

# Visual Anthropology

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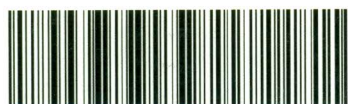
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*Cover:* Surging, flowing, glistening, patterned—the visual poetics of water enact an aesthetic of revelation and concealment (Photo © Jennifer Deger).



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# Embodiment of the Gaze: Vision, Planning, and Weaving between Filmic Ethnography and Cultural Technology

Felice Tiragallo

The purpose of this paper is to discuss problems concerning the observation and cinematographic description of technical practices. Which meaning should we attribute today to this topic within the present framework of the ethno-anthropological disciplines? Starting from an experience of observation and video documentation of traditional weaving in Sardinia, I propose to define a visual approach based on the principles of cultural technology in some of its recent developments.

There is a common field of dialogue between visual anthropology, cultural studies on vision, and material culture. Research prospects on the embodiment of technical knowledge have recently provided new opportunities for development in cultural technology studies, as set up by André Leroi-Gourhan. This paved the way for further inquiries on the relations between physiological and cultural facts, in which the theory and the practice of vision play a special role.

Nowadays we can explain the connection between seeing and doing by appealing to the logic of mixed genres, according to which to question oneself about the vision and the skills of the "other" necessarily implies a question about the vision and the skills of the ethnographer, especially when he or she is equipped with devices for visual recording. Besides, this question urges us to build hybrid languages capable of expressing the wealth and variety of the flows of visual communication in modernity.

One of the frontiers of visual anthropology arises out of comparison between the gazes of the social agents and the gazes of those who look at them. The reciprocity of this vision and the opportunity of interpreting it as a competitive and redistributive game, in its emotional and fictitious aspects, lead us to assess carefully the links between "skilled visions" [Grasseni 2006], filming, and the reflection on the outcome of these actions, which are only partly aware and directed.

In 1928, the Dutch film documentarist Joris Ivens was shooting a documentary on the Cyclopean works involved in the reclamation of an inlet in the Zuiderzee basin in the north of the Netherlands. The director was a young, left-wing

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militant who worked with the support of the trade unions; his aesthetic formation was rooted in avant-garde experimentalism and the experience of the Soviet cinema of Pudovkin, Eisenstein, Vertov, and others. While filming the operations of laying the stone foundations of a large outer breakwater, he came up against a problem he had not yet considered clearly. He explained this to a Soviet worker who saw the film [*Zuiderzee*, 1930–33] with him a few years later in the following terms:

I couldn't find the right camera angle from which to shoot this work with the stones. So I started to observe the work to see how it began, how it ended, its rhythm, but I still couldn't find the right shooting angle. So then I began to move the basalt blocks, since I thought it was necessary and valuable for me to get the exact sensation of this work, and I discovered what I wanted to know. . . . I discovered that most of the weight is on the shoulder and jaw muscles. So the shooting had to emphasize those areas, because they characterized the work. At that point I found the position for the camera, its angle and the composition of the frames; everything centred on those muscles and the jaw. They were both the focal points of the action. It was the reality that determined the photography and not my aesthetic effort to reach a balance between light and line. . . . My interlocutor was satisfied. "Good," he said, "Very good." [Ivens 1979: 42–43, trans.]

With his approval, the Soviet worker declared that he recognized his own way of imagining that technical action in the way the sequence was filmed. He thus had projected into the film a special skill of his own, not only that of knowing how to do the work but also of knowing how to see his own work. His expectation of recognition was satisfied thanks to a process of identification: through direct experience, the observer-director recognized the points on which to concentrate his efforts on the matter and the muscles involved; he understood the dynamics of the efforts to be made and the points of equilibrium to be reached. The shots reveal the work of shoulders and jaw, the rapidity of the gesture by which the body placed the basalt block on the back and remained in balance while carrying it. Thus in a certain way filmmaker and worker both participated in the same technical experience, and this produced a new effect on the level of human relations between observer and the observed. Ivens "won in the field" his right to become part of a common skilled gaze: he became part of the ranks of those who "know" (who are able to see) the toil of workers and implicitly share its value and sense.

The synesthetic analogy between the work and his way of filming it, between the gestures of the worker and the physicality of the action of following them, carried out by placing the camera in fixed positions, moving it and taking panoramic shots, thus shows that the technical sequence and the shot film sequence are based on similar space-time relationships. Also the latter, as well as the former, carries the sign of corporeality, of involvement in a complex of perceptive, muscular, and mnemonic acts.

The problem to be posed is whether or not this analogy can be used to good effect in gaining knowledge on productive know-how, the capacity to plan, and the processes of their embodiment, factors to which the study of material culture attaches fundamental importance. The path indicated by Ivens shows the

need to address the questions of the ways in which ethnographic observation can grasp and represent both the corporeality and the materiality of productive behaviors. In other words, one needs to grasp the relationship between these gestures and the planning stage preceding them, as well as the network of relationships of persons and gazes among which they themselves live.

#### WORKING THE LOOM, SEEING THE PLAN

In Sardinia, weaving occupies an important position among traditional productive activities. Even today it is the one that most clearly highlights the features of a peculiar aesthetic taste that manifests itself in the island's quality handicrafts [Caoci 2005]. Between the 19th century and the beginning of the 20th, in its rural areas the island went from a generalized domestic form of weaving as a way to meet the needs of the family to a more rarefied production divided into different "artistic" levels. In the division of labor, weaving created two different profiles of feminine activity, one strictly domestic and the other market-oriented. In the historical Gerrei region in the southeast of the island, an area of hills sheltered by the mountains of the Ogliastra region and bordering on the cereal-growing plains of the Campidano region, at the beginning of the 19th century Vittorio Angius had already drawn a distinction between weavers who produced for the family and those who sold their products on a small scale in their own towns and those nearby. In all, he counted 575 weavers [Casalis 1833] in the Gerrei region, a density greater than that found in the adjoining Sarrabus region. Up to the 1950s, the activity of weavers in this area "was not yet a single-partnership or a sure source of revenue, but was a resource that could be turned to in case of need, making it possible to avoid working in the fields, sharecropping or being someone's servant" [Da Re 1990: 76, trans.].

