Popeye Doyle in the Rearview Mirror: Has the POV Shot Lost its Human Identity?

By Ted Fisher

In 1972, Gerald B. Greenberg won an Academy Award for editing *The French Connection* (William Friedkin 1971). His work in that film exemplifies a traditional editing technique for clarifying the human "identity" behind every Point-of-View (POV) shot or sequence: cutting to a facial close up shot and revealing an active "eyeline" or active "gaze" just before cutting to the POV. For example, in the film's extended car-versus-elevated-train chase scene, Greenberg reveals brief shots of driver Popeye Doyle's eyes and shifting gaze before showing his POV from behind the wheel.

In the decades that followed, however, this technique for "cueing" POV shots transformed in ways that are worthy of close study. Two significant changes in cinematic production seem to have unmoored this type of traditional editing technique for setting up POV shots, forcing editors to adopt new approaches. First, a shift toward the use of stabilized camera systems (specifically, Steadicam rigs starting in 1975 and drone systems in the last decade) has provided material with beautifully smooth but rather "inhuman" camera movement through space. Second, a parallel trend toward shooting action sequences with a "documentary approach" to camerawork has often resulted in productions where the editing team faces a lack of shots that can serve as "cues". Consider, for example, the purposeful use of "documentary style" cinematography in the work of Paul Greengrass. His film *Bloody Sunday* (Paul Greengrass 2002) adopts a documentary cinematography look that is quite appropriate to the depiction of a protest march escalating into violence, recalling news coverage of the real events the film is based on. He follows this with *The Bourne Supremacy* (Paul Greengrass 2004), an action movie embracing the camera shake and lack of coverage characteristic of documentary production.

In 2015, Gerald B. Greenberg edited his final film: a remake of *Point Break* (Kathryn Bigelow 1991), the Hollywood blockbuster that had expanded on previous Steadicam technique and, by emphasizing Steadicam cinematography in several showcased set pieces, established stabilized POV material as central to Hollywood action sequences. Did Greenberg continue to use the editing techniques he developed in the pre-Steadicam era? Or did he address new ideas developed over four decades of editing? In this paper I will present a case study on Greenberg's final edit and relate his practice to emerging contemporary theory on POV

Part One: The Practice, 1971

Gerald B. Greenberg is credited as editor on 44 films, including *The Taking of Pelham One Two Three* (Joseph Sargent 1974), *Kramer vs. Kramer* (Robert Benton 1979), *The Untouchables* (Brian De Palma 1987), and *American History X* (Tony Kaye 1998). Best known for his work on action films, in his long career he cut comedy (*National Lampoon's Christmas Vacation*, Jeremiah S. Chechik 1989), drama (*Awakenings*, Penny Marshall 1990), and even music video (Bruce Springsteen's "Dancing in the Dark" video, broadcast on MTV in 1984). From his apprenticeship with Dede Allen (which included cutting shootout scenes in *Bonnie and Clyde*, Arthur Penn 1967) through his collaboration and shared Oscar nomination with Walter Murch for *Apocalypse Now* (Francis Ford Coppola 1979), to his late-career collaborations with action cinematographer Ericson Core, Greenberg was an editor's editor.

On 10 April 1972, at the age of 35, Greenberg won the Best Film Editing Academy Award for his work on *The French Connection* (William Friedkin 1971). In that film we see—if we look very closely at the craftwork—the cutting edge of cinematic editing practice during the early 1970s. Building on the chase editing techniques demonstrated in *Bullitt* (Peter Yates 1968), Greenberg worked to achieve director William Friedkin's ambition: to create a sequence that would surpass the dramatic extended chases of *Bullitt.* The result, Friedkin claimed, was a sequence that "not only fulfilled the needs of the story, but that also defined the character of the man who was going to be doing the chasing—Popeye Doyle (Gene Hackman), an obsessive, self-righteous, driven man".[i] As Friedkin wrote, in the Director's Guild of America's *Action* magazine:

At this point, I should say that I thought the chase sequence in *Bullitt* was perhaps the best I had ever seen. When someone creates a sequence of such power, I don't feel it's diminished if someone else comes along and is challenged to do better. The chase in *Bullitt* works perfectly well in its own framework, and so, I feel, does the one in *French Connection*. When a director puts a scene like that on film, it really stands forever as a kind of yardstick to shoot for, one that will never really be topped, that will always provide a challenge for other filmmakers.[ii]

Greenberg's success, however, is notable as a controlled virtuoso performance rather than as a radical, if heartfelt, burst of wild creativity. Greenberg, always a paid craftsman at the service of a director or a film studio, never embraced the more intense experimentalism of his New

York contemporary Ralph Rosenblum or the risk taking of an emerging set of international editors treating montage as an art form, rather than a last stage of refinement in a studio production model. (Later in his career, Greenberg would be brought in to "save" films that a studio perceived as at-risk in the hands of less-experienced film directors.)

Greenberg's editing of the famous *French Connection* chase scene, then, should be thought of in the way classical music fans understand recordings by pianist Vladimir Horowitz: he is not the composer, but an interpreter, bringing a perfected version of a set of ideas that others have worked with, but never at such a refined level. This is an overstatement, but Friedkin supports this appraisal of Greenberg's invisible craft:

I can't say too much about the importance of editing. When I looked at the first rough cut of the chase, it was terrible. It didn't play. It was formless, in spite of the fact that I had a very careful shooting plan that I followed in detail. It became a matter of removing a shot here or adding a shot there, or changing the sequence of shots, or dropping one frame, or adding one or two frames. And here's where I had enormous help from Jerry Greenberg, the editor. As I look back on it now, the shooting was easy. The cutting and the mixing were enormously difficult.[iii]

