

University of Texas Press
Society for Cinema & Media Studies

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Source: *Cinema Journal*, Vol. 31, No. 2 (Winter, 1992), pp. 59-75

Published by: University of Texas Press on behalf of the Society for Cinema & Media Studies

Stable URL: <http://www.jstor.org/stable/1225144>

Accessed: 06/06/2010 09:10

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The Kuleshov Effect: Recreating the Classic Experiment

by Stephen Prince and Wayne E. Hensley

Open any film textbook, and you will find discussions of the “Kuleshov effect,” deriving from the series of editing experiments conducted by Lev Kuleshov in the late teens and early 1920s.¹ One experiment in particular—with the actor Mozhukin, child, soup, and coffin—is perhaps the classic piece of film research, customarily cited in discussions of editing and montage aesthetics as proof that cinematic meaning is a function of the ordering of shots. Students reading these texts in introductory film courses may often encounter the Kuleshov experiment and its reported results as empirical facts. The effect is often written about as if its factual status has really been documented and is uncontested. A representative citation is the following: “[Kuleshov] intercut a perfectly neutral closeup of an actor with a shot of a plate of soup; then the same close up with a dead woman in a coffin; then with a little girl playing with a doll. Audiences raved about the actor’s sensitive projection of hunger, grief, and paternal joy, his subtle shifts of emotion depending on what he was looking at. Kuleshov proved that the order of shots in a sequence influenced the perception and meaning of any given action.”²

It will be the suggestion of this essay that nothing of the kind has really been proven in the usual scientific sense. As Norman Holland and others have noted, the experiment has “passed into the mythology of film.”³ Kuleshov’s experiments are surrounded with questions of fact and procedure that make his work difficult to evaluate and that cast some doubt on his conclusions. The footage Kuleshov used is now lost, and accounts about the famous experiment with Mozhukin are contradictory. According to Pudovkin, the Mozhukin footage included a shot of a woman in a coffin. In another context, Kuleshov indicated it was a naked woman on a couch.⁴ Despite such problems, however, the Kuleshov experiments are repeatedly cited and acknowledged by the introductory texts in our field, where they are disseminated to succeeding generations of novice students. This being the case, a critical examination of the Kuleshov legacy may be in order, the better to disentangle the components of speculative theory and empirical observation operative inside his research paradigm. The goal here is to provide a clearer contextualization of Kuleshov’s work, distinguishing between

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its incontrovertible importance for an understanding of how cinema communicates and certain of its limitations, especially its incautious merging of theoretical claim and observational assertion. As we will see, Kuleshov may have been right, but perhaps for some of the wrong reasons.

This essay critically examines the Mozhukin experiment in light of the theoretical perspectives from which Kuleshov was working and discusses the results of a replication study that tried to take Kuleshov at his word and recreate, as closely as is now possible, the famous experiment with the soup, the coffin, and child. Assessing the experimental traditions from which Kuleshov worked will enable us to compare and contrast their procedures and findings with our contemporary understanding of cinematic communication and, hopefully, better position Kuleshov in relation to our contemporary paradigms. Briefly reviewing the context in which Kuleshov worked and that guided his assumptions about montage, cinematic structure, and visual communication will help us to understand how his work was motivated by the ideological and aesthetic temper of the times and how the outcome of the Mozhukin experiment may have been perhaps unduly influenced by Kuleshov's prior theoretical commitments.

As is well known, the basic premise of the Kuleshov effect is that cinematic meaning is a function of the edited sequence rather than of the individual shot. Content or visual meaning is not contained within a given shot but in the arrangement of shots within a sequence (although, as we will see, this is not a sufficient principle of filmic communication). As Kuleshov wrote, "The content of the shots in itself is not so important as is the joining of two shots of different content and the method of their connection and their alteration."⁵ Indeed, so important was his initial commitment to montage—to uncovering the rules and principles of shot linkage—that he even wrote that "for a period of time content will virtually cease to exist for us." By contrast, in later years, Kuleshov would come to restrict the power of montage, partly under anti-formalist compulsion by Socialist Realist apparatchiks, noting that "it is not always possible to alter the semantic work of an actor" through the use of montage.⁶