The following years saw the emergence of a productive model in which weaving turned into a prevalently domestic task, with occasional sales to members of the family, relatives and friends. Carpets and bedspreads were woven for daughters' or granddaughters' dowries, and sometimes objects were made on commission in view of the tourist season. In these works, the traditional techniques were those of weaving with a raised-grain technique known as *a priali*, *a pappus*, and *a pibionis* [Carta Mantiglia 1987: 51ff.].<sup>1</sup> A partial revival began with the promotion by the autonomous regional government of "artistic" weaving "with totally different meanings" [Da Re 1990: 76, trans.]. The wool employed no longer had natural colors: the lively colors used in previous decades were totally abandoned in favor of a "modern" palette composed of more subdued shades, in line with the tastes of the younger generations. Today in the Gerrei region, the mechanism of intergenerational transmission of weaving skills has been lost [Da Re 1990: 81].

*Ordire. Le fasi preparatorie della tessitura ad Armungia (Warping: the preparatory phase of weaving at Armungia)* is a video film made in 1999 by Gabriella Da Re and the writer as part of a series of four ethnographic documentaries [see the Filmography] on the material culture of Armungia, a small town in the Gerrei region that was characterized up to the 1950s by subsistence cereal growing

and the breeding of livestock in the wild. In *Ordire* we find a narration of the work of the weavers, Giovanna S. and Nennetta C., blended into other aspects of their personalities: They were old-time companions and custodians of the home of Emilio Lussu, Joyce Salvadori Lussu, and their son, Giovanni.<sup>2</sup>

*We see Giovanna and Nennetta in the living room of the Lussu home, sitting in front of a monitor. Before watching the film featuring Giovanna, she says she has always had a passion for weaving. "... Those who take a liking to the loom are repaid by it. ... when you finish a pattern in the heddle you try to make another one, and the more you do the happier you are—you are fascinated and attracted by it ... was fascinated by it. ... In fact, I have this recollection: I went to Rome for the first congress for the reunification of sharecroppers and farmers and in the berth in the ship's cabin I saw the pattern of the springs of the bed. It stayed in my mind and I reproduced it in a carpet."*

*Odrìri (Warp [Figure 1]). Giovanna and Nennetta begin unwinding the four cotton threads from the balls and tie them on five pegs divided into two groups. Giovanna, who is watching herself in the monitor, explains that the first group of pegs is placed on two different planes so that the threads can be crossed and then divided: it's essential that the threads don't get tangled and can be counted easily. From time to time Giovanna stops unwinding the thread and counts the ones already in place near a peg.*

*Imboddìai (winding the warp on the loom [Figure 2]). We can see a room with a horizontal loom. The ends of the warp threads go under and then over the front roller and are tied along the board of the back roller, thanks to an iron pin that holds the threads in a groove running along the length of the roller. At this point *su serradori* (the*



Figure 1 *Odrìri*: Warping.



Figure 2 *Imboddiai*: Winding the warp onto the loom.

winder), that is, the lever at the end of the back beam that allows it to turn on its axis, comes into play. While Nennetta keeps the warp threads under tension, they are put in order on the rollers, making sure they do not get tangled and are spaced regularly with the help of two joined sticks placed between the bundles of threads. The action continues until the entire warp is wound on the back beam.

*Arremissi* (passing the threads through the heddles [Figure 3]). "This work," Giovanna explains, "consists of getting the counted and divided threads to the heddles to produce the patterns." The final end of the warp threads is now untied and fixed on the front roller. The heddles appear: they are harnesses, each made up of two canes the same length as the width of the loom, connected to each other by numerous series of cotton chains. Depending on the pattern to be produced, the warp threads are threaded through the central link of each chain. The upper cane of each harness lies on the two upper cross-beams of the loom. A helper hands Giovanna the end of each warp thread. The helper puts the thread through the chain of a certain heddle and Giovanna, on the other side, grasps it, pulls it, and ties it to the roller once again.<sup>3</sup> Giovanna warns that the loom is still not ready for use: "... now each thread is put through the comb. You have to tie little knots. ... Ah, now the work gets even harder. You have to thread the weft and make sure it's working right. You weave some flowers to test it."

Now Giovanna explains how she created her patterns and shows the notebook where she records her different projects. Each page contains the series of heddles to be used for that specific pattern and notes, on each line representing them, the number in order of the warp threads that must be put through them. "Is passing the threads through the heddles



Figure 3 Arremissi: Putting the yarns on the heddle.

*the most difficult operation?" Giovanna replies, "...everything is complicated. When you know what you're doing nothing is complicated, when you don't know what you're doing everything is complicated." The end.*

It was the shooting of this video that brought out a host of questions about the presence in these technical skills of important quantities of visual skill, and questions connected with two orders of issue. The first concerns the features, dynamics, and ways of thinking in which visual skills (in the sense identified by Ingold [2000a], see below) are not only visual, of the weavers and their relationship to the symbolized and planning aspects of their actions. The second concerns the kind of access to these skills that is provided by observation with a camera.

This way of approaching the issue emerged by questioning the film. The deferred and repeated observation of a filmed artifact thus led to an attempt at a critical and contextualized discussion of vision. The film also revealed the two-fold, inseparable nature of plan and performance, the result of a previous elaboration, but also *de facto* "in progress" and not foreseeable in all its final results. As a consequence, the ever partial nature of control over the visible [de France 1979: 158–160] thus makes the ethnographic film *per se* the place for the tracing of implicit and marginal visual clues, of cross-references and implications. And it evokes the need for a thoughtful, *a posteriori* discussion.