What, exactly, had the Friedkin / Greenberg team done? It is essential to recognize that Greenberg could only cut together the shots provided to him by Friedkin's filming, and while he structured, paced, and refined the chase, Friedkin and his cinematographer Owen Roizman made systematic choices on camera placement and the focal lengths of the lenses used. Friedkin:

The entire chase was shot with an Arriflex camera, as was most of the picture. There was a front bumper mount, which usually had a 30- or 50-millimeter lens set close to the ground for point-of-view shots. Within the car, there were two mounts. One was for an angle that would include Hackman driving and shoot over his shoulder with focus given to the exterior. The other was for straight-ahead points-of-view out the front window, exclusive of Hackman. Whenever we made shots of Hackman at the wheel, all three mounted cameras were usually filming. When Hackman was not driving, I did not use the over-shoulder camera. For all of the exterior stunts, I had three cameras going constantly.[iv]

In this initial description of his system, Friedkin is only telling us part of the story, but importantly he has described three camera angles we see in the film.

FRONT BUMPER CAMERA ANGLE: from the front bumper of the car, a view that acts as the driver's POV. This is not through the windshield, and we do not see the hood of the car as the driver would in real life, but we accept it as communicating the experience of what it is like to drive forward on the New York street. There are two important technical considerations: first, that most cinematographers shooting on 35mm film (as Friedkin did) think of using a 50mm lens as approximating our normal human vision of the world (with the 30mm lens providing a wider view); and second, that placing the lens close to the ground gives an enhanced sense of speed and motion. A few years after this, Claude Lelouch would use this low-front-bumper technique to give a sense of intense high-speed racing through Paris in his nine-minute short *Rendezvous* (1976).

OVER-THE-SHOULDER CAMERA ANGLE: This is not, for the purpose of our discussion, a POV shot. In theory, we do not "identify" with the driver, but experience this view in the same way we experience any general camera view. This minor, but significant, distinction becomes essential to our understanding of the mechanics of "POV" shots when we consider how little difference there is between this shot and the next—which is thought of as the driver's point-of-view. This is from almost the identical camera position, simply using a slightly wider focal length and revealing the driver's shoulder.

THROUGH-THE-WINDSHIELD CAMERA ANGLE: This view acts as the driver's POV. This is filmed from very close to the same camera position as the "over the shoulder" angle, but due to the use of a longer focal length, we simply see out the windshield without the inclusion of the driver's shoulder. We are not in the back seat of the car now … we are seeing through the driver's eyes. We can, the filmmakers hope, identify with the driver.

Watching the film, however, reveals that Friedkin's claim that we see Popeye Doyle's driving movements via the "over the shoulder" shot is incomplete. There are a range of views from the position of a camera operator in the car's front right seat, giving us a more complete indication of our main character turning the steering wheel and reacting to the events of the chase. We can think of these as the **PASSENGER-SEAT CAMERA ANGLES**. Most importantly for our discussion, we also have shots of Doyle's face and eyes, some made from a camera mounted on the car's front hood and some in closer, from a camera inside the windshield, shot when the car was not moving. These **CLOSE-UP SHOTS** are essential to the film's POV tactics.

During most of the chase, Doyle's car is driving beneath an elevated train. The structure above him is reflected in the car's windshield in the majority of the hood-mounted camera shots, giving an active sense of motion. Reflected shapes slide up the windshield, yet Doyle's face is readable through the windshield glass. At a moment of higher intensity, however, a tighter close-up is used. Friedkin describes it:

To achieve the effect of Hackman's car narrowly missing the woman with the baby, I had the car with the three mounted cameras drive toward the woman, who was a stunt person. As she stepped off the curb, the car swerved away from her several yards before coming really close. But it was traveling approximately 50 miles per hour. I used these angles, together with a shot that was made separately from a stationary camera on the ground, zooming fast into the girl's face as she sees Doyle's car and screams. This was cut with a close-up of Doyle as he first sees her, and these two shots were linked to the exterior shots of the car swerving into the safety island with the trash cans.[v]

Watching the film reveals the close-up of Popeye Doyle that Friedkin mentions, but it is worth noting that there is one more mechanism at work here: in some of these "Doyle's face" shots we see not only a matched eyeline—Doyle looking in a direction that matches the POV shot—but often see his eyes move. The chase proceeds. We cut to Doyle; his eyes move. Then we cut to a POV shot revealing what he sees. This use of an eye-movement visual cue and other cues is essential to understanding the POV usage not only in this famous chase, but throughout the film. It is a very direct editing strategy. It works, and it proceeds in alignment with film theory. A close viewing of the film makes the technique obvious, but there is much to be gained by questioning it: why does this work, how does it work, and what are the limits of this editing mechanism?

Part Two: The Theory, 1975

Between 1973 and 1976 Christian Metz wrote *Le Signifiant imaginaire. Psychanalyse et cinema*, but before the complete book was published in 1977 an English translation of the first section ("The Imaginary Signifier") was published in *Screen* in 1975. One might wish to imagine film editors like Greenberg lining up impatiently at a newsstand while stacks of the film journal were unloaded, but sadly, communication between theory and practice in film editing (despite shining moments in essays by Sergei Eisenstein and Dziga Vertov and François Truffaut) was mostly nonexistent in the world an editor like Greenberg inhabited.

If we cannot see a direct influence on filmmakers, we can, however, look to Metz to understand an emerging shift in academic thinking on how a viewer "identifies" during a film viewing experience—whether we care about that as a practical matter driving editing decisions or as a more philosophical problem. Whether we hope to devise an editing strategy to amplify a viewer's emotional identification or to build a theoretical system for understanding film language itself, reading Metz kickstarts the process.

By simply making the assertion that there is an inherent identification function in the institution of cinema, in the apparatus of cinema, and (in a complex and problematic way) in the viewer of cinema, Metz opened new ground in editing room theory. Quite quickly, however, Metz' conception of a mechanism allowing cinematic identification became a sort of easy target: if we identify with characters put forward by the dominant culture, is "identification" not prone to creating sympathy for mainstreamed racism, sexism, and homophobia, etc.?

