

Rhythmic Intuition

How does an editor make decisions about where and when to cut in order to make the rhythm of a film?

When asked, most editors will say something along the lines of “by intuition” or “you just know when it’s right.” For example, in *First Cut, Conversations with Film Editors* by Gabriella Oldham, editors are quoted talking about rhythm and editing as “magic” (Sheldon Kahn), “feels right” (Carl Kress), “it’s intuitive” (Bill Pankow), “it’s intuition” (Paul Hirsch), “having a sense” (Donn Cambern), “you just know” (Sidney Levin), “exclusively in the realm of intuition” (Merle Worth), “an internal sense” (Richard Marks), and “we go by intuition” (Alan Heim).¹ These are extremely estimable editors, and there is no question of the validity of their answers. They are, in my experience, absolutely right, and if there is one thing this book aims to respect and support, it is the power of intuition.

But these editors’ comments leave one wanting to know more. What kinds of thinking and practice are editors referring to when they say that shaping rhythm is intuitive? Intuition is not the same as instinct. People are born with instincts, but intuition is something we develop over time, through experience; in other words, it is learned. So, if we can pinpoint what kind of intuition is at work in shaping a film edit, then we can ask, “How is this intuition developed or acquired and how is it actually working in the process of editing rhythms?”

To say that something is intuitive is often used to draw a protective veil around the knowledge. As Donald Schon wrote in the preface to *The Reflective Practitioner*, “When people use terms such as ‘art’ and ‘intuition,’ they usually intend to terminate discussion rather than to open up inquiry.”² The implication is that intuition can’t be further examined without disrupting the ecology of mind that permits it to flourish.

The explanation for most editors’ lack of discussion of rhythmic intuition may be the fear that analyzing or theorizing—in other words, “thinking too much”—will interfere with intuition. It is true that analyzing creativity and doing something creative are incompatible activities to perform simultaneously. Analysis is an activity that engages neural pathways that are distinct from the pathways engaged by moving or responding directly to a stimulus. So, trying to break down and observe an action at the same moment as doing it causes the brain’s attention to be split and diffused, disrupting the efficacy of either the analysis, or the action, or both. Neurologist Richard Restak explains:

In terms of brain performance, “just doing it” involves the smooth non-self-conscious transfer of learned actions from working memory, stored in frontal lobes, to the pre-motor and motor areas that transform the working memory into those effective, winning plays that result from thousands of hours of practice....³

In other words, disrupting impulses by thinking too much is a specific neurological response to the effort of activating two distinct neurological pathways simultaneously. However, this disruption does not occur as a result of the accrual of explicit knowledge about a craft or skill. In fact, explicit knowledge is an essential support to intuition. It is the learned knowledge that gets transferred from working memory. The more that is explicitly known, the more readily accessible intuitive responses will be. “Geniuses ... share a similar talent for storing vast amounts of information in long-term memory and then retrieving the information as circumstances demand.”⁴

This discussion of intuition therefore proceeds from the premise that articulation of ideas about what kinds of learned knowledge inform an editor's intuition need not disturb the balance of thinking and doing that allows editors to use intuition in the creation of the rhythms in films.

Not everyone will agree with this premise, and furthermore, some editors who disagree are, in fact, extremely credible given their experience, knowledge, and swags of awards. To quote Martin Walsh, Academy Award-winning editor of *Chicago* (Rob Marshall, 2002), "Don't read any books about film editing, especially those that theorize about mathematical possibilities and how many feet of film they had to deal with back in the 20th century. And blinking. I read one once ... I'm still in therapy."⁵

I can only hope that the readers of my ruminations (particularly those from the Final Cut Pro generation who have easier access to gear and technical manuals than to ideas about editing) will, instead of requiring therapy, find some useful thoughts.

In any case, the discussion of intuition that follows is consciously designed to avoid disrupting intuition and to respect and even enhance the immediacy of rhythmic knowledge and its "smooth non-self-conscious transfer of learned actions from working memory."⁶

INTUITIVE THINKING

Guy Claxton, educator and co-editor of *The Intuitive Practitioner*, summarizes what particular types of thinking are at work, or what people mean when they say "intuition," as the following six things: expertise, implicit learning, judgment, sensitivity, creativity, and rumination. Each of these things could be at work at any moment that intuition is activated and often in complex combinations. But to pull them apart for a moment and see how they work in the process of editing, I have listed them below, first with Claxton's definition,⁷ followed by my

thoughts about some of the ways they apply specifically to an editor's intuitive processes.