In this perspective, filtered through the denotative capacity of the film, Giovanna's visual skill does not appear as separated from the other sensorial skills that go into weaving. The film shows Giovanna as a body operating in a visual world full of objects and surfaces, which are for her the subject of her

technical actions. In such a context, the perceptions of her eyes are added to a complex of other sensorial stimuli (hearing, touch, and smell—the latter two inaccessible to film), which in turn combine with the sensorial memory and the whole of spatial references belonging to the visual world [Marazzi 2002: 30]. It is a world in which the things that make it up have a meaning for the person acting in it. Giovanna's visual skill does not live in the weaving as a skill *per se*: all the spaces and objects involved in her actions (the courtyard and wall of the Lussu home, the spools of cotton thread to unwind, the holm-oak loom to be prepared, the threads to be passed through the heddles, and so on) are elements in a corpus of experiences and they live in her, taken from the immediate visual perception, which, if anything, confirms this wealth of past experience.

We can thus hypothesize the acting of a "model of perception by which visual experience intertwines with that of the other senses in a multisensorial environment" [Grasseni 2003: 139, trans.], in a field in which technical and perceptive skills (counting the warp threads and putting them in order, laying out the pattern in the heddles) come together with the corporeal capabilities to bring together the rhythms and the recollections (the time of passage between the pegs of the warping mill, the winding rhythms, synchronization of the work around the loom) with the resources of her particular environment and relations with the members of her community and other expert communities. Thus in Giovanna the visual skill is practical knowledge that acquires meaning and is recognized in a precise perceptive horizon, that of practices and locality.<sup>4</sup>

This knowledge of the gaze takes on sharper features when we take into consideration the relationship between plan and action. Giovanna sees the pattern as a modality that can be extrapolated from the real (like the bedsprings on the ferry) or as the possible variation on a model produced in the past. But these patterns do not live simply in an impersonal repertory similar to a catalog. They are, instead, a part of the inventory of the practical creations already produced and memorized. They live in a deposit that is both cerebral and corporeal, which makes itself accessible as the sense of behaviors already practiced accumulates.

With this line of reasoning, what role is played by the plan? Giovanna memorizes and draws patterns in her notebooks, and she does this using the same explicatory, symbolic language as in the plates of André Leroi-Gourhan's *L'homme et la matière*. Everything corresponds: the number, the position of the warp threads in each harness, the succession of passages of the weft, all are the bases of one and the same planning alphabet. Concretely, having established the number of the order of the heddles, we see in the notebook the indications on which threads to raise (1, 2, 3, 4) and in what order.<sup>5</sup> "It is likely that the use of these diagrams originated with the arrival of the first women's magazines (for example the Italian *Mani di fata*, *Fairy Hands*) in Sardinia's towns in the 1920s and '30s" [Da Re 1993: T.5.5, trans.].

In the video, the vision of the plan is partially exteriorized in the practice of *remissidura* (drawing in) through various signs of a slow and progressive exteriorization of the pattern. The passage of the warp threads through the eyes of the heddles, shown in the film from different angles, is connected with the weaver's words: the task of *drawing in* "reveals the pattern." The progression would be more evident on examining the subsequent stages of the work—that is, the actual

weaving—with the insertion of the weft between the threads of the warp. But already in this embryonic stage we can distinguish an operational logic that points the way to an interpretation of the weaving as an order of knowledge. From this comparison between the images of the action and the words commenting on it, it emerges that with Giovanna there is no separation between the making of a plan and its implementation; the “vision” of that plan coincides with the whole of the perceptive activities connected with her sensorial contact with the loom, which constitutes a sort of narration, a progressive unveiling of the impulse to create.

Tim Ingold poses the question: “What is a fabric?” Why is it not perceived as a special form of braiding? Speaking of fabrics, attention is usually focused on the product and not on the process. It would be better to consider the producing as a form of weaving and not a woven textile as a product [Ingold 2000a: 346–347]. In synthesis, if I stress production, it means that I consider the object as the expression of an idea. But if I try to emphasize the weaving, I go in the direction of considering the object as the embodiment of a rhythmic movement. It is thus possible to invert the priority between idea and movement. Movement is to be understood as the true generator of the object, Ingold says, and not as the mere revealing of an object already present in ideal, conceptual, virtual form prior to the process that reveals it [*ibid.*]. Ingold thus uses the notion of weaving in a wider than usual way. It is connected to a notion of *skill*, not in the sense of the individual property of an isolated body, but as a property of the whole system of relations composed of the presence of the craftsman in a highly structured environment [2000a: 347]. Furthermore, the skilled action has a narrative quality: every movement, like every line of a story, derives rhythmically from the previous one and lays the foundations for the next one [*ibid.*]. Ingold thus concludes that the forms of the objects are not imposed from above but grow, emerging from the reciprocal involvement of persons and materials in an environment. The surface of nature is an illusion: we work from within the world, not on top of it [2000a: 345].

On the relationship between weaving and the form of symbolization connected with it, Gian Paolo Gri has proposed reflections in many ways convergent with those of Ingold’s. He notes that weaving had already been put in algorithm form in “books,” or *quaderni di tacamenti*, in the Carnia region during the 18th and 19th centuries. The verb *tocar* indicated the tying together of heddle and treadle on the loom, following a predetermined order to create the basic layout [Gri 2000: 154 ff.]. In the Friuli region, weaving marked the passage from a preindustrial to a proto-industrial culture. Although the use of writing often accompanies the exchange of information in notebooks and letters among the members of the community of professional weavers, still in the final years of the 19th century, to illustrate the more difficult steps in the dyeing and weaving processes, “the explicative execution consisting of a mixture of gestures and verbal and oral components was preferred” [Gri 2000: 162, trans.]. Among the Carnia weavers there was a “closer, more intense relationship with literacy, with writing, than was the case for other members of the society” [2000: 163, trans.]. But nonetheless weaving required “total commitment and absorbing attention” [*ibid.*] of the whole body—feet, hands and eyes.