Metz' secondary concern—how one might connect with the "people" in a film—was read often, but his primary interest in the inherent strangeness that humans can "identify" with projected shadows at all, was lost in his complex explanations of "looks" and "codes" and "sub-codes." Yet his primary concern provides the essential theory that relates to POV shots, and the essential background we need to consider if we wish to understand the conceptual framework of human identity implied in a point-of-view camera angle.

Picture Metz' essay as the car that Popeye Doyle commandeers during the chase: it gets smashed, then smashed again, yet somehow carries us to the end of our path. What, then, did Metz actually say?

The ego's position in the cinema does not derive from a miraculous resemblance between the cinema and the natural characteristics of all perception; on the contrary, it is foreseen and marked in advance by the institution (the equipment, the disposition of the auditorium, the mental system that internalises the two), and also by more general characteristics of the psychic apparatus (such as projection, the mirror structure, etc.), which although they are less strictly dependent on a period of social history and a technology, do not therefore express the sovereignty of a 'human vocation', but inversely are themselves shaped by certain specific features of man as an animal.[vi]

For Metz, these "specific features of man" included mental development shaped by a Lacanian "Mirror Stage" in which there is an "illusion of perceptual mastery", and, he claims, cinema offers a parallel illusion.[vii] This assertion, like the side door of Doyle's car, has become quite

damaged over time. While Lacanian / Psychoanalytic film analysis carries on, few theorists today, if any, would enthusiastically argue for some sort of Mirror Stage development as the key to cinematic "identification" with a character, a camera, or an omniscient perceiver within a film.[viii]

Yet if we decide that Metz has the specific mechanism for identification wrong, we should still credit him with his insistence that identification happens through a complex mechanism, not a simple momentary confusion that a film shot is somehow, suddenly, real. While one of cinemas (doubtful) "origin stories" tells us that panicked viewers fled the theatre when the train neared in *L'arrivée d'un train à La Ciotat* (1896), we can imagine a difference between a jump-scare gimmick and a deeper moment where identification—seemingly being behind the wheel in the car chase, for example—makes the experience more than a shallow surprise. Surely our reaction in the cinematic instant we realize Popeye Doyle is driving directly at the woman with a baby carriage parallels our own complex and actual experiences of having an animal run in front of a car we are driving?

Metz' specific discussion of point-of-view shots is convoluted. He is not wrong, but his discussion of how POV shots are perceived is quite different than we might expect if a film editor attempted the same explanation. He claims:

In a fiction film, the characters look at one another. It can happen (and this is already another 'notch' in the chain of identifications) that a character looks at another who is momentarily out-of-frame, or else is looked at by him. If we have gone one notch further, this is because everything out-of-frame brings us closer to the spectator, since it is the peculiarity of the latter to be out-of-frame (the out-of-frame character thus has a point in common with him: he is looking at the screen). In certain cases the out-of-frame character's look is 'reinforced' by recourse to another variant of the subjective image, generally christened the 'character's point of view': the framing of the scene corresponds precisely to the angle from which the out-of-frame character looks at the screen. (The two figures are dissociable moreover; we often know that the scene is being looked at by someone other than ourselves, by a character, but it is the logic of the plot, or an element of the dialogue, or a previous image that tells us so, not the position of the camera, which may be far from the presumed emplacement of the out-of-frame onlooker.)[ix]

Metz comprehends cinematic space differently than a film director like Friedkin would. Instead, he builds a mental scenario: the screen is a mirror, but I am not reflected in it. This complex conceptualisation of space leads to his strange explanation of the POV shot: he imagines off-screen characters in a virtual space. This virtual space overlaps the

theatre in which we (actually) watch the film.

It is not an idea that a film editor would find valuable in any pragmatic sense. What makes it valuable is that it escapes from the ground level of POV theory: a POV happens when a character looks through a keyhole, a telescope, a gun sight, or the bottom of a glass. Metz' theory begins to fly up into the air: a POV is part of a complex mental conception of cinematic space. If he is, unfortunately, intent on overlaying Lacan's Mirror Stage as a metaphor for this space, he at least allows us to abandon the idea that a POV means locating a camera in place of a character's eyes. Now, we're locating a camera in place of a character's mind.

And it is true that as he identifies with himself as look, the spectator can do no other than identify with the camera, too, which has looked before him at what he is now looking at and whose stationing (= framing) determines the vanishing point. During the projection this camera is absent, but it has a representative consisting of another apparatus, called precisely a 'projector'. An apparatus the spectator has behind him, at the back of his head, that is precisely where phantasy locates the 'focus' of all vision.[x]

Metz' reference to a "vanishing point" is connected to the analysis of his contemporary (and fellow Lacanian / Psychoanalytic film theory enthusiast) Jean-Louis Baudry. In reading Baudry, we see more clearly Metz' leap forward in thinking. By 1970 Baudry questions existing ideas on cinematic space and the human perception of it, yet it is a critique of ideology, not an attempt to reconsider the deepest mechanisms of human perception.

In Baudry's *Ideological Effects of the Basic Cinematographic Apparatus*, first published in 1970, we find a discussion of conventional cinematic space as ideologically regressive—mired in Renaissance perspective.[xi]

Of course the use of lenses of different focal lengths can alter the perspective of an image. But this much, at least, is clear in the history of cinema: it is the perspective construction of the Renaissance which originally served as model. The use of different lenses, when not dictated by technical considerations aimed at restoring the habitual perspective (such as shooting in limited or extended spaces which one wishes to expand or contract) does not destroy [traditional] perspective but rather makes it play a normative role. Departure from the norm, by means of a wide-angle or telephoto lens, is clearly marked in comparison with so-called "normal" perspective. We will see in any case that the resulting ideological effect is still defined in relation to the ideology inherent in perspective.[xii]

While Baudry intends this as critique—after all, how can a practice stuck in a centuries-old visual system produce revolutionary art?—his explanation of the production of cinema sounds strikingly similar to the process of Friedkin planning shots, Roizman choosing focal lengths, and Greenberg cutting together the resulting images.

