they acknowledged that the situation they studied included "two identified persons in the presence of a child, a camera and a cameraman" (Bateson 1971a: 6). Their attention, however, was directed to what was going on *in front* of the camera. This corresponded with the "modest" descriptive goals of the inquiry (Brosin 1971a: 3), its limited concentration on certain types of information with the aim of establishing parameters for future research on interaction communication. "Context", in this sense, only included what was captured in the film image. This required the researchers to downplay the camera's role in shaping the interaction situation, and also Doris' reluctance to being filmed. The film was viewed as containing what Adam Kendon would later call "*specimens* of behavior" (Kendon 1979: 67).

The concentration on what was going on in front of the camera, and particularly between Bateson and Doris, entailed the omission of yet another aspect: the technical and aesthetic features of the film itself. To be sure, it is not my intention to criticize the project for something it never intended to do, or to somehow complete the analysis of the interaction scene.[5] What I wish to consider is how the separated practices of filmmaking and analysis were still entangled with each other, and how, in the perceived gap between these practices, epistemological assumptions about interaction and film developed. References to Myers and to the camera are not entirely absent from the notes on project meetings nor the final report. But cinematographic aspects are usually mentioned only when they present obstacles to analyzing the film images for their interactional content, such as temporal gaps in the recording, out-of-focus shots, too narrow framing, or low image resolution. These aspects, as well as Myers' presence at the scene, however, are part of the media history, sociology and theoretical practice of the NHI. This is reason enough to give them some attention here.

The separation of film practice/data gathering from analysis is interesting in itself, since it points to another paradox inherent in the project: reflexively paying attention to techniques of analysis was, on the one hand, an essential element. On the other hand, some aspects, such as the practices involved in obtaining data, could not be (fully) included in this reflection. Not only would they have exceeded the researchers' capacity to process the already vast amount of data,

[5] Leeds-Hurwitz (1987: 18) notes that an appendix on "the techniques of manipulating taped and filmed materials" had been planned, but was never written. Kendon rejects Williams and Feld's proposal that research filmmakers should produce "footage that shows the filmer's through-the-camera experience of the event he is filming" (Feld & Williams 1975: 31, quoted in Kendon 1979: 76).

but they would also have marred the presumed autonomy (purity?) of the filmic specimen.

When Myers and Bateson entered Doris' home, Myers immediately started to set up his Auricon 16mm camera on a tripod, facing the living room couch at a slight angle. This enabled him to cover most of the room when using the wide-angle setting of his zoom lens. Although the camera recorded a synchronous optical sound track, Myers also installed a magnetic tape recorder – its microphone, placed on the coffee table, is prominently visible in the film. Since the camera could only hold 100ft magazines, it had to be reloaded every 3½ minutes, resulting in temporal gaps in the film (which are diligently noted in the transcript). The tape recorder ran continuously so that a full audio transcript of the conversation between Doris and Bateson could be made. The researchers treated the gaps in the visual record as mere inconveniences. For the purpose of analysis, they broke down the film into "scenes", "incidents or sequences with beginnings and ends psychologically meaningful to the participants" (Bateson 1971a: 13). Typical titles were "pillow scene", "toy gun scene", "playmate scene", "little green ears scene", or "cigarette scene".

If the initial set-up of the camera suggests, in principle, the intent to obtain a straight record of as large a visual field as technically possible, Myers in practice constantly deviated from this approach. He often zoomed in on Doris and occasionally used pans. Neither the zooming nor the panning were random movements. Rather, Myers' camera appears to react to, and participate in, what is going on in the room. In one instance, panning movements were obviously triggered by Bateson's gaze and then reinforced by eye contact with the boy, Billy. This interaction started in what the researchers called the "second airplane scene", where Billy briefly plays with his toy plane. Most of the time, Myers keeps the camera on Doris and Bateson, who are seated on the sofa. When Billy leaves the frame, Bateson follows him with his gaze. Upon reentering, the camera similarly stays on the boy, who aimlessly ambles toward the terrace door on the left. Billy then turns around and from up close looks at Myers and his apparatus. The camera briefly follows him, but eventually settles on Doris and Bateson, allowing the boy to again leave the frame. Shortly after, Billy reappears once more, continuing to curiously stare into the camera. This time, the camera follows him all the way to the terrace door. When he exits through this door, Myers starts to pan back to Bateson and Doris just before the film roll runs out. Myers here is obviously picking up clues from his surroundings on where to point his camera. In one register, Bateson's looking at the boy could be described as functioning

somewhat like a stage direction, which is then confirmed by the subsequent eye contact between Myers and the boy.[6]

At other times, Myers' camera movements seem to be motivated more by the attempt to expand the field of vision of the camera lens and to connect the film's characters – Doris and Bateson on the sofa, Billy playing in another corner of the room. Trial and error is also evident. Myers follows Doris getting up to look after Billy, who has dashed out of the terrace door. The pan continues toward a window with the blinds down, blocking the view of Billy's outdoor activities; the camera then rapidly swings back to Bateson, alone on the sofa. Apparently noticing the error, Myers turns the camera off. When it is turned on again, Doris and Bateson are once more seated together on the sofa. Zooming in on Doris also appears to have been motivated by interactional clues. It usually occurs during phases when she displays heightened gestural activity or raises her voice to give her speech emotional stress. Sometimes the framing is so close that only her face and upper body are shown. In fact, for long stretches Doris is the only person in the frame, underlining her role as the main character of the film that came to be known under her (alias) name. The one roll of footage shot of her husband, Larry, differs from this material in that Larry is sitting opposite Bateson, his back turned toward the camera, his face only partially visible. He thereby somewhat eschews the role assigned to Doris as the subject of the inquiring gaze of the camera.