1. *Expertise*—the unreflective execution of intricate skilled performance

An example of expertise is the way a professional editor with years of experience uses her gear. It's like touch-typing or riding a bicycle; she doesn't have to think about what button to push in order to do an operation, and this frees her concentration to focus on the material she's working with. I call it "breathing with the Avid," but it's not restricted to Avid. . . . It's a matter of knowing your gear of choice so expertly that its operation doesn't require conscious thought.

Another important instance of expertise is that which arises from years of experience with the editing process. Editors often say that each new project is like learning to edit all over again, and in my experience this is an accurate description of what it feels like. However, after accruing a degree of experience in structuring documentary footage or shaping a story or scene, an editor becomes expert, in the sense that she can see a possible organization or flow very quickly and without conscious thought. Note, however, that there is practice and learning at work in acquiring this expertise that, just like learning the gear, can be made explicit.

2. *Implicit learning*—the acquisition of such expertise by non-conscious or non-conceptual means

A lot of implicit learning about editing is acquired by watching films. There are conventions of filmmaking that show up in most TV programs, ads, movies, and digital games. An editor may not know the names of these conventions or techniques but has seen them enough to know what they are without ever having consciously learned them.

3. *Judgment*—making accurate decisions and categorizations without, at the time, being able to justify them

Judgment can be seen at work whenever an editor makes an adjustment to a cut and it works better. Once the “working better” is visible, an editor is rarely called upon to explain why or how. In fact, there are reasons that can be elucidated and described, but the use of judgment implies making good decisions without going through the process of justifying them. Judgment is, however, acquired by having a thorough understanding of the material, the story, the conditions, and the traditions within which you are working, and the capacity to make judgments can be enhanced and developed through explicit teaching and learning.

4. *Sensitivity*—a heightened attentiveness, both conscious and non-conscious, to details of a situation

An editor has sensitivity or heightened attentiveness to movement and emotion in the material. Developing sensitivity is a matter of learning to see the potential of movements and moments before they are shaped—a subject that will be taken up at length in this book!

5. *Creativity*—the use of incubation and reverie to enhance problem solving

Creativity is a complex and much-discussed notion, sometimes understood to mean generating new ideas or concepts, but just as often considered to be the process of making new associations or links, which, of course, is exactly what an editor does. Editing creativity is the lateral association of images or sounds to solve the problem at hand, which is the shaping of the film and its rhythms. The editor’s reveries yield connections between images, sounds, and movements in the raw material, which will create new and coherent meanings. Practice, and trial and error, informs these reveries, of course, but also the editor’s acquired knowledge of the world, herself, and her sensitivity to movement

and emotion give her the basis from which to make creative connections and associations.

6. *Rumination*—the process of “chewing the cud” of experience in order to extract its meanings and its implications

Rumination is what is at work when you are washing the dishes and suddenly the solution to an intractable sequence is clear to you. It is the kind of thinking that happens when you’re thinking about something else, and you have immersed yourself so deeply in your material that it inhabits a part of your brain even when you’re not actually looking at it or working on it. Rumination is what happens on the weekend or while you’re making a cup of tea and can yield some of your best solutions and ideas, which is why healthy work/rest cycles are so important to editing: they enhance your intuition!

Looking at intuition as these six types of thinking clearly demonstrates that intuitive thinking need not draw a protective veil around itself. The ecology of mind that allows these kinds of thinking to flourish is nourished by acquisition of explicit skills and knowledge. Claxton, in fact, is quite clear on this point when he quotes Nobel Laureate Konrad Lorenz: “This apparatus which intuits has to have an enormous basis of known facts at its disposal with which to play.”⁸ In short, intuition isn’t something you just have. It is something that can be developed, enhanced, and even acquired through practical and theoretical experience and education. The question implied by Claxton’s list is this: Where, specifically, does the experience and education of rhythm, which editors use as fodder for their intuition, come from?

The philosopher Henri Bergson describes intuition in physical, spatial terms that are useful starting points for describing the editor’s means of acquiring rhythmic knowledge:

We call intuition here the *sympathy* by which one is transported into the interior of an object in order to coincide with what there is unique and consequently inexpressible in it.⁹

It is a feeling *for* something that moves one's understanding not just from outside to inside an object, but into a relationship of feeling *with* the object, a position at which one can *coincide* with some aspect of the object. This feeling *with*, in the case of rhythm, is what I will call kinesthetic empathy.

Even more directly, this quote from Australian editor Dany Cooper, ASE, sums up rhythmic intuitions and points distinctly and succinctly to what I will argue is the editor's method of accrual and storage of rhythmic information: "It's a body thing."¹⁰

Picking up on Bergson's spatial metaphor and applying it quite practically to the body of the editor, I propose that an editor learns where and when to cut to make rhythm from two sources: one is the rhythms of the world that are experienced by an editor, and the other is the rhythms of the body that experiences them.