Equally distant from "objective reality" and the finished product, the camera occupies an intermediate position in the work process which leads from raw material to finished product. Though mutually dependent from other points of view, découpage [shot breakdown before shooting] and montage [editing, or final assembly] must be distinguished because of the essential difference in the signifying raw material on which each operates: language (scenario) or image.[xiii]

Where Baudry moves theory forward—thus allowing Metz to take flight—is in his desire to shift the perceiving intelligence from "the eye of the subject" to a "transcendental subject." At an early stop on this journey, he considers the implications of traditional perspective:

The conception of space which conditions the construction of perspective in the Renaissance differs from that of the Greeks. For the latter, space is discontinuous and heterogeneous (for Aristotle, but also for Democritus, for whom space is the location of an infinity of indivisible atoms), whereas with Nicholas of Cusa will be born a conception of space formed by the relation between elements which are equally near and distant from the "source of all life." In addition, the pictorial construction of the Greeks corresponded to the organization of their stage, based on a multiplicity of points of view, whereas the painting of the Renaissance will elaborate a centered space. ("Painting is nothing but the intersection of the visual pyramid following a given distance, a fixed center, and a certain lighting."-Alberti.) The center of this space coincides with the eye which Jean Pellerin Viator will so justly call the "subject."[xiv]

Baudry here surfaces a part of the discussion that should be key in any consideration of cinematic identification: what happens when the camera moves?

Meaning and consciousness, to be sure: at this point we must return to the camera. Its mechanical nature not only permits the shooting of differential images as rapidly as desired but also destines it to change position, to move. Film history shows that as a result of the combined inertia of painting, theater, and photography, it took a certain time to notice the inherent mobility of the cinematic mechanism. The ability to reconstitute movement is after all only a partial, elementary aspect of a more general capability. To seize movement is to become movement, to follow a trajectory is to become trajectory, to choose a direction is to have

the possibility of choosing one, to determine a meaning is to give oneself a meaning. In this way the eye-subject, the invisible base of artificial perspective (which in fact only represents a larger effort to produce an ordering, regulated transcendence) becomes absorbed in, "elevated" to a vaster function, proportional to the movement which it can perform. . . . And if the eye which moves is no longer fettered by a body, by the laws of matter and time, if there are no more assignable limits to its displacement-conditions fulfilled by the possibilities of shooting and of film-the world will not only be constituted by this eye but for it. The movability of the camera seems to fulfill the most favorable conditions for the manifestation of the "transcendental subject."[xv]

Baudry continues quickly past this transcendental subject, ending in the same place Metz would: cinematic identification happens not in a subject's eye, not in a subject's mind or soul, but in some difficult-to-imagine moment where cinema acts as the "mother" in Lacan's Mirror Stage, holding up the baby to see itself reflected, revealing the viewer and the viewer in relationship to the world in a mystical, illusionary play.

Metz says:

What I have said about identification so far amounts to the statement that the spectator is absent from the screen as perceived, but also (the two things inevitably go together) present there and even 'all-present' as perceiver. At every moment I am in the film by my look's caress.[xvi]

He then uses an odd word about this presence: hovering. Like Ralph Waldo Emerson's "Transparent Eyeball", the subject—our awareness—floats along, seeing everything.

Part Three: The Rig, 1972-2002

Let us, for a moment, abandon the Mirror that Metz and Baudry wish to sell us, and pause in this moment where the camera and our awareness simply hovers. It is, after all, an easy thing to imagine and a common dream. Yet the reality of film cameras has always been the opposite: a camera is a heavy, shaky box that is difficult to move smoothly. Much of film technology's history can been seen as working to counter this problem: the tripod, the fluid head, the dolly, dolly tracks, cranes, the shoulder mount, and the Steadicam. In "'DANCING, FLYING CAMERA JOCKEYS': Invisible Labor, Craft Discourse, and Embodied Steadicam and Panaglide Technique from 1972 to 1985", Katie Bird traces the development of early Steadicam practice and, more importantly, how this practice connects to the characteristics of human movement rather than

mechanical action.

In 1972, out of a desire to produce a handheld shot that looked as stable as a dolly shot, Philadelphia-based camera operator and commercial producer Garrett Brown set to work on a series of experimental designs for an apparatus that could mimic the way that humans see and move around in space. . . . In 1974 Brown returned to Philadelphia to make a 35mm "Brown Stabilizer" prototype and updated demo reel to promote the device to potential large-scale manufacturers. In the demo reel, Brown wore the rig and produced a series of "30 impossible shots": rambling around the Pennsylvania hills near his barn workshop and a sequence with Brown chasing his girlfriend, Ellen, up and down the stairs of the Philadelphia Art Museum. . . . The art museum stair footage would go on to captivate manufacturers and directors alike, and it directly inspired John Avildsen and Sylvester Stallone's now infamous sequence ascending the very same Philadelphia stairs in Rocky.[xvii]

Claiming that a camera operator in a Steadicam rig is, essentially, a "hovering" consciousness (to paraphrase, and perhaps distort, the theory of Baudry and Metz) may at first seem to be a bit of a stretch. Consider, however, documentary practice before and after the mainstreaming of Steadicam stabilization in high-budget documentary filmmaking.