3 A Transitional Object

It has often been noted that the Doris film was not a perfect document for interaction analysis, but that it was used because it was readily available (e.g. Birdwhistell 1970: 228). The film's main problem, from the perspective of the researchers, was that Myers' camera too often focused on individual actors rather than the whole scene. This hampered their attempt, crucial to the project, of analyzing interaction between multiple agents rather than individual expressions. Bateson claimed that he and Myers made the Doris film before he "had any contact with micro-kinesics or micro-linguistic analysis" (Bateson 1971b: 2). This should, however, not be taken as evidence that he had not heard of the project developing at the CASBS. It is unlikely that Birdwhistell, whom Bateson may already have consulted regarding earlier films on family interaction, did not inform him about

[6] Bateson's looking at Billy rather than Doris is interpreted in McQuown's chapter "Collation" (chapter 9 of the NHI manuscript) as "evidence for occasional disorientation" (McQuown 1971: 23).

the meeting in February and the opportunity to participate in the project. Bateson also spoke with Fromm-Reichmann (Bateson et al. 1956: 264). As mentioned earlier, it seems probable that when Bateson made the films about Doris and her family he already had their potential usefulness for this project in mind.[7] What he did not and could not know were the methodological details of how the material would actually be analyzed. In fact, many microanalytic methods and transcription procedures were only developed over the course of the analysis of this film. Commenting on his methodological ignorance, Bateson stressed that he himself had not been aware at the time of the filming that his own "smallest movement[s] and intonation would later be examined" and hence "was not in a position to communicate any self-consciousness" concerning the methods of analysis (Bateson 1971c: 2). He is, in other words, implying that he behaved "naturally".

What, from the perspective of the researchers, appeared as flaws of the Doris film were, however, not merely the result of the lack of a clear-cut cinematic method. Myers did have a distinct method, but he filmed in a style that differed fundamentally from the one that would eventually develop out of the analysis of his film. This latter filming method, to which I will return, was characterized by the requirement to fully and unobtrusively cover whole bodies and complete movement "phrases". Myers, on the other hand, participated in the action. He and his camera joined in the interaction ritual between Doris, Bateson and Billy. But the film also reveals his self-consciousness, particularly when he occasionally turns off the camera on realizing a pointless or mistaken shot. There is an experimental, probing quality to Myers' attempt at capturing what is going on between the actors in the room. This approach, ultimately, left the researchers enough room to select material suited for their purpose, especially since they primarily intended to work with brief interaction sequences. Already during the initial viewings in July 1956 they homed in on two short segments, one 10 seconds long, the other 20 seconds long, that appeared particularly promising (Fromm-Reichmann, *My year's fellowship*: 9). The first one was the "pillow" scene from the beginning of the film; the longer one was the much discussed "cigarette" scene.

With Bateson and Doris in full frame for a relatively extended period of time, this scene provided a somewhat larger context on the dynamics of interaction between the two actors. The scene, roughly, unfolds like this: Doris picks up a cigarette from a pack lying on the coffee table, she taps it on the table, appears to tentatively raise it to her mouth, but then lowers the hand holding the unlit

[7] This was definitely the case when Bateson asked Doris (recorded, as mentioned above, in the follow-up film) for her consent to filming a therapy session with Kantor.

cigarette again to rest it on her thigh. All the while Bateson, somewhat hesitantly, fiddles with a book of matches. Eventually, Doris lifts her head, turns her face toward Bateson and determinedly puts the cigarette in her mouth. Bateson reacts by striking a match and lighting the cigarette. What the researchers began to see in this interaction over repeated film viewings was the "ritual dance-like lighting of Doris' cigarette" (McQuown 1971: 6). The closely coordinated movements of the two "appeared to mark a critical point in the interviewer-interviewee relationship" that highlighted "the dynamic aspect of their relationship" (McQuown 1971: 6). It was here "that Doris and Gregory achieved the greatest intimacy as evidenced by the adjustments required during the lighting of the cigarette" (McQuown 1971: 8). When Bateson finally makes a hand and arm movement in which he wields his own cigarette "as an orchestral baton", this brief moment of "male-female centered reciprocal" is terminated and the interviewer-interviewee relationship is re-established (McQuown 1971: 8).

From early on in the project, the researchers regarded this scene as hinting at the wider potential of their method. Viewing the segment in slow motion, they observed that Bateson, before eventually lighting Doris' cigarette, had briefly withdrawn the match. He had been unaware of this, but, as Frieda Fromm-Reichmann reports, retrospectively explained his behavior as having been motivated by "the feeling that [Doris] may withdraw and kick any moment, so how would anybody like to light her cigarette?" (Fromm-Reichmann, *My year's fellowship*: 10). Fromm-Reichmann cites this to demonstrate how microanalysis brings into awareness things that could not be known "from listening to a recording of the interview" or "just from observing the scene" (Fromm-Reichmann, *My year's fellowship*: 10). One may also perceive in this exchange a mutual awareness of the awkward situation created by the unwanted visit. One of the initial tasks of the project consisted in sifting the film for similar scenes of interaction that not only promised insights into the psychodynamics of the participants but that also unfolded more or less uninterrupted by camera actions. The researchers hoped that "the spot-intensive analysis" of such scenes could be extrapolated to establish "a topography of interaction for the whole interview" (McQuown 1971: 7). They also hoped to chart "self-regulatory mechanisms" – such as Bateson's use of the cigarette "as orchestral baton" to readjust the interactional relationship (McQuown 1971: 8).

But again, this was only feasible for segments, like the "pillow" and "airplane" scenes, that covered two, if not all three of the actors, for at least a few seconds. In this sense, the whole project hinged on and was, to some extent, shaped by Myers' camerawork. Not fully accommodated to the requirements of microanalytic interaction research, the Doris film formed a transitional object, marking a

turning point in approaches to research filming, but also a critical intersection between research film, emerging observational styles in documentary film and communication theory.[8] Before considering these intersections, a look at Bateson's previous psychiatric research films seems in order.[9] These films provide an often overlooked context for the Doris film, and they can help us understand its transitional role.

What, from the outset, made Bateson's earlier films, all produced between 1951 and 1955, unsuitable for use in the NHI was their lack of sound. At this time, Bateson did not have access to a sound-on-film camera. Instead, he and his then cinematographer Weldon Kees used simple spring-wound cameras with a limited shot length of about 20 seconds. Lack of synchronous sound was not a problem, since the researchers wanted to study nonverbal communication. (The use of an additional magnetic tape recorder for the interview with Doris, allowing for good quality speech-recording, hints at the possibility that this film responded, in part, to the needs of the group at the CASBS.) The earlier project was a direct precursor of Bateson's subsequent research on the role of family interaction patterns in the etiology of schizophrenia. Bateson worked with the psychiatrist Jurgen Ruesch at the Langley Porter Clinic in San Francisco, with whom he co-authored the influential book *Communication: The Social Matrix of Psychiatry* (1951). Starting in 1951, Bateson and Kees visited families which, presumably, had a history of psychiatric problems. They concentrated on recurring daily activities, especially feeding and bathing routines, as in *Hand-Mouth Coordination* (1951). This focus was prompted by the hypothesis, already in place by then, that psychological disturbances resulted from repeated instances of misdirected communication (Ruesch & Bateson 1951: 19). In contrast to the interview with Doris, Kees and Bateson went to great lengths to edit their footage. Some films, such as *Communication and Interaction in Three Families* (1952), had an added soundtrack with an

[8] I am here obviously using the term "transitional object" in a different sense from how it was introduced in children's psychology in the 1950s by the pediatrician Donald Winnicott. For Winnicott the term described an object that bridges a child's imagination with external reality. It should be noted, though, that Winnicott's work – and specifically his focus on the home as an important scene for psychological study – unfolded in a context not entirely unrelated to the NHI. And one might even see in the Doris film an object that, in the words of the film scholar Annette Kuhn (2010: 83), "inhabit[s] an intermediate position between fantasy and reality".