This closer relationship [with literacy] raises an interesting theoretical issue in the framework of the debate on the "consequences of literacy" and the characteristics of "primitive thought," particular as far as the affirmation that writing is a necessary condition for gaining access to the structure of formal thought. *In fact, weaving can have the same value as writing.* [Gri 2000: 163, my trans. and italics]

Diagrams, drawings, and the written word thus would appear to arrive only at a later time, when memory was no longer capable of conserving the reproducibility of plans that had become quite complex. It is thus the increasing complexity of the technical aspect that leads to symbolic and formal organization. But the structuring of this complexity precedes writing, it goes into a more and more articulate, tense corporeal memory, it coagulates in the spoken word and becomes lasting in the written word. Gri concludes: "The *tacamenti* of the Friuli region conserve an easily identifiable function of support that is collateral to, not substitutive of, a technical memory still well rooted in traditional gesture and equipment" [2000: 169, trans.]. From this viewpoint, Giovanna's aesthetic knowledge appears structured in a balance between corporeal memory, the spoken word, and pattern, by her action around an expert mechanism, namely the loom, which translates perceived and transposable reality into new visual artifacts.

On the other hand, the film introduces us to a multisensorial complex of practices and gestural and spatial performances, which in turn constitute the wealth of sensitivity in the film, thanks to its capacity to reproduce the nuances, details, and centrality of the body as a means of communication [de France 1978: 158]. Faced with this abundance of information offered frame after frame, we have access to Giovanna's project, which comes across in her words or, better still, in the words she pronounces accompanied by those specific gestures.

The camera observes and records the weavers' work; the weavers observe the monitor and speak of their work. We see the weavers both as spectators and commentators and as agents within the arbitrarily composed framework of the film. In it we have represented both the allusive and metaphoric level of their knowledge as well as the empirical one. The plan-level thus does not have access to the film if we consider it as being expressible only in the logic, evoked and systematically criticized by Ingold, of the relationship between genotype and phenotype [Ingold 2000b]. But what comes to the fore is a specific approach to the phenomenon of human action, this at least being accessible to the video camera and conceivable as an evolutionary system that has generative capacities [*idem.*].

Knowledge, in this context of perception, is not in the project or the relationship between the structure of the mind and that of the world, but is "immanent in the life of those who know and develops in the context of practices that are established thanks to their presence as beings-in-the-world" [Ingold 2000b: 79]. If we consider Giovanna's actions as an ongoing exchange of actions and reactions that produce knowledge and that in turn create adjustments and corrections in the parallel and subsequent actions of weaving, we find ourselves faced with the dominion of the emotional aspects of what has occurred, the continuous collision of the action with confirmations and denials.<sup>6</sup> "The pleasure increases as the work goes on," Giovanna reports, and if it is true that this progression

of sensations finds only indirect confirmation in the film, it is true that the words that evoke it are there to indicate a possible horizon of perception of what we see and it operates in *our* gaze.

The creative projection of the self onto the object takes place gradually and cumulatively. Success in the intention of creating the project calls up new energies to favor the completion of the work. The narrative dimension of the doing, in the sense defined by Ingold, is connected to this pleasure in proceeding. A pleasure that is recognized is a distinctive feature of the art of weaving, one of the signs of the successful and full entry of the subject into that expert community. This passage reveals itself as pertinent both to the emotional and social spheres. In fact, with the perception of this pleasure, the awareness of being skillful emerges: Giovanna says that there are those who weave after someone else has prepared the loom and those, like herself, who accept no prior meddling "by anybody."

#### INTERTWINING GAZES

If to some extent we have shed light on the nature of the expert gaze in this community of skill, we must now attempt to find the position and role of the filmmaker-ethnographer, who brings to bear on this situation the weight of his or her *cumbersome* eye, full of an experience that now can be considered from a historical standpoint [Hockings 2003, Banks and Morphy 1997].

Without disavowing Appadurai's immersion of gazes in complexity [2001],<sup>7</sup> our intention here is to go beyond the notion of "gaze" as a general perceptive attitude of the anthropologist and to focus on the theme of the gaze as the expression of the relationship between physiological facts, culturally formed visual abilities, and technical instruments for the construction of visual artifacts. Thus the skilled gaze is intended as a corporeal fact, as an action connected with gesture and endowed with effects on matter. What I mean is that the movements of the pupil of the eye and the motor and muscular activities that direct the gaze are efficacious gestures that involve the body in its relations with the outside world. Now, if the gaze is endowed with a prosthesis capable of transcribing the real, and changing the physical state of a certain supporting material, we are introduced into a familiar conceptual universe: that of the study of material culture. This goes back to Leroi-Gourhan, Haudricourt, Cresswell, and others who have placed gesture and efficacious action on matter in relation with the environment and in its social context.

In more precise terms, when the ethnographer becomes an observer equipped with a portable but *cumbersome* instrument owing to its corporeal statics and dynamics and its resulting appearance, which also "records"—that is, reproduces the visible<sup>8</sup> on a durable support—we are dealing with a variation in the relationship between humans and matter, the subject of study in anthropology of technological and cultural orientation. Now, it sounds paradoxical that a tradition of such articulated and refined studies is not employed in investigating audiovisual technology, that which today produces one of the most widely used means of observation in ethnographic practice. The circumstances in which the

meeting between cine camera and ethnographer took place in modern terms were well described by David MacDougall. Around 1960,

The light-weight sound cameras of Richard Leacock, Michel Brault and Albert Maysles were the first that could be used as personal instruments after years in which sound was either added to images in the cutting room or resulted from the use of huge cameras requiring teams of technicians. After the first flights of fancy—that cameras could go anywhere and could also record everything—filmmakers began facing the implications of film as a *personal form of record-making*. [MacDougall 1998: 203, *my italics*]

Once free of technicians and machinery, filmmakers brought their activity much closer to that of ethnographers in their *structural* solitude while working in the field. This coming together gave rise to a new qualification of the ethnographer-filmmaker's activities, which involves, as MacDougall suggests, their subject and their public. The filmic gaze became a fully personal gaze and assumed the same responsibilities in the construction of the image of the other that were to be found in written observations.