Consider two moments before:

- A handheld 35mm Eyemo camera walks along with troops in John Huston's documentary on *The Battle of San Pietro* (John Huston 1945)
- A shoulder-mounted 16mm Auricon camera follows John F. Kennedy from a car through a crush of political supporters to deliver a speech in Robert Drew's *Primary* (Robert Drew 1960)

And consider two moments after:

- A drone floats a camera into and out of a wooded area in Michael Madsen's *Into Eternity: A Film for the Future* (Michael Madsen 2010)
- A helmet-mounted GoPro camera drifts through a series of snowboard jumps on a training course in Lucy Walker's *The Crash Reel* (Lucy Walker 2013)

While one can develop a list of documentaries using a Steadicam

operator—*Russian Ark* (Aleksandr Sokurov 2002), *Pina* (Wim Wenders 2011), *Cathedrals of Culture* (Karim Aïnouz, Michael Glawogger, Michael Madsen, Margreth Olin, Robert Redford, Wim Wenders 2014) —these films remain a small percentage of mainstream documentary releases. There has been more of a conceptual change than a "takeover" by Steadicam operators. The idea of stabilization has expanded documentary practice. But it is the audience acceptance of Steadicam motion and Steadicam identity that has been the most significant change.

What, exactly, is the difference between the handheld camera work of Ricky Leacock in *Jazz Dance* (Roger Tilton 1954) and *Primary* (Robert Drew 1960) and the Steadicam operation of Torben Meldgaard in *Cathedrals of Culture* (Karim Aïnouz, Michael Glawogger, Michael Madsen, Margreth Olin, Robert Redford, Wim Wenders 2014) and *Into Eternity: A Film for the Future* (Michael Madsen 2010)? Katie Bird's "DANCING, FLYING CAMERA JOCKEYS" delves into complicated explanations of the "embodied" camera, comparing Steadicam practice to dance and puppeteering:

This intuitive recognition is built on a knowledge of personal quirks (ways of moving in space), as well as the weight and placement of load by the operator's body. In other words, no Steadicam shot performed by different operators would look alike even if filmed under the exact same shooting conditions, flight path, and start and stop marks.[xviii]

A more direct claim is found in a 1992-1993 *American Cinematographer* article by Brooke Comer: "Steadicam Hits Its Stride". Comer quotes Steadicam operator Jeff Mart's simpler take:

Even though Mart believes that Steadicam is one of the most unusual inventions the film world has seen in many years, he's sure that its use has not even begun to be fully explored. "There's something very special about its capabilities", he says. "A Steadicam shot is very close to what you experience as a human being because of the slightly less-than-perfect motion. It rocks a bit, but that's how a human moves through space in life. We don't glide like dollies. We move with our heads bobbing slightly, and this imperfect perspective is something that filmmakers are forever after. If used correctly, Steadicam is a priceless addition to film."[xix]

In 1991, James M. Muro, Steadicam operator, worked with James Cameron on *Terminator 2: Judgment Day* (James Cameron 1991). It was his 22nd credit in this role. Comer's article includes a long section quoting Jimmy Muro:

"Terminator 2 epitomizes the total integration Steadicam can have within a film", he submits. "The Steadicam was totally intertwined in the picture. It was the tool that moved you from scene to scene, and it was cut so nicely that it flowed, it took you for the ride of your life." He and Cameron were in sync when they planned their Steadicam shots: "We didn't like it for full-on running, and Jim didn't want to do fast-tilts. With so much mass, you can't be on someone's face and tilt quickly to the floor. But we could do whip pans by getting medium close, whipping the camera to what the character is seeing, then stopping on a dime – which is tough to do."[xx]

Cameron naturally hired Muro for his next release: *Point Break* (Kathryn Bigelow 1991), directed by Kathryn Bigelow. How was Muro's skilful work integrated into the action of that film?

I have looked at a sequence of 56 shots that make up the most famous chase in the film. In the sequence, after a bank robbery, Bodhi (played by Patrick Swayze) is separated from his gang and pursed by Johnny Utah (played by Keanu Reeves), a former athlete who has joined the Federal Bureau of Investigation. The footchase travels through a tightly-packed neighbourhood, moving through alleys and backyards, and into and through homes as well. The majority of the shots used are clearly recorded from a Steadicam rig. Does this create viewer identification with Bodhi and Utah? Do we embody the chase experience? Are we in the action even more so than in *The French Connection*? Roger Ebert thought so:

Bigelow and her crew are also gifted filmmakers. There's a footchase through the streets, yards, alleys and living rooms of Santa Monica; two skydiving sequences with virtuoso photography, powerful chemistry between the good and evil characters, and an ominous, brooding score by Mark Isham that underlines the mood. The plot of "Point Break," summarized, invites parody (rookie agent goes undercover as surfer to catch bank robbers). The result is surprisingly effective.[xxi]

There is no question that Bigelow's chase, built on Muro's energized camera, is cinematically equal to Friedkin's intense car action, despite its inherent silliness. Bodhi struggles against a boy on a bike, and Utah is attacked with a vacuum cleaner, but the movement through backyard passageways is full of adrenaline and surprise. We run along with the pair throughout the chase.

Still, the specifics of the sequence, if we consider Baudry's "decoupage" and "montage" analysis, present a hybrid form clearly planned and edited

to take advantage of the excitement and possibilities of the Steadicam but without any commitment to presenting the Steadicam view as an ongoing POV of a single character.

Our view chases the chasers, but sometimes jumps ahead. We have POV experiences (Bodhi runs into a flying towel and our view goes dark when it covers his face; we inhabit Utah's eyes when a dog is thrown at him) but there is no rigorous practice. The Steadicam view can at any moment represent either Bodhi, Utah, or an omniscient perceiver. Bigelow's use of cinematic space in action scenes is not vastly changed in character from her work on *Near Dark* (Kathryn Bigelow 1987) or *Blue Steel* (Kathryn Bigelow 1990), just amplified. The Steadicam use here is a bit like Bob Dylan switching to the electric guitar: a difference in intensity, rather than a difference in the essential concerns of the artist.