[9] It might be rewarding for further research to include in this discussion the extensive footage shot by Bateson during his field trip with Margaret Mead to Bali between 1936 and 1939. The overly didactic film series "Character Formation in Different Cultures", although based on footage shot in Bali and New Guinea by Bateson and Jane Belo, is not directly relevant here. The series was made independently by Mead (assisted by film editor Josef Bohmer) without Bateson's participation between 1951 and 1953 (Jacknis 1988: 172).

expository narration. Others, such as *A Problem Child Before and After Therapy* (1955), were silent.

Bateson and Ruesch used these films in academic talks and public lectures – like the one where Doris and her husband saw *Communication and Interaction*. The function of the films and the data gathered from them for the research project, on the other hand, is somewhat unclear. Bateson, in particular, often developed his arguments deductively from theoretical premises, while at the same time suggesting a (tenuous) link with empirical observations (Harries-Jones 1995: 87). He may, as I have suggested elsewhere, have used film and filmmaking as a material aid – or a model – for thinking through theoretical problems (Engelke 2014: 233). The films also allowed him to search for patterns and analogies, and to make comparisons, as stated in *Communication and Interaction*, between "each family's own language of action".[10] If the focus on family interaction overlapped with the Doris interview, Bateson, Kees and Ruesch at this time had neither the methodological skills nor the conceptual apparatus to systematically analyze communication behavior. Kees and Bateson made up for the lack of a systematic approach through aesthetic intuition, spending long hours on editing the research material to tease out interaction patterns. In Weldon Kees, Bateson had found a collaborator who brought his artistic sensibilities to the project while at the same time developing a profound understanding of communication theory.

An artistic polymath who had gained recognition as a poet and as an abstract expressionist painter, Kees quickly became a member of Ruesch and Bateson's research group, eventually co-authoring with Ruesch the influential photographic study *Nonverbal Communication: Notes on the Visual Perception of Human Relations* (1956). Kees not only sustained intense contacts with the San Francisco experimental film scene, but himself made, with equipment borrowed from the research project at the Langley Porter Clinic, the experimental film *Hotel Apex* (1952). Bateson's research on communication systems closely resonated with Kees' own artistic interests, evident in his filmmaking and poetry, in shifting signifiers, contradictory signals and glitches in communication (Engelke 2018: 405–407).

It is revealing that the earlier films reflexively addressed concerns downplayed in the more "scientifically rigorous" film on Doris. In films like *Hand-Mouth Coordination* (1951), Kees and Bateson almost obsessively dwelled on the problem of the cinematographer's inclusion in the scene, only fleetingly touched upon in

[10] Such patterns and analogies formed an important element in Bateson's theoretical work as outlined already in his article on "Experiments in Thinking about Observed Ethnological Material" (1941).

the analysis of the material on the Doris interview. Kees remarked, "Our picture is so damned documentary that the cameramen (Bateson and me) are always getting into the picture, partly to emphasize that it is a picture about people being photographed, and not something 'spontaneous', that just happened" (quoted in Reidel 2003: 240). If these films were conceived as research films, providing somewhat unspecified observational data, they were also edited in such a way as to illustrate ideas on feedback, circular causality, and metacommunication in interaction systems that included the filmmakers/observers. In *Communication and Interaction* we also get to see what it looked like when Bateson, tape recorder and lights in hand, arrived at the home of one of his subjects – duly recorded by Kees, who even throws in a few shaky shots from a first-person perspective of the stairs leading up to the house, evoking the researcher's expectant mood. We also get to see, in tracking shots taken from a car on a freeway, the sprawling suburbs where most of Bateson and Kees' subjects lived.[11]

After Bateson moved on to conduct research on schizophrenia at the Veterans Administration Hospital in Palo Alto, Kees and Ruesch continued making films such as *Children in Groups* (1954) and *Approaches and Leavetakings* (1955). The latter is a brilliant illustration of how Kees' aesthetic imagination could fathom, even if unsystematically and intuitively, intricacies of interactional behavior. Kees wittily makes use of serendipitous correspondences in everyday scenes, such as the encounter of a nun and a leftist "radical" on a busy San Francisco street; status-rituals on the campus of the University of California at Berkeley; the complex interactional dance between a newspaper vendor, a little girl and a pigeon; or the way an African-American sailor becomes conspicuously invisible to white passers-by. Kees, in this film, clearly went beyond the focus on white middle-class families characteristic for much psychiatric research at this time. There is, moreover, a sense of playfulness and self-irony in almost all of the earlier films that is notably absent from the seemingly unaltered footage presented in the Doris film. In this film, Bateson obviously aimed at a more straightforward recording. The Doris film also departs from earlier films on interaction in families in that it depicts an interview situation.[12]

Bateson had already worked extensively with audio recordings of psychiatric interviews in his collaboration with Ruesch (Ruesch & Bateson 1951: 12), even

[11]The significance of the suburban family for Bateson's research is comprehensively discussed in Geoghegan (2017). For an account of how microanalytic procedures contributed to reconfiguring conceptions of maternal labor, see Joice (2020).

[12]Several films by Bateson on "structured family interviews" are catalogued in both the Bateson Papers at UC Santa Cruz, Special Collections and Archives, and the Don D. Jackson Archive, University of Louisiana at Monroe. These films were made in 1959, that is, after the Doris film.

though this interest was not reflected in the films he made with Kees (which were made after the publication of *Communication: The Social Matrix of Psychiatry*). The general exploration of levels of communication in psychotherapy and of the role of nonverbal communication in family interaction in the work with Ruesch and Kees took on a more specific direction in Bateson's subsequent research on schizophrenia. At the core of the double bind hypothesis which Bateson developed lay the conception, already outlined in the earlier book with Ruesch, that communication unfolds on several levels of abstraction. Higher – metacommunicative – levels frame the lower levels, as when they indicate that an utterance is to be understood as metaphorical or that a certain kind of behavior is to be perceived as play. If, however, messages on different levels continuously falsified each other in sequences of habitualized behavior in vitally important relationships, such as between children and their parents, this would lead to the disturbances observed in schizophrenic communication. The hypothesis was "that sequences of this kind in the external experience of the patient are responsible for the inner conflicts of Logical Typing" (Bateson et al. 1956: 252).