However, in the period of his most active cinematic research and writing during the years following 1917, Kuleshov was firmly committed to montage because it provided him with a tool to analyze cinematic meaning and structure. Montage made it possible "both to break down and to reconstruct, and ultimately to remake the material" of cinema.⁷ Accordingly, his experiments seemed to demonstrate how cinematic meaning might be a creation wholly of the medium's manipulation, without any analogue with or correspondence to real physical reality. The experiments in "creative geography" whereby two actors walking along Moscow streets suddenly seemed, through editorial sleight of hand, to ascend the steps of the White House in Washington, D.C., or the work with "creative anatomy" whereby a composite woman was created on screen through close-ups taken of different models, were presented by Kuleshov and by subsequent writers as offering empirical evidence of the power of montage and its dominance over the photographic material of the individual shot.⁸

As several scholars have noted, Kuleshov's analysis of montage and cinematic structure was influenced by the Formalist project of specifying the unique laws peculiar to a given artistic medium.⁹ Indeed, several Formalists—Osip Brik and Viktor Shklovsky—worked as screenwriters with Kuleshov. Like the Formalists, Kuleshov was driven to study “an art form in terms of its ‘immanent’ properties, its particular systems and structures which are ‘not directly dependent on other orders of culture.’”¹⁰ To illustrate how this orientation was manifest, let us consider his views on acting. Kuleshov's stress on the supremacy of cutting entailed a de-emphasis upon the actor's mimetic contribution to the filmic illusion. Naturalistic, emotive performances by actors were not considered by Kuleshov to be essential to cinema. Because of the demands of montage, actors were to provide minimal, restrained, and fairly unambiguous gestural and facial expressions. As Kuleshov puts it, “The presence of montage necessitated that the shots be constructed simply, clearly, distinctly. Otherwise, the ‘flickering’ of a rapid montage would not be sufficient for a full scrutiny of its contents.”¹¹ Reacting partly against the over-emoting found in some silent films, Kuleshov noted that “a preoccupation with psychologism” rooted in the actor's performance was “quite useless for the cinema.”¹² Instead, filmic meaning was a matter of semiotics, of a system of signs unique to the medium. Thus, acting, as an element shared with theater, would be less central, less uniquely cinematic, than cutting. This is the theoretical framework for which the Mozhukin experiment—with its apparent confirmation of the power of cutting over acting—was offered as a demonstration.

The proximity of Kuleshov's position with that of the Formalists is evident in Boris Eichenbaum's discussion of the centrality of montage to cinematic meaning. Written in 1927, two years before Kuleshov published “The Art of the Cinema,” Eichenbaum's understanding of the relation of the shot and the montage sequence illustrates how a semiotic conception of aesthetic communication marked the Formalist understanding of cinema (as it did that of literature) and how the montage aesthetic, in fact, has one of its roots in the Formalist project to uncover the laws of a given artistic medium. Eichenbaum noted the supremely communicative power of montage over the shot, and he buttressed this claim with a reference to “well-known” examples of film editing that demonstrated this principle. Perhaps one of those was the Mozhukin experiment. For Eichenbaum, “in cinema we have the semantics of the shots and the semantics of montage. Taken in isolation, the semantics of a shot as such rarely stands out; however, certain details in the composition of shots (those details linked to photogenic properties) sometimes can have independent semantic significance. But, of course, the basic semantic role belongs to montage, since it is precisely montage which colors the shots with definite semantic nuances in addition to their general sense. There are well-known examples of film editing where the very same shots, placed in a new ‘montage context,’ take on completely new meaning.”¹³ In keeping with this emphasis, Kuleshov noted that the shot was a cinematic sign, analogous within a sequence to a letter or word within a

sentence. As Kuleshov says, “The film shot is not a still photograph. The shot is a sign, a letter for montage.”¹⁴ As did Eisenstein in his work, Kuleshov seemed to understand cinematic structure as a kind of language. Shots, he noted, might be understood as a series of conventionalized meanings, like Chinese ideograms, which could be combined to produce concepts: “The montage of shots is the construction of whole phrases.”¹⁵ The film director assembled shots as a speaker “constructs a whole word or phrase from separate scattered blocks of letters.”¹⁶ The analogy with language was crucial for Kuleshov’s project because it justified cinema as an orderly semiotic system possessing a kind of grammar that might be systematically investigated. Understood within this conceptual framework, the Kuleshov experiments seemed to demonstrate how, as in language, semantic meaning flowed from syntactic relations, i.e., how the meaning of a film sequence was a product of its cutting.

Today it is clear that analogies with language are not very useful ways of understanding cinema. The shot does not function as a word or phrase. Nothing in the relationship of cinema and its audience, for example, seems to correspond with the distinction Chomsky has drawn between linguistic competence and performance. Viewers do not have to learn how to recognize or interpret simple photographic images, line drawings, or visual narratives as they must learn how to manipulate the phonemic and morphemic levels of language.¹⁷ Furthermore, photographic images lack many of the basic properties that make the linguistic system so flexible and powerful.¹⁸ Thus, a theoretical position committed, as was Kuleshov’s, to uncovering the “grammatical” operations of cinema—and which valorized montage as an example of cinematic grammar or syntax—could easily run the risk of overplaying its hand, that is, of making claims to empirical experience that are not easily verified.