In the next three sections of this chapter, I describe first the rhythms of the world as a source of knowledge in rhythmic intuition. Then I look at kinesthetic empathy and mirror neurons as two phenomena that pertain particularly to the editor's accrual of knowledge about rhythm. Finally, I look at the ways in which an editor's own body is also a source of rhythmic information in the edit suite.

PERCEIVING RHYTHM

The universe is rhythmic at a physical, material level. Seasons, tides, days, months, years, and the movement of the stars are all examples of universal rhythms, and our survival depends on us oscillating with these rhythms and functioning as part of a rhythmic environment.

Waking/sleeping, eating/digesting, working/resting, and inhaling/exhaling are just some of living beings' ways of following the rhythms of the world, of surviving by oscillating or moving with the rhythms of their physical world.

Going beyond rhythmic survival and into rhythmic creativity is partly a matter of *perceiving* rhythm. To enhance their rhythmic intuition, editors actively perceive the rhythmic movement of life and of the world around them. The world's external rhythms are a primary source of knowledge about rhythm in film, because they are the rhythms that frame our existence, expectations, and knowledge of the movement of time and energy in life.

If we actively see and hear and feel the world's rhythms, what we are actually seeing, hearing, and feeling is *movement*. Editors need actively to perceive and shape the flow of time and energy through movement to shape a film's rhythms. Russian filmmaker Andrey Tarkovsky uses the metaphor of a reed quivering to describe the way that movement shows us time and energy in life and in film:

“Cinema . . . is able to record time in outward and visible signs, recognizable to the feelings. . . . Rhythm in cinema is conveyed by the life of the object visibly recorded in the frame. Just as from the quivering of a reed you can tell what sort of current, what pressure there is in a river, in the same way we know the movement of time from the flow of the life-process reproduced in the shot.”¹¹

When Tarkovsky writes, “. . . we know the movement of time from the flow of the life-process,”¹² he describes movement as the means by which we perceive time and energy.

ACTIVELY PERCEIVING RHYTHMS

As living beings, editors inherently have some knowledge of rhythms of the world, but it is also possible for them to develop and enhance their rhythmic intuition by engaging an *active* awareness of rhythms of the world through the perception of movement of energy and time. For example, almost every one of the twenty-three distinguished editors interviewed in *First Cut, Conversations with Film Editors*¹³ mentions music, their love of music, or their musical training. One interpretation of these editors' engagement with music is that through their experience of music,

their awareness of rhythm in the movement of sound has been specifically and consciously activated. This activation educates their intuition about rhythms more generally—in life and in film. It may even cause them to perceive rhythms in the world around them quite actively, to become consciously aware of the rhythms with which people walk and talk, with which nature ebbs and flows. Music is an intentionally formed instance of rhythm, but knowledge of music has developed these editors' capacity to perceive any rhythm.

I have also heard editors speak about surfing, rowing, dancing, painting, and cooking as experiences of rhythm that help them to develop their rhythmic intuition. These editors draw on their direct experiences of the movement of these rhythms to accrue a cache of rhythmic knowledge.

PRACTICAL EXERCISE

Becoming Aware of Rhythms of the World

Becoming aware of the rhythms of the world is a way of adding to your rhythmic knowledge. We all behave rhythmically all of the time—how else would we avoid being hit by cars, for example, if we didn't judge their speed and our trajectory in relation to their speed? By recognizing our everyday lives as rhythmic entities, we can refine our sense of the rhythms of the world from rhythmic survival into rhythmic creativity.

Choose something that you do often, something physical that you do without thinking about it, something that is not dangerous; for example, brushing your teeth or locking and leaving the car once you've parked it. As you go through the motions of this activity, notice the speed of movements relative to each other, the efforts, the sounds, the emphasis points or punctuation points in gestures and actions, and particularly their relationship to one another. You could map this flow with a line drawing of accents, or hum it to

yourself, or just see it in your mind's eye as a flow of energy, directions, and actions.

When I pull into the garage at night I do a very polished rhythmic routine, and I do it without conscious thought—but it is not instinctive; I have trained myself to do it. It goes: ignition off, parking brake on, seatbelt unclick, door open, keys into bag, relock door, and slam. Each of these actions has duration, a sound, an amount of effort required (mostly very small!), and together, they make a rhythm, a flow, a pattern with lulls and accents. This is a rhythm of the world, one of thousands, that informs my sense of what feels right as far as duration, emphasis, and rate of movement are concerned.