While the double bind was ostensibly formulated in a psychiatric context, it simultaneously addressed broader communication theoretical issues. Importantly, the hypothesis stressed the crucial role of "nonverbal media of posture, gesture, facial expression, intonation, and the context" for the higher level framing of communication (Bateson et al. 1956: 252). Even though the role of empirical data in the formulation of the hypothesis remained ambiguous,[13] the concern with bodily and paralinguistic signals provided a rationale for producing and studying audio recordings as well as "taking sound motion pictures of mothers and disturbed, presumably preschizophrenic, children" (Bateson et al. 1956: 262). From both the audio material and the sound film footage the researchers hoped to obtain "a clearly evident record of the continuing, repetitive double binding which we hypothesize goes on steadily from infantile beginnings in the family situation of individuals who become schizophrenic" (Bateson et al. 1956: 262). In addition to family interaction, the study also reflected back on psychotherapy itself, its potential for creating double bind sequences and its form as "a context of multi-level communication, with exploration of the ambiguous lines between the literal and metaphoric, or reality and fantasy" (Bateson et al. 1956: 262). Again, audio recordings became important tools because, unlike written transcripts, they promised to preserve the intricacies of therapist-patient interaction:

[13] According to John Weakland, "the idea of a double bind came out of a very mixed background. We mixed in a little bit of direct contact with patients, a good deal of thinking about communication and its complexities and its different levels, Russell's Theory of Logical Types, and how things fitted together and what might lead to what. Lord knows it was a strange combination of observation and speculation" (quoted in Harries-Jones 1995: 136).

> [W]e prefer exact records since we believe that how a schizophrenic talks depends greatly on how another person talks to him; it is most difficult to estimate what was really occurring in a therapeutic interview if one has only a description of it, especially if the description is already in theoretical terms. (Bateson et al. 1956: 263)

Filming interviews, therapeutic or otherwise, would obviously have made perfect sense within the framework of Bateson's project on the etiology of schizophrenia. It is not clear, though, if Bateson made other interview films prior to the Doris film. He and Myers shot the Doris film shortly before "Toward a Theory of Schizophrenia" was submitted for publication in June 1956. While this makes it unlikely that any last-minute observations derived from the film entered into the article's argument, it underlines Bateson's concern, at this time, with the intersection of interviews, psychotherapy and the family constellation. This concern strongly resonated with the problems Frieda Fromm-Reichmann and her co-fellows at the CASBS sought to address. Finding out "what was really occurring in a therapeutic interview", after all, aptly summarizes the initial motivation for the NHI. Bateson may have viewed both projects as complementing each other. "Toward a Theory of Schizophrenia" concludes with an extensive description, based on a personal conversation with Fromm-Reichmann that had taken place shortly before, of how Fromm-Reichmann had intuitively created a "therapeutic bind" to reach a withdrawn schizophrenic patient (Bateson et al. 1956: 263–264). Echoing the conception of the NHI, the article looks forward to a time "when such strokes of genius will be well enough understood to be systematic and commonplace" (Bateson et al. 1956: 264).

The Doris film would contribute to this transition. Emerging, like the films Bateson made with Kees, in a research context where it provided general observational data that loosely intersected – by bringing into awareness patterns and analogies – with the formation of hypotheses, it turned into an object systematically scrutinized by linguists, kinesicists and psychologists. In effect, it became the keystone in these researchers' efforts at developing systematic procedures for describing the multi-channel process of interaction-communication. Bateson's ideas for using the Doris film may have differed from his earlier efforts from the outset, because it was made with different problems in mind. But, of course, he also worked with a different cinematographer.

As late as 1954, Bateson and Kees finished *The Nature of Play – Part 1: River Otters*, based on material shot in 1952/53 at the San Francisco Zoo. The film's observation "that animals other than man can exchange two orders of message" (Bateson & Kees 2017 [1954]: 112) became an important element in developing the

double bind hypothesis. The collaboration between Bateson and Kees came to an abrupt end when Kees, tragically, vanished in July 1955, his car parked on the Marin County side of the Golden Gate Bridge. Myers, Bateson's new cinematographer, came from a similar artistic background. The same age as Kees, he had not yet achieved the latter's artistic recognition, but was about to embark on a long and highly successful career as a documentary filmmaker. Myers had studied still photography at the California School of Fine Arts (CSFA), and had only recently turned to filmmaking when Bateson recruited him. Among his credentials was his work as a photographer at a mental hospital in Spokane, Washington, during the Second World War, where he took pictures of incoming patients. Unlike Kees, who, besides his involvement in experimental filmmaking, had started a documentary film company shortly before his disappearance, Myers was drawn more unambiguously to documentary formats. Around the time of his collaboration with Bateson, he was making a film on the photographer Ansel Adams, one of his teachers at CSFA. A few years later he made *Ask Me, Don't Tell Me* (1960), a pioneering portrait of a social work project for youth gangs from different racial backgrounds in San Francisco. His reliance in this film on techniques that came to be associated with direct cinema, cinéma vérité, and observational cinema is already evident in the Doris film – especially the free-roaming, spontaneous camerawork, reacting to what is going on in front of the camera. In addition, the use of synchronous sound in the Doris film, unusual in documentary filmmaking at this time, directly anticipated one of the most prominent features of the later approaches.

These correspondences were not accidental, but rather emerged from interrelated media practices and epistemologies in documentary filmmaking and social research. In the 1950s and 1960s, practices and technologies of research filming often intersected with those of the emerging direct cinema and cinéma vérité approaches. Such interrelations were particularly close in ethnographic film, but they extended to other fields (see MacDonald 2013). Long audiovisual sequences of uninterrupted interaction were appealing to both documentary filmmakers and social scientists because they gave "the impression of lived experience by being there as events happened" (Ruoff 1992: 218). Synchronized sound evoked an immediacy and spatio-temporal unity that distinguished this approach from the tradition of expository documentary with its reliance on didactic montage and authoritative narration. Much of this development was driven and financed by television, and films often focused on events with implicit storylines and "crisis structures" (Mamber 1974: 114).