Seeing and not seeing, underscoring, emphasizing, concealing, taking away, distorting, and manipulating now became easier to spot and judge on the part of the film's subjects and the different spectators who had access to the film: the spectators belonging to the same community who watched it and saw whether or not their image of themselves corresponded to the indistinct one on television, the public of specialists and guardians of methodological correctness, and so on. We are dealing with filmic behaviors ascribable to ethnographers as authors, so as to constitute for them a less objectifying and more interpretative identity, one in which the factors in the construction of their gaze now became directly exposed to cultural criticism.

#### VALUES AND RHYTHMS

An understanding of the working conditions of this particular gaze requires that we search for a link between some basic features of human vision as an externalized fact and others ascribable to its modern condition. On the first point, André Leroi-Gourhan proposes a paleontological approach that refers to the process of hominization and which indicates the need "to search in the depths of perception for the way in which in time and space a code of the emotions is constituted so as to guarantee ethnic subjects the essential condition of affective inclusion in their society" [1997: 317, trans.]. Thus the question is to search for a code of aesthetic emotions. This is based on the biological properties of humans—the senses—that give access to the perception of *values* and *rhythms*.<sup>9</sup>

The Leroi-Gourhanian approach sees vision as a sort of activity that develops, in the course of the process of hominization, into a capacity for discernment of values and rhythms, an activity that arises before any kind of symbolization. It remains as a distinctive and unconscious feature in the work of interrelating with environment and society, and produces phenomena belonging to the emotional sphere and that of social integration. This leads to the hypothesis that the

functional properties of a utensil are improved if humans are in a very close relationship with its aesthetic connotations.<sup>10</sup> If the hypothesis of the author of *Le geste et la parole* is correct, the production of a visual textile artifact thus tells us two parallel stories: that of an aesthetic emotion that has nothing to do with the mere implementation of a project, but which springs from a continuity of expert gestures and efficacious actions on matter; and that of a conscious effort at representation of reality or imagination that identifies, for example, the mythograms of the pattern to be reproduced in the weaving.

The effort at optimizing the patterns, changing them, elaborating on them, and putting them through the loom is the effort of extrapolation from reality of perceptive values endowed with a life of their own; it is a question of the framing of a textile and a visual narration connecting the two poles, the two upside-down and superimposed pyramids of hominization.<sup>11</sup> The eye of ethnographers and filmmakers behaves no differently. Their primary gesture, the framing and the starting of the camera, is the application of a grasp on perception that lives on aesthetic and emotional balances of the primary kind, under the control of the eye trained to use the technical prosthesis. The visible film is a series of extrapolations, of mythograms the sense of which originates here too as signification, this time conscious, of values and rhythms.

#### THE RECONVERTED GAZE

On the relationship between body and instrument, Jean-Pierre Warnier [1999, 2005] has elaborated the notions of sensorial-motor conduct and motor algorithms to indicate a condition of close relationship of the body to different kinds of human artifact. Driving an automobile, playing the piano, skiing, and steering a sailboat are actions in which an instantaneous perception and decoding of sensorial impulses allow one's incorporated knowledge to operate without the involvement of the conscious, except at times of changes in programs (deciding on a rest stop, beginning a sonnet, changing tack, and so on). Now, also during the operation of applying an audiovisual prosthesis to the gaze of the ethnographer determines, after a certain period, a naturalization of this kind of vision, which Jean-Marc Rosenfeld [1994] defines as a reconversion of the gaze.

While learning to use audiovisual means, one realizes that filmic observation is a case of breaking away from the ordinary, of dealing with a new situation that requires perceptive adaptation and, at least at the beginning, makes automatic behavior impossible. The filmic gaze produces a persistent trace as opposed to the uncertain one of the memory. This trace is continuous compared to the forced mechanical discontinuity of the eye, which is supported in this by mental activity that "mends" its failures [Marazzi 2002: 11]. But, according to Rosenfeld, there is a more important conquest to consider in such conditions of observation: "Cinematography, the writing of movement, is perhaps first of all a writing of time, duration and succession" [Rosenfeld 1994: 49, trans.]. Movement is only one of its options.

The great revolution brought about by the cinema in the observation of the perceptible world is beyond doubt the conquest of the *immobile*. The vision of the eye is never

immobile, the movements are the saccadic ones of the pupil within the field of vision, interpolated by repairs applied by the brain and its store of logical and perceptive patches of vision. [Marazzi 2002, trans.]

On the other hand, the (possible) immobility of the cine camera with respect to the observed ensures a durable arrangement of the point from which to observe it, because the cine camera allows the recording of manifestations that flow in a field that is kept fixed (the maintaining of the same axis of observation) [Rosenfeld 1994: 49–50]. This fixity and continuity thus activate a perceptible field composed of minimum traces of movement, almost objectively measurable, and of a perception cleansed of the time of vision.

Filmic observation is in a certain sense simultaneous with the desire for direct knowledge, in which once again it is the dimension of the process and the narration that prevail. But even in this case, before the jump we must take a run-up:

As with every movement, this inevitable passage is necessarily preceded by an anticipation. Filmic observation, defined as the whole of the activities of the filmmaker, is not limited to recording operations; it also covers a time before and a time after. It is a process during which the recording is but a strong moment. [Rosenfeld 1994: 54–55, trans.]