There are two technical questions to consider.

First, are the POV shots in *The French Connection* (William Friedkin 1971) and *Point Break* (Kathryn Bigelow 1991) essentially different with regard to the "smoothness" of the motion? Interestingly, the answer is that they are not. A dolly shot is smooth and gliding, but both Bigelow's Steadicam and Friedkin's car-mounted cameras give more sway and bounce.

Second, are the POV shots "cued" in *Point Break* (Kathryn Bigelow 1991)? Consider the last section of the chase:

- From a low angle, we see Johnny Utah go over a tall wall, and land hard, injuring himself. Then, with Utah on the ground behind him, Bodhi's feet splash in the flood control channel as he runs close toward us. As Utah struggles to his feet, we cut to a reverse shot of Bodhi running away from us.
- Utah falls back down, rolling around and grabbing his knee. He struggles to his feet, pulls out his gun, then falls, but points the gun toward the camera view, approximately toward Bodhi's position.
- Bodhi runs along to a chain link fence, then leaps onto it and climbs up. At the top of the fence, he looks back toward Utah's position. He is not looking directly to the camera, but off to screen left. **This is potentially a POV cue.**
- On the ground, Utah is pointing a gun toward the camera.
- Bodhi, still at the top of the fence, is still looking to screen left, at

Utah.
- A tighter view of Utah and his gun.
- Bodhi's eyes, direct to camera. **This is potentially a POV cue.**
- In a tight shot, Utah's gun is in focus, but Utah's face is not. Interestingly, this shot can be interpreted as a cued POV, revealing what Bodhi is noticing—yet it is not an "exact" POV since the gun is not pointed directly at the camera.
- Bodhi's eyes again. He begins to turn his head, and we see him climb away. Utah is still on the ground, still pointing the gun. He rolls onto his back, then fires the gun at the sky.

Perhaps *Point Break* (Kathryn Bigelow 1991), then, is at the midpoint between *The French Connection* (William Friedkin 1971) and *Hardcore Henry* (Ilya Naishuller 2015), where the basic production technique involved wearing a headset of two GoPro Hero3 Black cameras—so that every shot in the film would be a POV shot.

Still, the novelty of using only POV shots—and this is only novel if we ignore *Lady in the Lake* (Robert Montgomery 1946)—is not the advancement in film language we are intent on understanding here. The documentary *Russian Ark* (Aleksandr Sokurov 2002) consists of a single 96-minute Steadicam shot. We know it gains all the value a POV shot can offer, but we also know it reveals nothing about the intercutting of POV shots into shots depicting traditional cinematic space. It does not use that technique at all. No POV shots are "cued" if everything is one long POV. Identification may happen, but it is not used to amplify key moments in the film.

Our interest is in understanding what our best editors might decide to do after the dust the Steadicam kicked up settles down, and once the youth movement of GoPro cameras and flying drones matures a bit. In 2018, the Steadicam's function has evolved into the new lifeform of the DJI Ronin-S, a single-handed stabilizer allowing practically untrained operators to run, climb stairs, or charge through Santa Monica backyards with incredible fluidity. It will compete for holiday sales with the GoPro Hero 7 Black, an action camera with internal stabilization so good it is labelled HyperSmooth. Both of these systems will sit alongside aerial drones that work amazingly well, but which create an inhuman floating motion.

Metz understood our perception to "hover," but it is unlikely he meant that a camera should. Our test case for the future of editing, then, needs very close study. Documentary camera motion (as Friedkin, who made several documentaries, was well aware) is often "shaky" in a way that is perceived as authentic, human, and without artifice. As Steadicam

technique has become a celebrated mode of production in fiction film—consider Emmanuel Lubezki's work in *Tree of Life* (Terrence Malick 2011), *Birdman* (Alejandro G. Iñárritu 2014), *The Revenant* (Alejandro G. Iñárritu 2015)—we should be careful about its acceptance leading to our considering all stabilization as the same. We may be at an inflection point, where "embodied" stabilization and "robotic" stabilization (for example, drone cameras) need to be recognized as two separate modes. This becomes understandable when we focus on the issue of identification.

Part Four: The Cut, 2015

Rob Cohen directed *The Fast and the Furious* (Rob Cohen 2001), an immensely popular action film that earned over $200 million at the box office. His follow up, *xXx* (Rob Cohen 2002), made even more. Cohen discussed that film's cinematographic and editing style in *The Cutting Edge: The Magic of Movie Editing* (Wendy Apple 2004), explaining that he considered his approach "cubist" for its use of multiple camera angles and repetition to reveal and emphasize key moments of action. One can see an influence from popular sports media: the slow-motion instant replay techniques used in X-Games broadcasts.

Ericson Core was the Director of Photography on *The Fast and the Furious* (Rob Cohen 2001). When he expanded his work to film directing, he served as his own cinematographer on *Invincible* (Ericson Core 2006) and then *Point Break* (Ericson Core 2015), his big-budget remake of Kathryn Bigelow's film. On both of these films, he worked with Gerald B. Greenberg.

A close watch of Greenberg's edit of *Point Break* (Ericson Core 2015) reveals a shock: there are few POV shots present, and most of these are informational views, rather than views in the action sequences. As well, there are cases where the traditional technique seems called for but is purposefully avoided. At about one hour and eleven minutes into the film, for example, our characters Bodhi (played by Edgar Ramírez) and Utah (Luke Bracey) race away from a mountain landslide on motorcycles. When the dust settles, they pause in a confrontation on two mountainous peaks, with one character near the camera and the other at a distance. The near character, Bodhi, is at screen right, and Utah, at a distance, coasts his motorcycle a bit further into the frame, facing the same direction as Bodhi (toward screen left).