Especially in ethnographic film, there were also instances more closely related to the concerns of the NHI. One might think of the "sequence films" Timothy

Asch and John Marshall started making in the early 1960s out of footage shot by Marshall over the course of several years among the Ju/'hoansi of the Kalahari Desert. Concentrated on single, more or less continuous "events", sequence films such as *A Group of Women* (1961) or *A Joking Relationship* (1962) aimed to present "unrehearsed social interaction" (Asch 1971: 41). In contrast to the rigorous procedures deployed by the NHI researchers, Marshall relied on his familiarity with the people he filmed as well as aesthetic techniques to convey an understanding of what was going on. He remarked: "Our thoughts and feelings are the invisible drama of our daily lives, and, in any film, angles and distances create some feelings and perceptions experienced by the audience. […] With my camera, I was trying to let the audience share what people were really thinking and feeling instead of projecting my interpretations on events" (Marshall 1993: 43).

Marshall's terms "thinking" and "feeling" are certainly at odds with the NHI group's cybernetically informed perspective on communication systems and observable interaction behavior. Still, he too – despite invoking an "invisible drama" – assumes that it is possible to capture (and convey) on film the intricacies of interaction behavior, and his observational method resembles the natural history approach. Ironically, Marshall sought to achieve this through precisely the kind of filmic participation that appeared as a major flaw in Myers' film. Marshall and Asch's concept of "sequence films" also shares aspects of what Michael Lempert has described as the "epistemological longing" for the "indexical real" that permeated the use of film and other audiovisual media in mid-20th century communication/interaction studies. For the psychiatrists, linguists and anthropologists involved in these studies, the use of recording technology was driven by "the hope that one could put one's finger on the nerve of unconscious interpersonal life". Ultimately unattainable, even by "the kaleidoscopics of sound-film", the wish was to move "toward the interpersonal real for which no media was a substitute" (Lempert 2019: 29). We may find reverberations of this epistemological longing, transposed to such notions as "immediacy" and "spontaneity", not only in ethnographic sequence films, but across a variety of practices and discourses of contemporaneous documentary film.

Writing about films made by Richard Leacock, Donn Allan Pennebaker, Robert Drew and Albert Maysles, the film critic and experimental filmmaker Jonas Mekas pointed out that they "caught scenes of real life with unprecedented authenticity, immediacy and truth" (Mekas 1960: 11). For Leacock himself, writing in the same issue of *Film Culture*, this new aesthetic of "spontaneity" held profound implications for the art and politics of cinema. It paved the way for what he termed "an uncontrolled cinema", allowing "the filmmaker as an observer and perhaps a participant" to capture "the essence of what takes place around him, selecting,

arranging but never controlling the event" (Leacock 1960: 25). "Uncontrolled" here also meant freedom from commercial sponsors (because of the relatively inexpensive means of production) as well as social conventions. Mekas hoped that this would turn film into an instrument of social revolution, ultimately overcoming the separation between art and life. To not control the filmed event, evidently, was also essential for the natural history method. Jacques Van Vlack, who worked as a cinematographer with Ray Birdwhistell at the Eastern Pennsylvania Psychiatric Institute, observed that "the process of viewing and selecting scenes will seem familiar to conventional film editors particularly those working in *cinéma vérité*" (Van Vlack 1966: 5). There were also concerns, similarly surfacing in discourse on direct cinema, about the research cinematographer unconsciously trying "to censor out disturbing sequences by momentarily diverting his camera" (Scheflen, *Principles of film recording*: 2). But we are skipping ahead. These concerns were, in effect, a *result* of working with the Doris film.

4 "Socially Organized Ways of Seeing"

"Warm up that Movi-ola, Ray – we expect *it* to do all the work for us!" (McQuown, *Letter to NHI contributors*). Norman McQuown knew perfectly well that the film viewer, normally used by film editors, would not relieve him and his colleagues from the mind-crushingly exhausting tasks of microanalytic transcription. What his joking invocation of the Moviola, in a February 1957 letter to the group members, hinted at was how strongly their research was entangled with technological apparatuses: film cameras, tape recorders, film viewers and customized projectors, film negatives and duplicate prints, audio tapes and – in a later phase of the project – a "B-roll" process for numbering individual film frames. This machinery was, as Seth Watter (2017: 52) has argued, not something external to the project, but it inscribed itself, through a "formalized chain of technical operations", into the understanding and conceptualization of the linguistic and kinesic aspects of interaction behavior. To handle the complexity contained in even a one-second segment of the film, the kinesic researcher started by repeatedly looking at isolated body regions. The findings were then, step-by-step, connected to each other: "For the goal was really to work one's way back from the atomized fragments to the total mise-en-scène – to so connect part to part, part to whole, whole to part, and one moment to the next, until the image became a great tapestry of human communication" (Watter 2017: 59).

The process of piecing together started even before the actual analysis began. This had to do with the film's sound. The film's low-quality optical soundtrack

was important during the initial process of "soaking", since it evoked an immediacy that allowed the researchers to immerse themselves in the filmed situation. But its quality was not sufficient for detailed analyses of linguistic and paralinguistic features. Using the separate magnetic tape-recording required Birdwhistell, Hockett and McQuown to carry out "the grueling process of synchronization" manually, frame by frame (Bateson 1971a: 19). Synchronization thus had a double meaning: automatically achieved in the original film by the camera's recording apparatus, it had then to be repeated manually in order to combine the image with the higher quality magnetic sound. Similar adjustments and reconfigurations of the film went on for some time over the course of the project. A crucial step was the addition of frame numbers in 1962. The procedure of adding frame numbers had been devised by Jacques D. Van Vlack, who had become Ray Birdwhistell's cinematographer in residence at the Eastern Pennsylvania Psychiatric Institute in Philadelphia in 1960. Van Vlack used a "B-roll" of clear leader, imprinted with consecutive numbers that was superimposed in the film lab onto the original footage. Facilitating references to individual frames and film segments, this procedure was later used by a number of researchers, including Paul Byers, Adam Kendon and Albert Scheflen. The frame numbers marked a further step in the development of microanalysis as a "a fully integrated phenomenon, with special procedures regulating the film object from its initial production to its classificatory status and, finally, to its use in a body of comparative research" (Watter 2017: 52). Modifications such as the frame numbers and the manual synchronization of the magnetic sound track served to turn the Doris film into an object of "professional vision", as Charles Goodwin has termed it. They integrated the film into "socially organized ways of seeing and understanding events that are answerable to the distinctive interests of a particular social group" (Goodwin 1994: 606).