If filmic observation is to be understood as a process, an “observation prior to recording, which we can define as ‘pro-filmic’ ” is linked to observation of the perceptible filmed, a phase that can be repeated as often as we like. Pro-filmic observation limits the real to the *perceived that can be reproduced*, to what can be shown and heard by means of the film—in other words, the filmic displayable. The purpose of pro-filmic observation is to prepare the filmic observation: its orientations and methodological procedures as well as its strategies for the shooting (delimitations, concealments, masking, underscoring, fades in space and time) [1994: 55].<sup>12</sup>

In the weaving between the plan and its implementation, we have the degrees of visual activity that are not connected to the choice and withdrawal *in real time* of materials from the perceivable. The loom was conceived for the creation of forms of symbolic abstraction, far different from the frames of a film charged with their indexical value, which appear close to the characters used in writing, even though the former may approach a high technical degree of verisimilitude, as in the art of tapestry-weaving. But as we have seen, Giovanna also has an intermediate gaze, a way of looking at things that can at any moment become a meta-vision of the describable in textiles. It is a process totally removed from the rhythms and speed required by the intermediate gaze of the ethnographer-filmmaker, but that operates as an analogous form of reconversion of the gaze and the connection of some perceptive skills to others inherent in her manual and corporeal skills, where it is the sharpness of this intermediate vision that guides the rhythms and ways of working of head, eyes, and hands.

#### SHARING THE GAZE

The position of the film with respect to the social relations it describes is the final step in our reflection. To orient ourselves in this field we must reflect on the

notion of visual perception in ethnographic films, following a direction recently proposed by Antonio Marazzi.

The ethnographic film is a "genre," but one that allows us to cross the boundaries between cultures. It *crosses the boundaries of perception*—that is, the eye and the sensorial system allow us to bridge the gap between ourselves and the world around us. Perception is seen not only as a passive moment but as an active one "of internal acquisition and re-elaboration and external dynamics" [Marazzi 2002: 124, trans.].<sup>13</sup> In this direction the film on the weavers required the overcoming of an attitude of perceptive neutrality and the adoption of strategies calling for even exasperated close-ups in dwelling on details of the work of the hands on the threads and movements of the loom. For the filmmakers, these intentions acted on their gaze—that is, starting from a primary impulse to organize and put in order their field of vision and from another impulse of tension for what would happen moment by moment. It was thus impossible to act here as if we were simply "applying" a plan.

The ethnographic film *crosses semantic boundaries*: if in a fictional film we suppose that every visible detail was put there to transmit a certain message, in the ethnographic film the referential potentials of many details are weak because they are simply *there*, inside the shot. *But the action of symbolic signification works in this case as well*. Even in a film made with the idea of producing a simple documentary on a technical process, as is *Ordire*, the referential potentials of many details are in play (Giovanna's discursive strategies, the different signs of Nennetta's subaltern position, the details of the garden of the Lussu home, the patterns in Giovanna's notebook and so on). This is the terrain where we have the coming together of mental images, cultural interpretations, stereotypes, exoticisms, diversities, and even cultural universes, of which the authors and spectators of the film are the bearers. We can imagine Nennetta's world of affections, Giovanna's headstrong struggle against life's adversities, her voyage on the ferry, which "revealed" the pattern to her at the beginning of the 1960s.

Finally, the ethnographic film *crosses cultural boundaries*: the dominant narrative forms in visual anthropology are the *descriptions of communities* and *personal narratives*. The natural course of life leads to the disappearance of the protagonists, for example. Nennetta passed away some years ago, and the film is one of the witnesses to her existence. The memory of Armungia's community feeds concretely also on these testimonials; they are one of the materials that go into the formation of a shared imagination, no matter what the intention of the makers of the video was. But circulation just within the town has involved other filmed material produced by ethnographers in Armungia, and the attribution to these videos of specific meanings by the community is important evidence of the relationship between imaginary projections of the observed and concrete images of self in research in the field [Tiragallo 2001]. The public sphere in which ethnographic filmmakers work is thus the place in which their work comes into contact with that of the spontaneous activities of self-representation of the members of a community [Marano 2002]. It is thus necessary, concludes Marazzi, to develop a specific investigative sector: that of the *transcultural passage of images*. This is justified starting from the "enormous, growing expansion of electronic communication of visual

messages in metropolitan contexts, together with the multiplication of intercultural contacts on the planetary level" [Marazzi 2002: 133, trans.].

## CONCLUSIONS

At the beginning of this paper, we introduced the theme of the search for some distinctive features in the relationship between vision, plan, and implementation in weaving and the possible symmetry of these features with some from those operating in the work of the ethnographer's filmic observation. An attempt was made to base the plausibility of this symmetry on a notion of corporeality of the vision common to both the activities connected with the results of recent investigations on the physiological and cultural features of visual perception and with some Leroi-Gourhanian intuitions on the hominization of vision. On the other hand, the corporeality of the knowledge of vision is placed in relation to the materiality of visual artifacts that exteriorize the two perceptive disciplines: weaving and filming are presented, if not as the two sides of the same coin, as two adjacent faces of a polyhedron reflecting on its differently oriented surfaces the different results of one and the same ancient and ongoing activity, one of mediation between perceptive facts, the corporeal activities of drawing up the plan (weaving, for instance) and the products of such creative movement [Ingold 2000b]. The transitive nature of this activity has been defined in terms of perceptive, technical, semantic, and cultural transitiveness. Just as the carpets, blankets, and linen chest covers woven by Giovanna enter a personal sphere of the circulation of goods, they also become recognizable traces of her expert presence in the town. The film in which she appears crosses the boundaries of the "academic" product and models itself on the meanings and in the profound sense that future spectators will attribute to it.

The incorporation of the gaze thus presents itself here as one of the two poles of a situation of sharing visual events. A situation in which every reduction to mental objectification of the results of vision seem to leave unexplained most of what actually takes place. The physical involvement and the close contact of perceptive, emotional, and aesthetic events bring the weaver close to her observer. Giovanna's knowing how to see produced in her an emotion that the filmic "knowing how to see" can try to reproduce. This ethnographic emotion can be at the same time a second-hand emotion, modeled on the former, and an emotion *per se*, transmitted by way of research.

## NOTES

1. For an overall picture of pre-industrial weaving, see Patterson [1964]. On traditional weaving techniques in Sardinia, see, among others, Moica [2004].
2. Emilio Lussu (1895–1975) and his wife Joyce Salvadori Lussu (1912–1998) were outstanding figures in the resistance to fascism and in the Italian Socialist Movement.
3. "By means of a cord, each heddle is connected to a wooden treadle which the weaver works with her foot. With the movement of the treadle, the heddles go up or down so that the warp threads spread to leave an opening through which the bobbin with the weft can pass" [Da Re 1994, T5.4, trans.].