Do this exercise only outside of the cutting room, where analysis won't disrupt action. The objective is to develop a heightened sense of rhythms of the world, happening and intersecting all around you, all of the time. Later, in the cutting room, this sense will support and inform intuition or the "unreflective execution of intricate skilled performance."¹⁴

PERCEIVING RHYTHM IN THE RUSHES OR DAILIES

In the process of shooting a film, a small, specific “world” is created. The rushes, or raw material of a given film project, are the immediate source of information that feeds the editor’s rhythmic intuition about a particular project and its rhythmical world. The same active awareness that editors use to accumulate rhythmic information about the larger world is employed, but now in a very specifically directed way, to accumulate information about rhythms in the rushes or dailies.

The editor finds specific cues to rhythmic possibilities in the uncut material, as Tarkovsky suggests, in the *movement* inherent in the recorded images and sounds. This may be movement of the frame, movement within the frame, or movement of the eye around the frame. And, as will be discussed in greater detail later, it may also be movement of events or emotions. The editor who tunes her awareness to movement in the rushes—its pulse, effort, speed, shape, size, causes, purposes, and so forth—gathers information about the rhythmic potential of the film. An editor who is shaping a rhythm in the editing process directs her attention to the shaping of movement in the images and sound, because movement is the visible and audible manifestation of energy and time.

The processes by which specific sensitivities to the movement of the world and the movement of the more limited world of the raw material become sources of the editor’s rhythmic intuition are the subject of the next section, which looks at kinesthetic empathy and mirror neurons, two physiological motion detectors built into humans.

MIRRORING RHYTHM

There are at least two physiological activities that an editor engages in when intuitively perceiving and shaping movement in the rushes into an edited rhythm. The first is *kinesthetic empathy*. Kinesthetic empathy

is feeling *with* movement, a sensitivity we have developed by perceiving and being movement and a sensitivity that, I propose, is particularly relevant to editors of moving pictures. Neuropsychologist Arnold Modell describes the activation of kinesthetic empathy by saying, “The perception of feelings relies on the corporeal imagination, which in turn is determined by the history of the self.”¹⁵ I am drawn to his phrase “corporeal imagination,” which suggests that the body not only thinks, it imagines, in this case imagining how another body feels. And it imagines in relation to its own experience, drawing on remembered sensations to recognize feeling in movement.

Our physical response to movement is based on direct or indirect experience of movement, the history of our individual bodies in movement, and physically innate reflexes connected to protection from movement or pleasure in movement. In other words, even if we ourselves have not moved in a particular way, for example, if we have not fallen in a fast, straight, hurtling trajectory, our bodies know to duck if something comes hurtling at them, just as they know to brace for impact if they themselves are falling. We know the laws of physics in our bodies because we live them. So, movement speeds, directions, and energies have meaning when we see them, even if we have not experienced them. Through our kinesthetic memory of life lived in time, space, energy, and movement, we can account for responsive attention to movement in filmed rushes.

When movement is intentional, our responsive attention to its rhythms is augmented by a special feature of our advanced brains: mirror neurons. Mirror neurons are explained in layperson’s terms by neurologist Richard Restak:

Neuroscientists have recently discovered the existence of “mirror neurons” in the brains of monkeys that discharge both when the monkey performs certain movements and when the animal merely observes another monkey performing the movement. Strong evidence

suggests a similar mirroring process in humans—certain nerve cells are activated both during an activity and while observing another person performing the activity . . . the brain is a powerful simulating machine designed to detect and respond to a wide range of intentions on the part of other people. Neuroscientists are further exploring how our observations of another person’s behavior allow us to infer his or her conscious or even unconscious intentions.¹⁶

This breakthrough discovery of mirror neurons by neuroscientists gives us a physiological accounting for empathetic engagement with intentional movement. Neurologically speaking, we physically participate in the movement of people we see, even if we are sitting still. Moving with intention lights up certain neurons in our brains, and watching someone do the same movement lights up the same neurons.¹⁷ So, watching movement really is a physical thing; it is a special brain process that interacts differently with differently intended movements. Scientist V. S. Ramachandran writes:

With knowledge of these neurons, you have the basis for understanding a host of very enigmatic aspects of the human mind: “mind-reading” empathy, imitation, learning and even the evolution of language. Anytime you watch someone else doing something (or even starting to do something) the corresponding mirror neurons might fire in your brain, thereby allowing you to “read” and understand another’s intentions, and thus to develop a sophisticated “theory of other minds.”¹⁸

One of the ways the editor knows how to cut rhythm is through her mirror neurons. Mirror neurons allow us to participate in another person’s intentional movements. Our neurons do the movement with them, whether they are live or on the movie screen.