Goodwin's practice theoretical perspective on professional vision echoes, without explicitly referencing this, procedures of body motion analysis developed in the NHI and subsequent projects inspired by it: "To analyze how practice is organized as a temporally unfolding process encompassing both human interaction and situated tool use, I require as data records that preserve not only sequences of talk but also body movements of the participants and the phenomena to which they are attending as they use relevant representations" (Goodwin 1994: 607). To conduct his studies, Goodwin used the audiovisual medium of videotape. Similar to Goodwin's approach, part of the procedures of the NHI group focused on reflexively reconfiguring its own body of knowledge. If the interview Bateson conducted with Doris was not in itself a psychiatric interview, the analysis was nevertheless intended to lay the groundwork for understanding therapeu-

tic interaction. Of course, more general patterns of interaction/communication behavior were also a concern; and for some researchers, such as Bateson and Birdwhistell, they were the primary concern. Much of the research influenced by the NHI focused directly on reflexive assessments of professional procedures, such as Albert Scheflen's work on the communicational structure of a psychotherapy session (1973) or Paul Byers and Margaret Mead's study of *The Small Conference* (1968).

Goodwin's specific focus on professional vision allows us to go one step further and to consider what lay outside the demarcations established by the researcher's practices, by bringing into view the "asymmetry in interaction" these practices established (Goodwin 1994: 626). Specifically, it affords us with a more comprehensive perspective on why Doris' anger (as a behavioral phenomenon, not an internal state) was excluded from the analysis. Her misgivings about being filmed on that afternoon were, as I have suggested earlier, certainly part of the filming situation/context and, by extension, also of the procedures of knowledge production forming around the filmic record of her encounter with Bateson. But her perspective carried no weight for the project, because it did not fall into the category of professional vision. She was, in effect, the subject to be scrutinized – Bateson, although also exposed to the camera, less so.[14] Diligently noted in the transcript, Bateson continuously asserted his professional role, as when he brandished his cigarette like a conducting baton to re-establish the interviewer-interviewee relationship.

It is worth noticing that Kees' artistic rendering of interaction patterns in *Approaches and Leavetakings*, for all its sarcasm, evokes a much more inclusive vision. In a sense, his artistic approach also depended on "socially organized ways of seeing". But not only was such aesthetic practice more open-ended, it simultaneously challenged those established ways of seeing, constantly rearranging the figure-ground relationships of perception and awareness. What we are looking at, though, is a complicated situation – a situation that cannot be understood by resorting to simple art versus science dichotomies. An aesthetic undertow, "a motor of aesthetics with a dividend of pleasure" (Watter 2017: 61), runs through the specific practices and protocols of professional vision developed in the work of the NHI group with the Doris film. We have already noted that the film, by restricting the number of scenes suitable for interaction research, contributed to shaping the researcher's perspective. One could speculate that Myers' camerawork, though detrimental to microanalytic procedures, helped to intuitively

[14] Bateson, however, reports "moments of considerable pain when the others were interpreting my actions, and I was forced to see those actions on the screen" (Bateson 1958: 8).

evoke the sense, in the group's joint film viewings, that the film was indeed a record of spontaneously occurring social behavior, confirming its status as a valid document. Heather Love has pointed out that, choosing an epigraph from Rainer Maria Rilke's "Sonette an Orpheus" for his introduction, Bateson suggests that "the division between scientific and aesthetic activity is not absolute" (Love 2013: 429).

It is from this perspective that Love reclaims "surface reading", as facilitated by the natural history approach, for literary studies and, more broadly, the humanities. She concludes that "an expanded definition of reading might return the text to the context of communication as a whole and to make visible the fact that history includes what happened, thought includes thinking, and culture includes behavior. […S]uch practices might help us reframe reading as a social science, one that along with more traditional social scientific methods can contribute to the project of showing 'what the real world is really like'" (Love 2013: 430). The Doris film, as we can now see, was already enmeshed in a nexus that connected procedures of professional vision and aesthetic techniques. Besides occupying a place in both the development of microanalysis and direct cinema, it also formed a critical node for emerging techniques of research filming, archival policies, and filmic epistemologies. Notably, in the early 1970s it also produced reverberations far beyond its initial context of social and psychiatric research in aesthetic and discursive practices of artistic experimental films.

Drawing directly on the experience of working with the Doris film, Ray Birdwhistell and Jacques Van Vlack developed elaborate methods for filming interaction behavior at the Eastern Pennsylvania Psychiatric Institute (EPPI) in Philadelphia. Van Vlack, who had been hired as cinematographer in residence at the EPPI in 1960, devised the already mentioned B-roll procedure for adding frame numbers to research films. Collaborating with Birdwhistell, he also installed a film studio at EPPI that was specifically designed to record interview situations. Outfitted with lights, microphones and a "living room" set, it allowed the cinematographer to leave the room after having started the camera, which was installed on a table, and thereby to presumably minimize his influence on the filmed interaction. Avoiding any camera action, such as the pans and zooms Myers had used in the Doris film, it sought to capture whole people and whole interaction events in long camera takes; it thus "made a virtue of the most boring cinematography possible" (Davis 2001: 44). While he was engaged in the – at this time well-funded – project of creating filmic "specimens" of interaction behavior, Van Vlack also worried about the preservation of these records. In a paper given to the Society of Motion Picture and Television Engineers in 1963, he addressed the difficulty of categorizing what he called "data films". Uncomfortably squeezed in

between "terms such as 'documentary,' 'educational' and even 'experimental'", he perceived the danger that these unedited "film clips" might be lost to film history. Preventing this potential loss was all the more urgent since "[w]e cannot hope to know with any accuracy what data in our films will be important to the world of tomorrow" (Van Vlack 1963: 2).

Van Vlack's assertion that these films "do contain a wealth of unexplored information" (1963: 2) chimed in with efforts undertaken at the same time by the anthropologist E. Richard Sorenson and the neurophysiologist Carlton Gajdusek to establish an archive of research films at the National Institute of Neurological Diseases and Blindness, NIH, in Bethesda, Maryland.[15] Like Van Vlack, they viewed films of "non-recurring phenomena" as "preserving data", which they sought to make permanently accessible through carefully outlined procedures for filmmaking, editing, annotation and archiving. If the focus on "the programming of the human nervous system of unique subjects" aligned their archival project with programs in ethnographic film that sought to preserve records of presumably "disappearing cultures" (Sorenson & Gajdusek 1963: 112), it also echoed the cybernetic and systems theoretical foundations of the NHI. The interrelations between the two projects were even more specific, as when Sorenson and Gajdusek supported Allison Jablonko's ethnographic filmmaking and research on body motion behavior among the Maring of Papua New Guinea in 1963. In preparing for her fieldwork, Jablonko took classes with Birdwhistell and Van Vlack, and her research footage was eventually placed in Sorenson and Gajdusek's archive (Jablonko 1968: xiii). Protocols and practices developed in the NHI were integrated into and shaped the discourse of the emerging discipline of visual anthropology. One might think of Alan Lomax's research on choreometrics, or Margaret Mead's contributions to debates on ethnographic research film, where she references kinesics and choreometrics as well as Gregory Bateson's filmic studies of interpersonal behavior (Mead 1971: 34).