The Formalist project helped provide one component of the research paradigm that Kuleshov employed. Another component of this paradigm should be briefly noted since it, too, helped contextualize and motivate some of the claims made about the Mozhukin experiment. This other influence was a function of the privileged place that the machine held in post-revolutionary Soviet thought. To the impoverished peasant society that was Russia following the Revolution, the mechanized, industrialized societies in the West were powerful sources of inspiration, and this admiration helped produce a valorization of machinery and material progress that was felt not just in the economic and political realms but in aesthetic ones as well. As a technological medium, cinema was the preeminent art of the machine age and of the Revolution itself.¹⁹ A journal article in 1927, for example, extolled the virtues of technology and proclaimed that “the cinema is the triumph of the machine, electricity and industry.”²⁰ Given the climate of the times, marrying the techniques of industrial engineering to the art of film direction did not seem so radical a leap, and this is just what Kuleshov did.

In the United States at the turn of the century, the work of Frederick Taylor epitomized the scientific spirit that could be productively applied to the problems

of industry. Taylor treated the production process as an experiment, measuring and quantifying the movements of tool and laborer in the interests of achieving greater efficiency. For him, "the best management is a true science, resting upon clearly defined laws, rules, and principles" which were to be applied "with equal force to all social activities" ranging from the operation of homes and churches to personal behavior.²¹ Taylor's accomplishments were a powerful inspiration for a developing Soviet Union. Lenin, for example, found in the Taylor system "a number of the greatest scientific achievements in the field of analysing mechanical motions during work," and he urged that Soviet industry study Taylor's work and systematically adapt it to Soviet needs.²²

The influence of the Taylor system upon Kuleshov is illustrated in his discussions of film acting. For Kuleshov, the actor performs most photogenically and cinematically when his/her movements are performed with economy and precision. As Kuleshov puts it, "We know from an analysis of cinematic material that people performing organized, efficient work appear best on the screen."²³ Kuleshov proclaimed the importance of calculation and measurement in an actor's training and direction. Much as Taylor did with the industrial laborer, Kuleshov proceeded to time and quantify the actor's gestures and movements with the aim of subjecting them to a prearranged temporal plan. For Kuleshov, "It is insufficient to perform precise and measured movements; it is necessary to be able to do them in time." Kuleshov devised an elaborate system of notation for coding gestural movements that could be used to score a performance, just as a composer might score a musical passage with a series of tones. In addition, the better to produce visually distinctive performances, Kuleshov tabulated the range of gestural movement along three bodily axes, just as Taylor had isolated units of movement for the industrial laborer. Both men applied methods of scientific measurement to behavioral problems. Taylor sought to make industrial production more efficient, and Kuleshov, with his tabulations, aimed to produce a performance that would best serve the needs of montage for simple, direct, easily assimilable units of pictorial information. In other words, he aimed to present "organized, efficient work" on the screen that could be "quickly and clearly comprehended by the viewer."²⁴

If we accept for a moment that the Mozhukin experiment works the way Kuleshov and Pudovkin have claimed, we can now see how it is functionally related to both the Formalist undertaking and the procedures of the Taylor system. By all received accounts, the Mozhukin sequence proceeds like an assembly line efficiently producing meaning. As in the analogy of cinema and language, each shot performs almost like a word, combining with others to form a larger concept or phrase. Mozhukin's ambiguous or expressionless face followed by a close-up of a bowl of soup produce for the viewer the meaning that he is hungry. The face and the coffin produce the impression of sadness, the child and the toy the impression of happiness. Like an assembly line, the production process of the montage is both sequential and predetermined. The viewer's interpretations follow an orderly pattern and fall neatly into place, cued by each

shot combination. No one apparently reports that Mozhukin is disgusted by the soup or is angry at the child or has no feeling for the dead woman. The montage's lean efficiency of operations would have made Taylor proud. Of course, the production of meaning in the Mozhukin sequence depends on the viewer's contribution, the ability to use contextual cues to infer conventional meanings from associated images.²⁵ But accounts of the experiment, characteristically, do not report a wide range of viewer interpretations. Instead, it is as if, to quote Gerald Mast, "Editing alone had created the emotion—as well as a brilliant acting performance."²⁶ The terms of this communication paradigm would seem to leave no place for our contemporary reception theories. How might the viewer contribute to the co-construction of cinematic meaning in a Kuleshov-type sequence? More precisely, what elements of film form might invite such participation?