This standoff is a perfect opportunity for a POV shot. The moment is exactly parallel to the confrontation between the men in the original film,

where, as we have seen, POVs cued appropriately were used to heighten the emotional moment. To mark the changing relationship between the men, we might see—and identify with—Bodhi's view of Utah now that he knows his "friend" is an FBI agent. Or we might see Utah's view of Bodhi now that he knows Bodhi will endanger lives to achieve his goals.

We do not see either of these possibilities. Bodhi, near us, begins to turn his head. This could be a perfect cue for a POV, but it is not used. We cut to a standard over-the-shoulder view.

If we think of Baudry's discussion of "découpage [shot breakdown before shooting] and montage [editing, or final assembly]", there are two obvious possibilities. First, editor Greenberg, a champion of cued POV shots, is no longer interested in the technique. Second, director Core, trained by Rob Cohen's externally-based shot selection, did not choose to gather the POV shots Greenberg might have wanted. There is a third, less obvious scenario: since the beautiful cinematography of the film is shot on top-of-the-line digital cinema cameras (an Arri Alexa XT plus and a Red Epic Dragon, according to IMDb) any use of the GoPro cameras produced in 2015 would have meant a jarring drop in visual quality. This restriction limits the available angles in difficult locations.

While there may be a few GoPro camera shots placed somewhere in the film, the primary "action cam" strategy depended on the use of a Blackmagic Pocket Cinema Camera. The weight of this unit is far lighter than a Red or Alexa but still quite significant compared to a tiny GoPro. The camera can (almost) match the look of the full-quality cinema cameras, and it is possible to wear it on a helmet mount. Since this can result in exhaustion, strain, or injury, however, it is often only used for the most critical shots. If a POV isn't considered critical, it is simply not recorded, lost in the difficult mountainside tripod setups for the primary cameras.

What, then, of testing Gerald "Jerry" Greenberg's editing choices at the end of his decades-long career? We think of a film editor as the person who will cut out all that is unnecessary and then make music with what remains. Yet, when an editor is not given the material needed, there are elements of film language that simply become impossible, inexpressible. In *The French Connection* (William Friedkin 1971), the use of cued POVs was key to Friedkin's shooting strategy and central to the film's expression. In *Point Break* (Kathryn Bigelow 1991), Bigelow provided her editor (Howard E. Smith) with POV shots to add effect or emphasis, humour and surprise. In *Point Break* (Ericson Core 2015) we discover that technological advances are often paired with setbacks, as when early sound film techniques meant camera movement had to be rethought.

In documentary production it is expected that low budgets and limited access and the need to work in "real" space rather than imagined, repeatable, "cinematic space" will leave us missing shots and working with imperfect and problematic material. It is difficult to imagine a documentarian seeking out shots that will cue a POV, for example.

So what, then, is to be done with all the footage from helmet cams and the cameras held by our subjects? Is achieving "identification" by POV simply a dream?

Part Five: Documentary Identification, 2018

Baudry claims, "The movability of the camera seems to fulfill the most favorable conditions for the manifestation of the "transcendental subject".[xxii] In the "Stairway to Heaven" (Errol Morris 2001) episode of *First Person*, the documentary series directed by Errol Morris, the camera moves, and, indeed, a transcendental subject is made manifest. But it is not as simple as that. We see, in an interview shot, Temple Grandin. "I think in pictures," she says. "Pictures is my first language, and, you know, English is my second language."[xxiii] As the camera begins to move through a livestock chute, at the level of a cow's eye, she tells us:

I can be a cow walking through that system. I can be a person walking up and down the catwalk. I can be in a helicopter over the system. It's just that simple; it's just like having a video tape of it in your head.[xxiv]

Morris "flies" his camera along. It takes the identity of a cow. It takes the identity of Temple Grandin. It takes the identity of a dreamer. It takes the identify of a conceptualizer. It is a brilliant conflation of several identities at once, a perfect visual for his story on Grandin, "an autistic expert on the humane slaughter of cattle." It is not cued. It is assumed. The style of the shot, when it is presented, the context, our understanding that the projected pictures on a wall or screen are structured by a language and intended to communicate to us—all of this replaces traditional cueing shots. What matters, if we are to have empathy, is that we read a view as connected to an identity, not simply as an artefact from a surveillance camera. It is this distinction, in fiction or nonfiction, that presents us with a chance to think and feel along with another human identity.

[i] William Friedkin, "Anatomy of a Chase – The French Connection," *DGA Quarterly* (Fall 2006): n.p. http://www.dga.org/Craft/DGAQ/All-Articles/0603-Fall-2006/Feature-Anatomy-of-a-Chase.aspx. Original publication: Director's Guild of America, "Anatomy of a Chase – The

French Connection." *Action Magazine* (March-April 1972).

[ii] Ibid.

[iii] Ibid.

[iv] Ibid.

[v] Ibid.

[vi] Christian Metz, *Psychoanalysis and Cinema: The Imaginary Signifier*, trans. Celia Britton (London: The Macmillan Press Ltd, 1982), 53.

[vii] Ibid.

[viii] Metz, "Identification, Mirror," in *Psychoanalysis and Cinema*, 42-57.

[ix] Metz, *Psychoanalysis and Cinema*, 55.

[x] Ibid., 49.

[xi] *Jean-Louis Baudry, "Ideological Effects of the Basic Cinematographic Apparatus," Film*

Quarterly 28, No. 2 (Winter, *1974*-1975): 39-47.

[xii] Ibid., 41.

[xiii] Ibid., 40.

[xiv] Ibid., 41.

[xv] Ibid., 43.

[xvi] Metz, *Psychoanalysis and Cinema*, 54.