This direction in visual anthropology was soon to be contested as too scientistic by observational filmmakers, such as David MacDougall, who sought to make narrative ethnographic documentaries in an interactive film style that echoed – even if unintentionally – Myers' probing camerawork in the Doris film. Some experimental filmmakers, on the other hand, were more receptive to the communication theoretical conceptions and microanalytic procedures developed by the NHI researchers. This was particularly true of Hollis Frampton and Stan Brakhage, who, in the early 1970s, both, in different but interrelated ways,

[15]The National Institute of Neurological Diseases and Blindness was renamed the National Institute of Neurological Disorders and Stroke in 1988.

saw in microanalysis and body motion interaction research something that contributed to their understanding of film aesthetics. Their interest was most likely sparked by the publication of Birdwhistell's book *Kinesics and Context* (1970) and Birdwhistell and Jacques D. Van Vlack's film *Microcultural Incidents in Ten Zoos* (1971). The film was shown widely outside the circles of interaction researchers (in 1976 it even screened at the Berlinale Film Festival). In a general way, the use of slow motion, repetition and freeze frames in this film, emulating the practice of microanalytic film viewing, resonated with techniques used by many new formal/structural filmmakers to probe and reflect on elements of cinematic motion, materiality and illusionism. Brakhage's and Frampton's interest, however, was motivated by more specific problems of filmic temporality, the photographic basis of film images, and questions of how film elucidated processes of perception, awareness and consciousness. The aesthetic undertow of filmic research procedures and theoretical concerns of the NHI here intersected with and was activated in artistic reflections on the historical, material and perceptual conditions of the film medium.

Frampton explicitly referred to this overlap during the discussion period after a screening of his films at the Annenberg School of Communication in Philadelphia in March 1972. He found himself in the curious position of having to defend Ray Birdwhistell, who was not present, against the accusation, made by an audience member, that kinesics was "not scientific". Shortly before, Frampton had cited Birdwhistell to counter simplistic conceptions of communication (and artistic meaning) as a one-way process. Birdwhistell, Frampton claims, had shown that "we are, all of us, communicating all of the time, non-stop on fifty different channels, and we are receiving, sending and receiving in all directions, all the time" (Frampton, *Annenberg School for Communication*). A bit later, an interlocutor challenged this approach as "not belonging to science". Frampton responded that "[Birdwhistell] has organized his body of knowledge in such a way that it has been useful to me in my search for further knowledge" (Frampton, *Annenberg School for Communication*). In a letter to Stan Brakhage written a few months later, Frampton explained that he had discovered "a crosslight in Ray Birdwhistell's stuff", illuminating "a large portion of the whole snapshot 'problem'" (Frampton, *Letter to Stan Brakhage, September 2, 1972*).

Brakhage and Frampton had begun to correspond in late 1971, when Brakhage enthusiastically wrote Frampton in response to having seen the latter's film *Zorns Lemma* (1970). Often perceived by critics as embodying contrasting approaches to filmmaking (with Brakhage representing subjective vision and Frampton conceptual filmmaking), the two filmmakers engaged in a long-lasting and productive exchange. What Frampton described as the "snapshot 'problem'" originated

in their joint discussion of the photographic basis of the filmic image. Early in their exchange, Brakhage had asked Frampton for his thoughts on "Document" (Brakhage, *Letter to Hollis Frampton, November 22, 1971*).[16] Prompted by the experience of filming *Eyes* (1971), *Deus Ex* (1971) and the yet unfinished *The Act of Seeing with one's own eyes* (1971) in Pittsburgh, he had turned away from the visual metaphors, evoked through techniques of editing and superimposition, characteristic of his earlier films. His new "observational films" (Kase 2012: 2) depicted the work of the Pittsburgh police, medical procedures in a local hospital, and autopsies in the Allegheny County morgue. Brakhage conceived them as "a gathering of images […] which refers to its source" (Brakhage, *Letter to Hollis Frampton, November 22*). He contrasted his effort "to make all reference terminate in the film" (Brakhage, *Letter to Hollis Frampton, November 22*) with traditional documentaries which sought to steer their viewers toward ideologically preconceived conclusions.

Brakhage's conception of film as "Document", his striving for "indexical directness" (Kase 2012: 6), evidently resounded with the way the NHI researchers conceived and constructed the Doris film as a document of interaction behavior, and also the natural history approach with its attempt to avoid theoretical preconceptions. At first, Brakhage seems to have been unaware of these similarities. Shortly after, though, he acquired the comprehensive collection of Ray Birdwhistell's published and unpublished writings on body motion interaction that is today archived in his papers at the University of Colorado at Boulder.[17] These writings (perhaps suggested to him by Frampton) helped him to articulate more precisely what was at stake in the new direction his work had taken and also how to integrate it with his broader artistic goals. In a lecture on *Das Cabinet des Dr. Caligari* (1920) from October 1972, Brakhage cited Birdwhistell to explain how silent film highlighted and depended on "the particularities of people's motion and speech", revealing how bodily gestures were interrelated with cinematic technology (Brakhage, *Lecture on Caligari*). Filmic meaning, and linguistic meaning, too, should be viewed as emanating, like breath, from bodily, "cellular" activity (Brakhage, *Lecture on Caligari*).

This was as much about his own work as it was about the historical film he was ostensibly speaking about. Most of Brakhage's films, including the films from the Pittsburgh trilogy, were intentionally silent to avoid distraction from their visual structure. And from the late 1950s on, he had sought to evoke in his filmmaking

[16] For a discussion of Brakhage's use of "Document", see Nesthus (2001).