4. Cristina Grasseni, in one of her recent studies on the visual ability of cattle-breeders in Valtaleggio (Bergamo), defined the notions of practice and locality as facts inherent in the constitution of the subjects' cultural identity, in a decidedly anti-essentialist perspective: "identity is created in contexts of relations and concrete spaces, in daily practices, for example while working." This statement calls for "a logical transition from the idea of locality as a territorial community to the quite different one of the identity of a *community of practice*" [Grasseni 2003: 26, trans.].
5. A, AC, CB, etc.—that is, raise the first and third, then the second and fourth, and so on.
6. Mila Busoni interprets these continuous negotiations between doing and the experience of awareness at different levels as one of the reasons for the lack of creation of algorithms by the Tuscan carpenters she studied, a lack balanced by a constant and attentive attitude toward planning, which, when necessary, is rectified and adapted. Their ways of building are not based on given rules and automatic or subsidiary corporeal actions as opposed to those of a focal consciousness [Polanyi 1990]; on the contrary, they imply "a continuous application of reason to the procedures to follow, and which often present unusual interaction with the real and material by intervening with instantaneous changes and adjustments if the changeable progression of such a relationship were denied."
7. Appadurai speaks of interactions, cultural traffic, psychological distance, and electronic vicinity, sophisticated intersections between indigenous trajectories and global flows of persons and things, of imagination as an organized field of social practices [2001: 50].
8. Analogically according to Barthes [1980], indexically according to Faeta [1995: 40].
9. "The particularizing function of aesthetics lies on a foundation of automatic practices deeply connected both to the physiological and the social. An important part of aesthetics is connected to the humanization of behaviors common to humans and animals, such as the sensation of well-being or discomfort, visual, auditory and olfactory conditioning and intellectualization, through symbols, of the biological facts of cohesion with the natural and social environment" [Leroi-Gourhan 1977: 318, trans.].
10. This dialogue between functionality and aesthetic emotion, notes Leroi-Gourhan, lives (still) today for example in aeronautical creations, with the aerodynamic qualities of aircraft, which evoke sensations of purity and essentiality of line and form in our cultural perceptions.
11. The entire body of human culture, according to Fr. Teilhard de Chardin, can be described as an upside-down pyramid poised on the tip of another right-side-up pyramid, which is the image of animal and human evolution that had been completed 40,000 years ago. The first pyramid is "entirely fictitious and imaginary, born of the action that takes place on the outside, between the two poles of creative activity, the face and the hand, in technique and language" [Leroi-Gourhan 1977: 465, trans.].
12. Depending on its formal features, pro-filmic observation is direct, immediate, fleeting, discontinuous, irreversible. Furthermore, in functional terms, it is anticipatory, direct, oriented, discriminating. It is already filmic observation, still direct observation: its nature is mixed. From the viewpoint of the receiver, it is a reflexive presentation that tends to anticipate a possible transitive presentation [Rosenfeld 1994: 55].
13. See the reflection on the act of filming on which Claudine de France [1989, 1994] and her Nanterre research team, among others, worked.

## REFERENCES

- Angioni, Giulio  
 1986 *Tecnica e Sapere Tecnico nelle Società Preindustriali*. In his *Il Sapere della Mano. Saggi di Antropologia del Lavoro*. Pp. 91–115. Palermo: Sellerio.
- 2003 *Fare, Dire, Pensare*. In *Pratiche e Saperi*. Giulio Angioni, and Maria Gabriella Da Re, eds. Pp. 23–31. Cagliari: CUEC.
- Appadurai, Arjun  
 2001 *Modernità in Polvere*. Rome: Meltemi. (1996 *Modernity at Large, Cultural Dimensions of Globalization*. Minneapolis and London: University of Minnesota Press.)
- Banks, Marcus, and Howard Morphy (eds.)  
 1997 *Rethinking Visual Anthropology*. New Haven: and London: Yale University Press.
- Barthes, Roland  
 1980 *La Camera Chiara*. Turin: Einaudi.
- Bourdieu, Pierre  
 1980 *Le sens pratique*. Paris: Les Éditions de Minuit.
- Busoni, Mila  
 1996 *I Ritmi della Memoria. Conversazioni sul Lavoro con i Carpentieri Navali a Limite Sull'Arno*. Florence: Centro Editoriale Toscano.
- Caoci, Alberto  
 2005 *Le Tessitrici di Isili. Pratiche ed Estetiche*. Cagliari: CUEC.
- Carta Mantiglia, Gerolama  
 1987 *La Tessitura. Materiali e Tecniche della Tradizione*. In *Il Museo Etnografico di Nuoro*. Paolo Piquerdu, ed. Sassari: Banco di Sardegna.
- Casalis, Goffredo  
 1833 *Dizionario Geografico Storico Statistico Commerciale degli Stati di S. M. il Re di Sardegna*. Vol. I (the entry "Armungia" compiled by Vittorio Angius). Turin: Maspero.
- Da Re, Maria Gabriella  
 1990 *L'attività Tessile nel Sarrabus-Gerrei: Vecchi e Nuovi Saperi*. In her *La Casa e Campi. Divisione Sessuale del Lavoro nella Sardegna Tradizionale*. Pp. 71–84. Cagliari: CUEC.
- 1993 *Progetto per il museo "Sa domu de is ainas," Sezione etnografica*. Armungia.
- de France, Claudine  
 1979 *Corps, matière et rite dans le film ethnographique*. In her *Pour une anthropologie visuelle*. Claudine de France, ed. Pp. 139–163. Paris: Mouton.
- 1989 *Cinéma et anthropologie*. Paris: éditions de la Maison des Sciences de l'Homme.
- 1994 *Du film ethnographique à l'anthropologie filmique*. Brussels, Paris, and Basel: Éditions des archives contemporaines.
- Faeta, Franco  
 1995 (2003) *Strategie dell'occhio*. Bari: Laterza.
- Grasseni, Cristina  
 2003 *Lo Sguardo della Mano. Pratiche della località e Antropologia Della Visione in Una Comunità Montana Lombarda*. Bergamo: Edizioni Sestante.
- Grasseni, Cristina, ed.  
 2006 *Skilled Visions. Between Apprenticeship and Standards*. Oxford: Berghahn.
- Gri, Gian Paolo  
 2000 *Tessere Tela, Tessere Simboli. Antropologia e Storia dell'Abbigliamento in Area Alpina*. Udine: Forum.
- Hockings, Paul, ed.  
 2003 *Principles of Visual Anthropology*. Rev. ed. Berlin: Mouton de Gruyter.
- Ingold, Tim.  
 2000a *The Perception of the Environment. Essays in Livelihood, Dwelling and Skill*. London: Routledge. (Partially translated in Italian as *Ecologia della cultura*. Rome: Meltemi, 2001, ed. by C. Grasseni and F. Ronzon.)
- 2000b *Evolving Skills*. In *Alas Poor Darwin. Arguments against Evolutionary Psychology*. H. Rose and S. Rose, eds. Pp. 225–246. London: Jonathan Cape.