So, what an editor may be doing in making rhythm in moving pictures is engaging her corporeal memory and/or mirroring, neurologically, parts of what she sees and hears. Some part of what she sees or hears in the movement of the rushes will light up the editor’s mirror neurons or her kinesthetic memory, and that part will be selected and juxtaposed with another part that also “lights up her lights”.

Putting two shots together, each of which inherently has rhythm, makes a third rhythm, which is not the same, or even just the sum of the first two. So the edit begins to have a rhythm of its own. At this point the editor cannot simply recognize a “right” rhythm in, for example, a performance, which is a process of comparatively drawing on knowledge of the rhythms of the world. The editor’s own internal rhythms must come into play to shape rhythm through an editing process. As editors begin to do more than neurologically imitate existing rhythms, they draw on rhythms inside themselves, *as well as* those things captured in the rushes, to create the film’s rhythm.

PRACTICAL EXERCISE

Mirroring Intentions

The purpose of this exercise is to recognize how much you already know about movement, emphasis, energy, and intention.

Sit in a café and observe a conversation between two people—observe, but don’t listen in. You don’t want to know what the conversation is actually about, you just want to become aware of how much you know by seeing movement dynamics rather than hearing dialog. Watch the movements of your subjects’ heads, eyes, posture, and hands, and notice how much you know about their intentions just by their body language. You know, for example, when one person leans forward whether they are leaning forward conspiratorially or aggressively. And you know, just by watching the energy and quality of movement, whether the other person is delighted (leaning in to catch the gossip) or ambivalent (shifting to one side, looking away) or scared (leaning back warily).

The people you are watching may not lean forward and back but they will, without fail, use their hands, eyes, posture, speed, and attack on movement to express things—things they themselves may not even be aware of. Furthermore, they will also read each other’s intentions and respond through

movement. If one leans forward aggressively and the other leans back warily, the first person will, consciously or unconsciously, make a decision to pursue (lean farther forward) or retreat (relax, back off, withdraw ...). The decisions made and expressed in movement are arrived at through interpretation of the information being provided by mirror neurons, by the neurological readings of each other’s intentions as expressed in movement.

Observing the conversation from the outside, you are not called upon to make decisions about how to respond, but your mirror neurons are activated just by watching the two people move. You know what they mean because you yourself have done similar movements, and your neurons recognize the intentions that drive those movements. If you were constructing the same conversation from a number of available takes in the editing suite, you would be making decisions about which nuances of the movement to emphasize and which to elide to create a rhythm that feels right. The intuition about what feels right, and what doesn’t, comes, in part, from mirror neurons doing their work of interpreting intentions in movement. The shaping of the flow of these movements is the editor’s work of creating the appropriate interchange for a given moment in a film.



FIGURE 1.1

In this scene from Quentin Tarantino's film Pulp Fiction (1994), Tim Roth's character Ringo is trying to convince Yolanda (Amanda Plummer) to do something. In the first image (a) he is leaning forward, arms open to her in a gesture that reads as sincere, serious, and intent. She is focused on him, but her arms are clenched close to her body, shoulders slightly hunched, and face turned very slightly to the side so that she would have to look at him out of the corner of her eye. Her posture in relation to his is protective, maybe unwilling or skeptical. In the next image (b) Ringo looks as though he is about to jump out of his seat with vehemence. Yolanda has opened her arms and is leaning farther forward, looking straight at him; in other words, she has physically and psychologically opened up to his plan and is moving toward it. Even without hearing the dialog, we know what these characters mean because we recognize the intention in their movement. [Photo credit: Miramax/Buena Vista; The Kobal Collection; Linda R. Chen]

BEING RHYTHM

The editor is a material, physical, rhythmical entity that accrues rhythmic knowledge of the world. However, her body has another function in the creation of rhythm. It doesn't just recognize and store information about rhythm, it also *provides* rhythms. The editor's living, breathing body is the other source of rhythm available in the edit suite. Rhythm is in her own physical presence.

Roland Barthes' discussion of the difference between playing music and hearing music in his essay "Musica Practica" could also be a description of the way in which the editor's body participates in the creation of rhythms:

... the body controls, conducts, coordinates, having itself to transcribe what it reads, making sound and meaning, the body as inscriber and not just transmitter, simple receiver.¹⁹

The musician's, or in this case the editor's, physical presence and physical engagement with the material becomes part of the creative process. The rhythms of an editor's body act on the material of the film's rushes in a very direct, physical way. Her own rhythm of blinking, breathing, heartbeat, synapses firing, as well as the rhythm of her cycles of sleeping, eating, thinking, and feeling, choreograph the film's rhythm. The next section will articulate some theories about how this works, how the rhythm of the material passes through the rhythms of the editor on its way to being formed.