The Mozhukin experiment was clearly an important one for Kuleshov. It validated his prior theoretical commitments with the stamp of science, as it has continued to do in film studies in the years since. Operating on the crest of the scientific management wave of Taylor, Kuleshov actually was practicing a form of speculative psychology.²⁷ In the sense that no application of a theory is any more valid than the theory per se, Kuleshov was laboring under a heavy burden. For, in the final analysis, Taylor himself has been described as "quite naive" in his understanding of human motivation.²⁸ The disadvantage to which we refer is aptly described by Robert G. Jahn and Brenda J. Dunne when they write,

The bodies of established science move forward on two feet. One foot we call "experiment"—an observation or measurement performed under controlled conditions to acquire information about a natural effect or process. The other foot we call "theory"—a stated model, principle, or formalism to explain, correlate, or predict observational experience. When these two feet are sound, well balanced, and working in concert, and when the typical terrain they tread is propitious, science may move productively ahead, shifting its weight successively from empirical experiment to explicating theory, or from predictive theory to confirmatory experiment, in a brisk martial gait, a steady stroll, or a graceful swirling dance. But if either foot is lame, or is clad in technical or logical gear unsuited to the environment, or if the path extends through particularly obscure or hostile territory, progress is more tortuous and halting.²⁹

As Vance Kepley has noted, Kuleshov "consciously imitated the rituals and rhetoric of science to justify his theoretical claims."³⁰ Kuleshov, however, was not a trained behavioral scientist and, judging by the accounts of the experiment that one reads today, it seems he knew little about experimental procedure. In fairness, however, it must be admitted that the sophistication we now possess concerning the experimental situation was not only unknown to Kuleshov but to the world in general at that time.³¹ It would be grossly unfair to denigrate Kuleshov for his failure to understand principles that were undiscovered in his time.

On the other hand, having acknowledged the general lack of scientific

sophistication of the early twentieth century does not mean that we must now accept questionable findings as established facts. To give only a few examples of current misgivings consider the following questions. For such a seminal and basically uncontested study, there is virtually no information available about Kuleshov's actual method and procedure. Did he, for example, interview the subjects individually or in a group? What did he tell them beforehand about the purpose of the presentation? What, if anything, did he tell them about the nature of film editing or montage? What was the frequency of outlier opinions, e.g., people who did *not* think Mozhukin was saddened by the dead woman? Published accounts suggest the responses were uniform. Was this so? Unfortunately, we do not know the answers to any of these questions. In later life, Kuleshov himself had difficulty remembering what he did or even what shots were included in the montage.³² Therefore, without an attempt at replication, it remains difficult to evaluate the empirical status of Kuleshov's experiment and the experiential validity of his claims about montage. The intention here is not to over-valorize empirical methodology as providing the answers to all of our questions; but, in the case of Kuleshov and his experiment, attention to empirical matters can help us to construct a clearer disciplinary context in which to place his work.

The difficulties reviewed above in translating Kuleshov's work to more contemporary research paradigms, however, have not prevented his work from exerting a powerful influence on our thinking about film. As noted previously, a fairly uncritical recitation of the Mozhukin experiment, with details largely derived from Pudovkin's account, is characteristic of the basic texts in our introductory film courses. Beyond this, moreover, the Kuleshov influence may be found at work among actual filmmakers. Hitchcock, for example, cited his debt to Kuleshov in connection with the cutting of *Rear Window*. After describing the Mozhukin experiment (and adding yet another variation—for Hitchcock, one of the shots was of a dead baby), Hitchcock likened the close-ups of James Stewart looking out his window with the images of Mozhukin in the experiment: "In the same way, let's take a close-up of Stewart looking out of the window at a little dog that's being lowered in a basket. Back to Stewart, who has a kindly smile. But if in the place of the little dog you show a half-naked girl exercising in front of her open window, and you go back to a smiling Stewart again, this time he's seen as a dirty old man."³³

Hitchcock's account of what happens in *Rear Window* is actually somewhat disingenuous. As anyone knows who has seen the film, Stewart's expression in the shots showing him peeping out of his apartment does not remain the same. While spying on the newlyweds, for example, he reacts by salaciously rolling his eyes and turning away. At other times, he smiles at Miss Lonelyhearts, but not at Thorwald and his wife. Far from conducting a Mozhukin experiment of his own, Hitchcock subtly manipulates our responses not just through his editing but by carefully shaping the material within the shots. Kuleshov, as a theorist, of course, is not responsible for what Hitchcock does with his ideas, however

mutated they have become when Hitchcock finishes with them. Clearly, however, Hitchcock is trying to piggyback Kuleshov's work.