- Ivens, Joris  
 1979 *Io—cinema. Autobiografia di un cineasta*. Milan: Longanes (Also in English, 1969, as *The Camera and I*. Berlin: Seven Seas Books).
- Lai, Franco  
 2004 Trasmissione e Innovazione dei Saperi Locali. In *Fare e Saper Fare. I Saperi Locali in Una Prospettiva Antropologica*. F. Lai, ed. Pp. 17–30. Cagliari: CUEC.
- Lajoux, Jean-Dominique  
 1974 La durée des films ethnographiques. *Research Film*, 8(3): 233–245.
- Leroi-Gourhan, André  
 1977 *Il Gesto e la Parola*. Turin: Einaudi.  
 1993 *Evoluzione e Tecniche, vol. I. L'uomo e la Materia*. Milan: Jaca Book.
- Loizos, Peter  
 1994 *Innovation in Ethnographic Film. From Innocence to Self-consciousness, 1955–85*. Manchester: Manchester University Press.
- MacDougall, David  
 1997 The Visual in Anthropology. In *Rethinking Visual Anthropology*. Marcus Banks and Howard Morphy, eds. Pp. 276–295. New Haven and London: Yale University Press.  
 1998 *Transcultural Cinema*. Princeton, N.J.: Princeton University Press.  
 2006 *The Corporeal Image. Film, Ethnography, and the Senses*. Princeton, N.J.: Princeton University Press.
- Marano, Francesco  
 2005 *Anni Cinquanta e Coccinelle che Volano*. Nardò: BESA.
- Marazzi, Antonio  
 2002 *Antropologia della Visione*. Rome: Carocci.
- Mauss, Marcel  
 1977 Le Tecniche del Corpo. In his *Teoria della Magia ed altri Saggi*. Pp. 385–409. Turin: Einaudi.
- Moica, Anna Luigia  
 2004 *Scèrasa e Pibìonis. La Tessitura a Villamassargia*. Cagliari: CUEC.
- Parlebas, Pierre  
 1999 Les tactiques du corps. In *Approches de la culture matérielle. Corps à corps avec l'objet*. M. P. Julien and J. P. Warnier, eds. Pp. 29–43. Paris: L'Harmattan.
- Patterson, R.  
 1964 Filatura e Tessitura. In *Storia della Tecnologia*. Charles Singer, ed. Vol. 2, pt. 3. Turin: Boringhieri.
- Pink, Sarah  
 2001 *Doing Visual Ethnography*. London: Sage Publications.
- Polanyi, Michael  
 1990 *La Conoscenza Personale. Verso una Filosofia Post-Critica*. Milan: Rusconi.
- Rosenfeld, Jean-Marc  
 1994 Filmer: Une Reconversion du Régard. In *Du Film ethnographique à l'anthropologie filmique*. Claudine de France, ed. Pp. 43–57. Brussels, Paris, and Basel: éditions des archives contemporaines.
- Rouch, Jean  
 1988 *Il Cinema del Contatto*. Raul Grisolia, ed. Rome: Bulzoni.
- Tiragallo, Felice  
 2001 "Sentivo le pernici cantare nel Territorio di Armungia." Note su una documentazione audiovisiva dei mutamenti nel territorio del Gerrei. In *Il Senso dei Luoghi*. F. Lai, C. Maxia, F. Tiragallo and L. Draetta, eds. Pp. 83–122. Cagliari: CUEC.
- Warnier, Jean-Pierre  
 2005 *La cultura materiale*. Rome: Meltemi. (Originally, 1999, *Construire la culture matérielle. L'homme qui pensait avec ses doigts*. Paris: Presses Universitaires de France.)

## FILMOGRAPHY

- Ivens, Joris  
 1930–33 *Zuidersee*. 35 mm, b/w, silent. Production: CAPI Amsterdam.

Tiragallo, Felice

- 1993 *Tre caprili. Allevamento e insediamento caprino ad Armungia*. 3/4 U-matic BVU, 62 mins., with Maria Gabriella Da Re. Istituto di Discipline Socio-Antropologiche of the Università di Cagliari and the Municipality of Armungia.
- 1999 *Lavoro fabbrile ad Armungia*. Betacam U-matic, 20 mins., with G. Dore. Museo storico etnografico di Armungia, post-production Artevideo srl.
- 1999 *Ordire. La preparazione della tessitura ad Armungia*. 32 minutes, with Maria Gabriella Da Re. Museo storico etnografico di Armungia, postproduction Artevideo srl.
- 1999 *Su pistoccu. Il pane estivo di Armungia*. 21 mins., with Maria Gabriella Da Re. Museo storico etnografico di Armungia, post-production Artevideo srl.