THINKING RHYTHMICALLY

Thinking rhythmically is what I will call the intersection of the rhythms of the world and the rhythms of the editor's body with the editor's learned craft skills, including her ability to operate the editing gear. The three knowledges—knowledge of the world, of the body, and of the craft—are deeply entwined. The entwining occurs during the learning of craft skills and gear operation. During this process the body develops a new rhythm, a rhythm of editing as physical movement and work.

Also during this process some of the editor's significant neural mirroring patterns are formed. To quote Walter Murch on learning rhythms from working closely with other editors:

You pick up the good things that other editors are doing and you metabolize those approaches into what you're doing, and vice versa. It's kind of like women who live together eventually having their periods at the same time.²⁰

Murch's metaphor alludes to a process that is very much embodied. The picking up of good things is a process of metabolizing; i.e., taking the crafting knowledge into your body. Sharing a common rhythm of menstrual cycles is an example of oscillating with the rhythms of the world and an example of a body becoming a source of rhythmic knowledge about the world. In Murch's description of learning from other editors, the rhythms of the world and the rhythms of the body become entwined with the skills of editing.

Murch also talks about blinking and tuning oneself to the rhythm of the filmed material:

One of your tasks as an editor is sensitizing yourself to the rhythms that the (good) actor gives you, and then finding ways to extend these rhythms into territory not covered by the actor, so that the pacing of the film as a whole is an elaboration of those patterns of thinking and feeling. And one of the many ways you assume those rhythms is by noticing—consciously or unconsciously—where the actor blinks.²¹

I propose that an editor doesn't just notice where the actor blinks, she imitates it. This might mean that the editor literally imitates it, or at least tries to, by syncing up her own blinking rhythm with that of the actor and making a cut. Then, in playing back that cut, if the rhythm of her own blinks and the rhythm of the actor's blinks don't sync up, perhaps the rhythm of the film doesn't "feel right." So, the editor will have a look, adjust the cut, and then try re-syncing her rhythm to the rhythm in the material she has just cut into place. The editor needn't literally blink with the actors (although some do), her mirror neurons imitate the blinks. They mirror

the movement of the actor, and perhaps, on the first rough assembly, the blinks fail to light up all the mirror neurons that could be lit up in association with that moment of the film, in which case, the cut gets adjusted.

What editors are doing to tune themselves to the rhythm of the material is drawing on their own experiences of the rhythms of, for example, blinking. This knowledge of blinking rhythms they have perceived is implicitly compared to the rhythms they see in the rushes and cuts they are working on. As they continue to refine the cuts, they use their mirror neurons and kinesthetic empathy to relay the external rhythms, which they perceive in the developing edits, *through* their internal rhythms, to create the rhythm of the film.

Ross Gibson, in his essay “Acting and Breathing,” picks up on Murch’s ideas about blinking and extends them into a discussion of breath rhythm as an affective rhythm that actors use:

When we watch a body in performance, we watch its breathing, and most crucially we also imbibe its breathing. Performers with strong presence can get us breathing (and blinking also) in synch with them. As we experience the patterns of their corporeal existence, we also get gleamings (*sic*) of their thoughts and feelings—we get these gleamings in our bodies, nervously, optically, and cardio-vascularly . . . we feel ourselves occupied and altered by the bodily rhythms of another.²²

Gibson is writing about live performance at this point in the essay, but the same “imbibing” of breath can take place in the cinema. The difference is that, in cinema, the actor’s breath rhythms have passed through the hands, or perhaps the lungs, of the editor.²³ Gibson goes on to discuss the activity the viewers are engaged in, what their bodies are doing, when they are being moved by a performance:

By blinking and breathing in synch with the performer, you can feel the actor representing you in the world of the drama. And through the proxy of the actor . . . you can feel the imaginary world course through you. Your representative breathes you and blinks you and thereby helps you imagine experiences other than your own.²⁴



FIGURE 1.2

In this scene from Blade Runner (Ridley Scott, 1988) Deckard (Harrison Ford) puts Rachael (Sean Young) through a test to determine whether she is a human or a “replicant.” The test measures her eye movement as a way of determining her thoughts. So the scene, in a sense, illustrates Murch’s premise about blinking revealing thinking. Interestingly, Harrison Ford blinks fairly often in this scene, shifting his thoughts and focus from himself to his job, to his subject, to his concerns about the whole operation, and so on. Sean Young blinks not at all, an impenetrable presence, until, toward the end, when she becomes confused and flustered by the test results, she uncharacteristically blinks three or four times in one shot.