The foregoing considerations point to a gap or an ambiguity within the Kuleshov legacy between theory and practice, between conceptual claims and supporting evidence. An attempt at replication of the Mozhukin experiment may help give us a sharper sense of Kuleshov's proper place in film theory and history, that is, of the ways his work connects with or diverges from our contemporary understanding of cinema. Accordingly, we undertook to create a Mozhukin-type sequence and to elicit viewers' interpretations of the actor's emotional expression. A videotape was produced incorporating close-up shots of an actor's emotionless face, a little girl smiling and playing with her teddy bear, a woman lying in a coffin, and a bowl of steaming soup on a table. The video was produced in a television studio, enabling close control of lighting in all shots. Taking our cue from Kuleshov, who wrote that people, objects, and actions are most striking and visible on a darkened, black velvet background, we shot our scenes accordingly.³⁴ Continuity codes were used to ensure matched cuts and to heighten the illusion that the actor is looking at the objects in the other shots. Camera placement and angle were consistent with the implied direction of the actor's gaze. The actor was recruited because he had theater experience, and he did not know the purpose of the taping. He was told that we were putting together an instructional video for which we needed someone to model an expressionless or neutral face.

Separate sequences were created for each object at which the actor is supposedly gazing. Each sequence began with a fade in on the actor's face, followed by a cut to the object (soup, coffin, or child), followed by a cut back to the actor's face (the same footage that opened the sequence) and a fade-out. Each shot was seven seconds long. Separate sequences were used, rather than a single long sequence incorporating all of the objects intercut with the face, so that viewers' reactions to each of the significant objects could be monitored. It seemed plausible that a Kuleshov effect might be found for only some, rather than all, of the objects. Creating separate sequences for each object provided a design that was sensitive to such potential variation. In addition to these three sequences, an additional three were created, using the same shots with the exception of the closing shot of the actor's face. A new shot of the same actor was used, one taken from a slightly lower camera angle. We wanted to see if a minor variation of camera angle might be read by viewers as a "reaction" by the actor to what he had seen. As it turned out, the angle change made no difference, perhaps because it was so small. Viewer reactions to the second set of three sequences (those involving the angle change) were not significantly different than their reactions to the first set. Accordingly, in the analysis that follows, responses to each of the two soup, child, and coffin sequences have been collapsed.

Each viewer saw only one sequence and was randomly assigned to that sequence. Viewers were told that their help was needed in evaluating an acting

performance, and they were provided with a checklist for their evaluations. On the sheet was a list of emotions compiled from those that viewers reportedly associated with Kuleshov's sequence and those identified by Paul Ekman and Wallace Friesen as universal emotions underlying facial expressions.³⁵ The emotions on the checklist were happiness, sadness, anger, fear, surprise, disgust, and hunger. Additionally, viewers could check "no emotion," or they could check "other," in which case they were asked to write the emotion they felt the actor was conveying. By introducing the model in the tape as an actor and by asking the viewers to help evaluate his "performance," we tried to instill in them an assumption that a performance of some kind would be forthcoming. In doing this, we were trying to give the Kuleshov effect every opportunity to emerge and to replicate a condition akin to Kuleshov's use of the well-known actor Mozhukin, who would certainly have been recognizable to some of Kuleshov's respondents.

Our respondents were undergraduate students in a mid-Atlantic state university communications department. A conscious decision was made to exclude film students, as we feared they might make the connection to Kuleshov, even from viewing a single sequence. The Kuleshov effect can be properly tested only if viewers do not know about it beforehand. A recent effort at replication, conducted in France, illustrates why it is so important that we know what Kuleshov told his respondents about the montage. This study employed film students as subjects, and their responses to the sequence indicated a familiarity with Kuleshov and the alleged effect they were supposed to see. Characteristic responses included the following: "We know that the man does not change his expression, but because of the montage we think we see him change," and "We know the Kuleshov effect, and it works."³⁶ The use of film students in this study makes it difficult to evaluate whether an effect is really there or whether they are simply reporting what they think they should be seeing.