[17] Wendy Leeds-Hurwitz has suggested that Birdwhistell himself might have sent Brakhage a selection of his papers upon the latter's request, as he often did with academic colleagues (email to the author, October 15, 2020).

an embodied vision. The document films, and especially *The Act of Seeing with one's own eyes* with its viscerally shocking images of the dissection of dead bodies, reflected on these aspects to reveal, as Carlos Kase observes, "the fault lines between human bodies and the technologies that circumscribe them in art" (Kase 2012: 13). Viewed as "a delicate, nuanced work about transcription and observation" (Kase 2012: 12), *The Act of Seeing* simultaneously elucidates a blind spot inscribed in the analytic procedures of the NHI: the way in which the professional vision of the researchers was shaped by the cinematic dispositif which mediated their encounter with – and constituted a document of – the "reality" of interaction behavior.

Hollis Frampton picked up the "Document" thread, but he developed it in a somewhat different direction. At this time, he was working on his *Hapax Legomena* film series and was simultaneously embarking on the monumental *Magellan* project that would occupy him for the next decade and a half until his untimely death in 1984. He was also deeply engaged in writing a series of articles on film, still photography, history, art, and consciousness. Across these texts he unfolded a dense web of reflections on the connections between these areas.[18] One aspect that is particularly relevant for our present discussion is his assumption, shared with Brakhage, that photographic images presented "a virtually perfect *continuum*" of sensory data (Frampton 1971: 34). Their "ultimate structure seems to elude us at the same rate as the ultimate structure of any other natural object" (Frampton 1971: 34). Even though Frampton stressed the mediated nature of photographic "illusions" (Frampton 1971: 34), we may perceive in this an echo of the interaction researchers' longing for the "indexical real" (Lempert 2019: 29). Commenting on *The Act of Seeing with one's own eyes*, Frampton praised Brakhage for his decision "to *stand aside*", to let the camera do its work as seemingly "perfect Eidetic Witness", in order "to see, with your own eyes, what coherence might arise within a universe for which you could decree only the boundaries" (Frampton, *Letter to Stan Brakhage, January 26*).

Themselves the product of the mechanistic world view of 19th century science, and always in danger of reinforcing it, photographic images simultaneously promised to become "the subversive restorer of *contextual* knowledge seemingly coterminous with the whole sensible world" (Frampton 1971: 34).[19] This also un-

[18] For a comprehensive discussion of Frampton's theoretical articles and their complex interrelations among themselves and with Frampton's films, see Eisenstein (2016).

[19] It is noteworthy that Frampton's view of the interrelations between film images and processes of consciousness overlaps with Bateson's epistemological claim "that the laws and processes of our perception are a bridge which joins us inseparably to that which we perceive, – a bridge which unites subject and object" (Bateson 1957: 1).

dermined mechanistic conceptions of the relationship between still photography and film, bringing to the fore the problem of how "snapshots" as well as single filmic frames were cut from and referred back to a spatio-temporal continuum. If film resurrected "bodies in space from their dismembered trajectories" (Frampton 1971: 34), it released, rather than just setting still images in motion, the latent movement and the microtemporalities always already inscribed in still photographs.[20] These technological, perceptual, and historical intersections between film and still photography formed a persistent theme of Frampton's films, most notably in *(nostalgia)* (1971). The film links – through the interplay of images of still photographs being burned on a hot plate with a quasi-autobiographical (and temporally offset) narration – questions of stillness and motion with reflections on memory and entropy. *Critical Mass* (1971), on the other hand, foreshadowed the intersection of Frampton's aesthetic explorations with microanalytic procedures: a heated argument between a young woman and a young man is broken up into brief fragments that are partially repeated, producing a stuttering pulse that highlights, similar to a microanalytic viewing, the details of the body motion communication process going on between the actors.

It was these aesthetic and media-theoretical concerns with time experience, filmic movement and still photography that drew Frampton to the research procedures and theoretical conceptions of body motion research. In four consecutive articles (Frampton 1972e,b; 1973; 1974), he approached questions of image technology, time consciousness and historical time from the perspective of the history of photography, retracing, in a sense, his own turn in the mid-1960s from photography to film. But the concern with still photography was also inspired by microanalytic film viewing. In a letter to Brakhage (the same in which he had mentioned Birdwhistell in connection with the "snapshot 'problem'") he expressed the hope that "these pieces on still photography […] will nourish the attentions [sic] of other film-makers, from the admittedly nominal & (sometimes fruitfully) arbitrary point of view that one can learn something about the nature of images one frame at a time" (Frampton, *Letter to Stan Brakhage, September 2, 1972*).

Frampton expanded this idea in his article "Incisions in History/Segments of Eternity" (1974), where he discussed how Ray Birdwhistell had detected in a film about a mother and her baby, through careful "frame-by-frame analysis", an instance of assumedly double bind producing interaction.[21] What intrigued Frampton was the chasm between the extremely short interaction sequence, merely

[20]For a detailed discussion of Frampton's concern with microtemporalities, see Hansen (2011: 61–63.

[21]The text discussed is "The Age of a Baby" (Birdwhistell 1970: 11–23).

one sixth of a second, or four film frames, and the huge amount of time needed for "rigorous examination" – "hundred hours per running second of real time" (Frampton 1974: 48). Our lived experience, more unsettling even, emerged from "thousands of such brief, wordless exchanges" (Frampton 1974: 48). There was "a monster in hiding here" which "has cunningly concealed itself in time" (Frampton 1974: 48).[22] If the NHI researchers had used film as a tool to bring to awareness and to systematically describe the details of interaction behavior, microanalytic viewing procedures, for Frampton, illuminated two interrelated aspects that were central to his understanding of film and his aesthetic practice: the threshold between still and moving images, and the intersection, "in the reaches of temporality" (Frampton 1974: 48), of the technological gaze of the camera with human perception and time consciousness.

What these examples demonstrate is how the Doris film and the procedures of professional vision developed in working with it and on it were enmeshed in a broader matrix of film historical and theoretical practices. We have seen how this matrix contributed to shaping this specific form of professional vision, and how this vision, in turn, reflected back on emerging film practices and aesthetic discourses. The Doris film is also an example of the asymmetrical power relations inscribed in professional vision. This vision, though, was not monolithic: it could be adopted and exploded, for instance, by inclusion in artistic film practices. Looking into these twisted relationships opens up a media archaeological perspective that makes visible interlocking epistemological and aesthetic practices across a broad film historical field that includes intersections between "useful film", archiving practices, film art, and what has long been understood as the proper domain of cinema, theatrical feature films. This may also afford us with a new look at the sociological inflection as well as the entanglement in filmmaking practices of film theory and media studies.

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[22] Hansen (2011: 61–63) discusses this passage from Frampton in a media historical/theoretical context.

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