[xvii] Katie Bird, "'Dancing, Flying Camera Jockeys': Invisible Labor, Craft Discourse, and Embodied Steadicam and Panaglide Technique from 1972 to 1985," *The Velvet Light Trap* 80 (2017): 48-65.

[xviii] Ibid., 51-52.

[xix] Brooke Comer, "Steadicam Hits Its Stride," *American Cinematographer* 74, No. 2 (1993): 77.

[xx] Brooke Comer, "Steadicam Hits Its Stride," *American*

Cinematographer 73, No. 9 (1992): 82.

[xxi] Roger Ebert, "*Point Break* Movie Review & Film Summary (1991)," *Roger Ebert,* July 12,

  1991. https://www.rogerebert.com/reviews/point-break-1991.

[xxii] *Baudry, "Ideological Effects of the Basic Cinematographic Apparatus*," 43.

[xxiii] Temple Grandin, Interview by Errol Morris, *First Person*, October 26, 2001, accessed October 28, 2018, https://www.youtube.com/watch?v=8QCWeMHU6y0.

[xxiv] Ibid.

Notes on Contributor

Ted Fisher is a film director specializing in arts and culture documentaries. His short films have screened at over 30 festivals around the world. He produced 32 episodes of the ìFrugal Travelerî series for The New York Times, winning the Webby Award in the Travel Category for Online Film and Video in both 2008 and 2009. He earned an M.F.A. in Photography in 2003 from Claremont Graduate University. In 2017 he returned to school, attending the Filmmaking M.F.A. program at the University of Edinburgh. Filmography: http://www.imdb.com/name/nm3299032/

Bibliography

Baudry, Jean-Louis. "Ideological Effects of the Basic Cinematographic Apparatus." Film Quarterly 28, No. 2 (Winter, *1974*-1975): 39-47.

Bird, Katie. ""Dancing, Flying Camera Jockeys": Invisible Labor, Craft Discourse, and

Embodied Steadicam and Panaglide Technique from 1972 to 1985." *The Velvet Light Trap* 80 (2017): 48-65.

Comer, Brooke. "Steadicam Hits Its Stride." *American Cinematographer* 73, No. 9 (1992): 82.

Comer, Brooke. "Steadicam Hits Its Stride." *American Cinematographer* 74, No. 2 (1993): 77.

Ebert, Roger. "*Point Break* Movie Review & Film Summary (1991)." *Roger Ebert,* July 12, 1991. https://www.rogerebert.com/reviews/point-break-1991.

Foundas, Scott. "The Cutting Edge: The Magic of Movie Editing." *Variety*, October 14, 2004.https://variety.com/2004/film/reviews/the-cutting-edge-the-magic-of-movie-editing-1200530187/.

 Friedkin, William. "Anatomy of a Chase – The French Connection." *DGA Quarterly*, Fall 2006.http://www.dga.org/Craft/DGAQ/All-Articles/0603-Fall-2006/Feature-Anatomy-of-a-Chase.aspx. Original publication: Director's Guild of America, "Anatomy of a Chase – The French Connection." *Action Magazine* (March-April 1972).

Metz, Christian. *Psychoanalysis and Cinema: The Imaginary Signifier*. Translated by Celi Britton. London: The Macmillan Press Ltd, 1982.

Filmography:

American History X. 1998. Directed by Tony Kaye.

Apocalypse Now. 1979. Directed by Francis Ford Coppola.

Awakenings. 1990. Directed by Penny Marshall.

Birdman or (The Unexpected Virtue of Ignorance). 2014. Directed by Alejandro G. Iñárritu.

Bonnie and Clyde. 1967. Directed by Arthur Penn.

Bloody Sunday. 2002. Directed by Paul Greengrass.

Blue Steel. 1990. Directed by Kathryn Bigelow.

Bullitt. 1968. Directed by Peter Yates.

Cathedrals of Culture. 2014. Directed by Karim Aïnouz, Michael Glawogger, Michael Madsen, Margreth Olin, Robert Redford, Wim

Wenders.

First Person (episode: Stairway to Heaven). 2001. Directed by Errol Morris.

Hardcore Henry. 2015. Directed by Ilya Naishuller.

Into Eternity: A Film for the Future. 2010. Directed by Michael Madsen.

Invincible. 2006. Directed by Ericson Core.

Jazz Dance. 1954. Directed by Roger Tilton.

Kramer vs. Kramer. 1979. Directed by Robert Benton.

Lady in the Lake. 1946. Directed by Robert Montgomery.

L'arrivée d'un train à La Ciotat. 1896. Directed by Auguste Lumière, Louis Lumière.

National Lampoon's Christmas Vacation. 1989. Directed by Jeremiah S. Chechik.

Near Dark. 1987. Directed by Kathryn Bigelow.

Pina. 2011. Directed by Wim Wenders.

Point Break. 2015. Directed by Ericson Core.

Point Break. 1991. Directed by Kathryn Bigelow.

Primary. 1960. Directed by Robert Drew.

Rendezvous. 1976. Directed by Claude Lelouch.

Russian Ark. 2002. Directed by Aleksandr Sokurov.

Terminator 2: Judgment Day. 1991. Directed by James Cameron.

The Battle of San Pietro. 1945. Directed by John Huston.

The Bourne Supremacy. 2004. Directed by Paul Greengrass.

The Cutting Edge: The Magic of Movie Editing. 2004. Directed by Wendy Apple.

The Crash Reel. 2013. Directed by Lucy Walker.

The Fast and the Furious. 2001. Directed by Rob Cohen.

The French Connection. 1971. Directed by William Friedkin.

The Revenant. 2015. Directed by Alejandro G. Iñárritu.

The Taking of Pelham One Two Three. 1974. Directed by Joseph Sargent.

The Tree of Life. 2011. Directed by Terrence Malick.

The Untouchables. 1987. Directed by Brian De Palma.