While we excluded film students from viewing the edited sequences, students in a film class were employed as part of a pre-test. They were used as a control group to ascertain whether the actor was indeed modeling a neutral, expressionless face, as Mozhukin's face in Kuleshov's experiment is often reported to be.³⁷ Twenty-four students (none of whom saw the sequences) were shown the two close-ups of the actor's face and were asked what emotion, if any, he was portraying. They could select one of the basic emotions, no emotion, or other. Eighty-eight percent reported that there was no emotion on the actor's face. This measurement establishes a basis for comparison with the evaluations of the actor viewed in sequence with the other objects. An independent evaluation of Mozhukin's expression, viewed alone and out of context, is an important piece of information missing from Kuleshov's study. We have only his own word that Mozhukin's face was without any particular expression since there is no indication that he pre-tested the shot of Mozhukin with viewers before assembling it in the sequence. Furthermore, there is a difference between an expressionless face and an ambiguous expression. As we will see, this distinction can produce

meaningful differences in how viewers interpret a Kuleshov-type montage sequence.

With the control group, our sample included 137 students. Comparing the responses of the control group with those who viewed the face in the edited sequences reveals small but nonsignificant differences. In every condition, the majority of viewers said there was no emotion being displayed. Sixty-eight percent of the viewers who saw the soup sequence reported that the actor was not portraying any emotion, as did 61 percent of viewers in the two groups that saw the child and coffin sequences. Thus, while somewhat smaller proportions of viewers report "no emotion" in the edited sequences than do when seeing the face alone, the differences are not large enough to be statistically meaningful. More important is the clear indication that these viewers were not demonstrating a Kuleshov effect. Those viewers who reported seeing emotions did not tend to pick the expected emotion (e.g., happiness for the child). For the majority in each condition, moreover, the editing made no apparent difference. In their eyes, the actor's face remained emotionless. The sequences we constructed provide an extremely conservative test of the Kuleshov effect in that associational cues were kept to a minimum, as they apparently were in Kuleshov's study. Only the camera angle, the direction of the actor's gaze, and the lighting established continuity cues linking the shots. The crucial interpretive linkages needed to be supplied by the viewers but were not.

A logical extension of this study, therefore, would involve designs that would gradually increase the presence of associational cues (e.g., camera movement toward the actor and/or the objects, ambiguous changes of display on the actor's face, use of music) until a threshold level is reached where enough cues are present that viewers begin to infer an emotional display by the actor. It seems likely that, with sufficient associational cues, a Kuleshov effect might be created and, in a moment, we will review some evidence for this. This search for the threshold seems a promising avenue for inquiring into the meaning of the Kuleshov effect. Note that these considerations specify a crucial difference between Kuleshov's *Mozhukhin* sequence and the structure of modern narrative films, especially those employing the codes of continuity editing. Hollywood's continuity system of editing stabilizes and minimizes the effects of the potentially disruptive cut through the use of eyeline matches and observance of the 180-degree rule. These, and other codes of the system, provide powerful associational cues that knit together noncontiguous narrative spaces and times. The eyeline match, for example, restores sequential narrative and dramatic order in scenes whose components are shot out of sequence. This points us toward an important revision of the Kuleshov effect, whose reported results have tended to disparage the importance of linkages internal to the shots. It may be that a modern audience, by virtue of increased media exposure relative to Kuleshov's day, has become accustomed to a more systematic and complex set of associational cues, such as those supplied by the continuity system of editing, and is, correspondingly,

less likely to respond to a montage sequence that employs a blank face and minimal, if any, associative cues within the shots.

Unless it can be shown otherwise, there seems little reason to believe that the Kuleshov effect, *as reported*, any longer exists even if the effect did play a role at one time. If it did occur, there seem at least three potential explanations. The least satisfying account would attribute the effect to the naiveté of early cinema audiences, whereby the montage might be seen as eliciting a projective response, a lack of critical distance (i.e., an inability to see the face as it really was, lacking expression), from audiences akin to that which supposedly drove Lumiere spectators away from the oncoming train. However, film was no longer a novelty in the Soviet Union when Kuleshov did his experiments in the late teens or early 1920s, and film historians are presently rethinking apocryphal accounts of the earliest spectators' incredulous responses to motion pictures.³⁸ Tom Gunning, for example, notes that "Cinema's first audiences can no longer serve as a founding myth for the theoreticalisation of the enthralled spectator."³⁹ His discussion of audience reactions to the Lumiere train and other early films shows how conventions of projection (first showing the images as still photographs, then cranking the projector so that they began to move), presentation (verbal introductions by a speaker or barker telling the audience what it was about to see), and familiarity with the larger context of nineteenth-century illusionistic arts (the magic theater, *trompe l'oeil*) helped generate within the viewer a dialectic between a rational recognition of the medium and delight at the enveloping illusion, "a pleasurable vacillation between belief and doubt."⁴⁰