Before the spectator can have this wonderful experience of blinking and breathing with the performer in the cinema, the editor has to do it. She has to use her own physical presence as a stand-in for the spectator's and measure the rhythms of the film's breath by comparing it with the feeling of her own breathing. To do so, the editor has to imbibe the breath first. Then the editor can deploy her two caches of rhythmic knowledge on it: the rhythms she has seen, in the world or in the rushes (or both); and the rhythms she has "been," in the sense of her own experiences of breathing and blinking.



FIGURE 1.3

In this scene from American Beauty (Sam Mendes, 1999) there is a quartet of breath rhythms carried on the voices of the four actors, each of whom has a different pattern and different state of mind and different objective. But the scene is unmistakably driven by the breathing of Lester (Kevin Spacey), who is overwhelmed by desire for his daughter's friend, Angela (Mena Suvari). Each of his utterances is borne on a particular breath expressing his desire, and each of his exhalations and inhalations adds to the sense of his purpose and intent. The other three characters each respond: Lester's wife (Annette Bening), with a chirpy, high-pitched insistence that glosses over everything; Janie (Thora Birch), with a strangled breath and sound that barely escapes through gritted teeth; and Angela, with an easy poise, a breath rhythm that promises much but gives little away. [Photo credit: DreamWorks/Jinks/Cohen; The Kobal Collection]

I propose that Murch's ideas about blinking and Gibson's about breathing can be extended to take the actor's whole body and the whole of the *mise-en-scène* into account as a source of kinetic communication. As an editor, my body tenses and relaxes responsively to what I see because my kinesthetic empathy and mirror neurons are activated by all of the sources of movement on the screen. If I can be at some level tuned to these physical responses to what I see and hear, then I can use them to make the rhythm feel right.

In this case, the method editors use for constructing a rhythm is this: they breathe and blink with the actors, feeling their way through a shot, a performance, a scene, and the whole film. They tune their awareness of the movements in the film to the rhythms of their own bodies. Some even hear the film's movement as a song in their heads. Others sway, shrug, nod, or squint with the energies made visible by movement passing before their eyes. Maybe something is off. The sigh of the actor doesn't feel long enough—literally. I know because I can feel his sigh in my body.

Because the editor is conducting rhythms of the whole world of the rushes, as we have seen, Murch suggests "sensitizing yourself to the rhythms that the (good) actor gives you, and then finding ways to extend these rhythms into territory not covered by the actor."²⁵ The actor's intentional movements provoke empathetic engagement in the editor's body and implicit comparison, by the editor, of the rhythms of the performance to her own rhythms and the rhythms of the world. The editor uses this form of intuition (the Bergsonian sense of being in "coincidence"²⁶ with the actor's rhythms) to make decisions about when and where to cut the performance to shape its rhythms. During this process a rhythm of the film begins to take shape in the rushes, and in the editor there awakens a physical experience of this nascent rhythm. This physical experience is used to map the rhythms in the film where the actor is not present, to give the story, emotions, and visuals rhythm.

USEFUL QUESTIONS

If an editor is stuck, and she knows that some of her intuition about rhythm comes from her knowledge of the rhythms she has seen or heard in the world or rhythms of her own being, she may ask herself what rhythmical experience she can use for comparison to the rhythm she is trying to construct.

This question is generally deployed unconsciously when confronted with an editing project. It is part of the comparison that is implied by the statement, "It doesn't feel right"; i.e., it doesn't feel right compared to some internal or external

experience of rhythm. So, an editor could employ this question consciously as a strategy for giving rhythmic intuition a structure to work within. She could ask herself: To what rhythm am I comparing the rhythm of this edit? This question pushes the editor to broaden the range of rhythms she refers to during the process of editing and brings the editor's body of knowledge about perceiving rhythms and being rhythms into active engagement with the rhythms she is shaping from the uncut, raw, filmed material.

SUMMARY

Intuition in editing is a mode of thinking that includes creativity, expert judgment, sensitivity, and "unreflective execution of intricate skilled performance."²⁷ It also includes activation of implicit learning, which is learning acquired through nonconscious means. This chapter has proposed that the specific learning that supports intuition about the creation of rhythms in film editing is acquired through living in a rhythmic body and in a rhythmic universe. However, although this learning is implicit in being alive, it is not necessarily *only* implicit. Just as Murch suggests that we can sensitize ourselves to the rhythms a good actor provides, we can also sensitize ourselves to the rhythms of the world and of the body to expand and enhance our intuitions about cutting rhythms.

ENDNOTES

1. Oldham, G., *First Cut: Conversations with Film Editors*, p. 27 ("magic," Sheldon Kahn), p. 91 ("feels right," Carl Kress), p. 177 ("it's intuitive," Bill Pankow), p. 194 ("it's intuition," Paul Hirsch), p. 209 ("having a sense," Donn Cambern), p. 301 ("you just know," Sidney Levin), p. 320 ("exclusively in the realm of intuition," Merle Worth), p. 372 ("an internal sense," Richard Marks), p. 381 ("we go by intuition," Alan Heim).
2. Schon, D., *The Reflective Practitioner: How Professionals Think in Action*, p. vii.
3. Restak, R., *The New Brain*, p. 22.
4. *Ibid.*
5. Online at www.moviemaker.com/hop/vol3/02/editing2.html; accessed March 2007.

6. Restak, R., *The New Brain*, p. 22.
7. Claxton, G., "The anatomy of intuition," in *The Intuitive Practitioner*, p. 40.
8. Lorenz, Konrad, as quoted in Claxton, G., *ibid.*, p. 44.
9. Bergson, H., *Introduction to Metaphysics*, pp. 81–82, as quoted in Fraleigh, S. H., *Dance and the Lived Body: a Descriptive Aesthetics*, p. 167.
10. Rowe, C., "Dany Cooper interview," *Inside Film Magazine*, p. 43.
11. Tarkovsky, A., *Sculpting in Time*, pp. 119–120.
12. *Ibid.*
13. Oldham, G., *First Cut, Conversations with Film Editors*.
14. Claxton, G., "The anatomy of intuition," in *The Intuitive Practitioner*, p. 40.
15. Modell, A. H., *Imagination and the Meaningful Brain*, p. 145.
16. Restak, R., *The New Brain*, pp. 35–37.
17. The meaning of "intentional" has significant potential for variation when moving between scientific studies and philosophical studies. As Robert Sokolowski says in *Introduction to Phenomenology*, "The core doctrine of phenomenology is the teaching that every act of consciousness we perform, every experience that we have is intentional: it is essentially 'consciousness of' or an 'experience of' something or other . . . We should note that this sense of 'intend' or 'intention' should not be confused with 'intention' as in purpose we have in mind when we act" (p. 8). In the phenomenological sense, all human movements are intentional. In the "practical" (p. 34) sense of having purpose in mind, not all human movements have intention. The discussions of mirror neurons that I have researched do not specifically address this question of the philosophical versus the practical sense of intention. However, my readings do seem to suggest that any human movement can and will be mirrored by another human. When introducing the topic of mirror neurons, Restak begins by discussing how the brain can distinguish "biologically based movements, such as walking, from random other movements" (Restak, R., *The New Brain*, p. 34). Walking is an example of a movement that is potentially intentional in either sense. It may be that one walks with a specific intention or desire, or it may be that walking is intentional in the sense that the biological being, who is walking, has consciousness. What is important is that in *either* case, walking is mirrored by the mirror neurons. This book takes the point of view that other human movements, such as breathing and blinking, which may not be intentional in the sense of having a purpose in mind, are still intentional movements that trigger responses from mirror neurons.
18. Ramachandran, V. S., "Mirror neurons and imitation learning as the driving force behind "the great leap forward" in human evolution," online at www.edge.org/3rd_culture/ramachandran/ramachandran_p2.html; accessed 11 September 2004.
19. Barthes, R., "Musica Practica," in *Image–Music–Text*, p. 149.
20. Ondaatje, M., *The Conversations: Walter Murch and the Art of Editing Film*, p. 62.
21. Murch, W., *In the Blink of an Eye*, 1992, pp. 62–63.
22. Gibson, R., "Acting and breathing," in *Falling for You: Essays on Cinema and Performance*, p. 39.
23. These breath rhythms have also, of course, been considered, shaped, and captured through the rhythms of directing and shooting, passing through the lungs, as it were, of the director, the cinematographer, and the rest of the crew.
24. Gibson, R., "Acting and Breathing," in *Falling for You: Essays on Cinema and Performance*, p. 41–42.
25. Murch, W., *In the Blink of an Eye*, 1992, p. 62.
26. Bergson, H., *Introduction to Metaphysics*, p. 167.
27. Claxton, G., "The anatomy of intuition," in *The Intuitive Practitioner*, p. 40.