A second potential explanation for the Kuleshov effect lies in a response bias unwittingly introduced by Kuleshov among his subjects. The contamination of experimental results by an experimenter who has unknowingly tipped his/her hand is an extremely well-documented phenomenon in the behavioral sciences.⁴¹ If subjects know what the experimenter hopes to find and are eager to please, they will often supply the desired result. Since Kuleshov was not trained as a social scientist, there is no reason to suppose that he was aware of the danger of a response set or careful to avoid creating one. As noted previously, Kuleshov was clearly committed to a theoretical position that stipulated that the effect of montage should exist, and he looked to science as a way of documenting this claim. "Only amateurs could work on the preparation of [an artistic] product without a scientific method of studying all the laws of its production," he wrote.⁴² Despite this interest in science, he may have been overly quick to detect an effect. He remarks, for example, that even he succumbed to the effect on at least one occasion:

I saw in this scene, I think in a film by Razumny: a priest's house, with a portrait of Nicholas II hanging on the wall; the village is taken by the Red Army, the frightened priest turns the portrait over, and on the reverse side of the portrait is the smiling face of Lenin. However, this is a familiar portrait, a portrait in which Lenin is *not* smiling. But that spot in the film was so funny, and it was so uproariously received by the public, that I, myself, scrutinizing the portrait several times, saw

the portrait of Lenin as smiling! Especially intrigued by this, I obtained the portrait that was used and saw that the expression on the face in the portrait was serious. The montage was so edited that we involuntarily imbued a serious face with a changed expression characteristic of that playful moment. In other words, the work of the actor was altered by means of montage.⁴³

Kuleshov was primed to find the evidence that would confirm his theories, and if he communicated this enthusiasm to his subjects, this could account for his findings. The nature of this enthusiasm can best be understood if we remember that (1) Kuleshov was personally committed to the idea that montage was everything, and (2) Taylorism had not only been used as a model for emulation but scientific management had actually drawn the praise of Lenin himself. The ensuing consequences for *not* corroborating the famous findings would have been that Kuleshov would have been in the embarrassing position of disproving his own personal beliefs.

A third potential explanation for the effect may be, simply, that Kuleshov's montage was more complexly constructed than has been reported. If associational cues were employed that have not been described by Pudovkin et al., this may be a basis for the differences between our findings and those of Kuleshov, especially since, as was suggested earlier, the Kuleshov effect may be a threshold phenomenon. If Mozhukin's face was not "neutral" but actually modeled an ambiguous expression, then Kuleshov's subjects may have been more likely to report seeing emotions. Some of our results pointed in this direction, indicating that the ambiguous and the "neutral" faces may be read by viewers quite differently. An initial version of our tape employed a different actor and was discarded because the proportion of viewers reporting "no emotion" during the pre-test was not high enough. Thirty-three percent felt there was some emotion being portrayed when the face was viewed out of sequence. Since the attributions covered a wide range, the expression was apparently ambiguous. When other viewers were then shown this face in sequence, many attributed a wide range of emotions to the actor, some consistent with a Kuleshov effect, others not. The sequence with the soup, for example, elicited interpretations of apathy, disgust, contemplation, detachment, dislike, indifference, lack of interest, as well as an occasional attribution of hunger. The ambiguous expression seemed to offer a stronger interpretive cue for the viewer than did the expressionless face. If Kuleshovian montage may not be capable of making an expressionless face emotive, it may very well do this with an ambiguous expression, since the objects (soup, coffin, child) provide a context for resolving the ambiguity. The viewer is able to attach the ambiguous expression to the object and thereby provide an interpretive label for the emotion. By contrast, when no emotion is present to begin with, there is little to contextualize, and most viewers continue to see an expressionless face. An important consideration for evaluating Kuleshov's results, then, is whether Mozhukin's expression was "neutral," as is frequently reported, or actually ambiguous. Our first actor seemed to us at the time to have provided a "neutral" expression, yet when viewers rated this sequence in a pre-test the

expression was clearly not neutral. Since Kuleshov never discusses having done a pre-test to determine what Mozhukin was expressing, we cannot know whether Kuleshov may have confounded a neutral expression with an ambiguous one, as we did initially. The possibility that he could have done this does not seem unlikely, especially when one considers his remarks that he obtained the close-up of Mozhukin from a previously existing film.⁴⁴

Considerations of thresholds, associational cuing, and ambiguous expressions point us to the fundamental truth of Kuleshov's legacy—that visual (and aural) juxtapositions are partially constitutive of meaning—while bearing out the earlier observation that Kuleshov was right but perhaps for some of the wrong reasons. As noted previously, Kuleshov's theoretical paradigm constructed a model of cinema in which its formal elements operate like a productive machine, transmitting information to the viewer, who makes the connections that are predetermined by the montage. However, we now know that cinematic meaning is not simply transmitted by the image but is co-constructed by the viewer in terms of the cognitive and affective horizon provided by such factors as race, class, gender, ethnicity, and social and political ideologies of various complexions. Let us see how these considerations about reception, associational cuing, and expressive ambiguities operate in practice, although in ways that take us some distance from the transmission-belt model of Kuleshov.

The famous daisy spot, designed by Tony Schwartz, for Lyndon Johnson's 1964 presidential campaign is a montage that falls clearly within the montage tradition established by the Soviets, whereby the cuts evoke a constellation of meanings larger than the sum of their parts. Indeed, as a genre, political advertising is heavily indebted to the editing experiments of the revolutionary Soviet filmmakers in that the basic syntax of the genre is the use of metonymy and metaphor, the creation of an affective aura or identity for a candidate by careful juxtapositions with politically or ideologically evocative images or sounds. The daisy spot is one of the most notorious of these juxtapositions. Produced as one in a series of commercials targeting Goldwater's opposition to a nuclear test ban treaty, the ad presents a little, blond girl in a field picking the petals off a daisy, and her image is suddenly juxtaposed with a series of shots of an exploding nuclear bomb, producing a devastating contrast of childish joy and innocence with the horror of the apocalypse. How the spot connects its visual and aural elements with each other and with a larger political message demonstrates clearly the use of associational cuing and the way that this may be constitutive of cinematic meaning, beyond what mere shot juxtaposition may accomplish, and how this in turn is dependent upon audience reception.

The cut from the little girl to the bomb is prepared by visual and aural linkages within and between the shots. The camera tracks in to frame her in a slightly low angle medium close-up as she pulls off the petals, counting as she does so. However, she charmingly garbles her count, proceeding, "one, two, three, four, five, seven, six, six, eight, nine, nine." She does not reach ten because her count is interrupted by an off-screen, booming male voice which announces

“ten.” This number both finishes her sequence and commences a backwards count, clearly understood as a countdown to a missile launch. As the countdown proceeds, she looks up, apparently in response to the voice, and the image freezes as the camera zooms in to her face. As the numbers tick off, we have ten seconds to contemplate her expression. It is, notably, ambiguous. Framed in a low angle, her eyes are huge and wide, and her mouth hangs open slightly, exposing her two front teeth. Her expression can be construed, due to the context, as anticipation, fear, surprise, anxiety, or any of a constellation of similar emotions. The ambiguous expression cues the viewer to supply an appropriate interpretive category, and, faced with the bomb, the range of emotional categories the viewer will employ will be sharply constrained.

As the camera zooms in, another major associative cue is employed. As the orb of her left eye fills the screen with a circular pattern, the shot cuts to the circular hood of the flash of an exploding nuclear bomb. The transition is effectively managed by a matched cut linking two engulfing orbs, the eye and the bomb. The camera’s zoom has enlarged the eye in a way that is visually homologous to the sight of the exploding bomb and that binds the image of one to the other, thereby suggesting the reduction of this child to ashes and brimstone. Johnson’s voice then appears overtop a series of shots of the exploding bomb: “These are the stakes. To make a world in which all of God’s children can live or to go into the dark. We must either love each other or we must die.” Cut to blank screen with white letters: “Vote for President Johnson on November 3.”

It may not be too fanciful to read this ad as a kind of Kuleshov montage, juxtaposing the face with a spatially and temporally noncontiguous object in ways that suggest a relationship between the two in terms of a contextualized facial expression. As we have seen, however, the success of the montage—defined in terms of the political objectives of Johnson’s campaign—is crucially dependent upon visual and aural associational cues both within and between shots, and a strategically ambiguous facial expression. Furthermore, audience reception plays a key role. Note that Goldwater is never mentioned by the ad, yet he is clearly the political target. Within the domestic political landscape of 1964, television viewers would contextualize the ad’s message in terms of the perceived political differences between the candidates on the issues of the nuclear test ban. The major political referents—Goldwater and nuclear weapons testing—remain outside the diegesis of the montage and must be supplied by the viewers for the ad to work. Intertextual relationships would certainly have assisted some of these viewers because the Johnson campaign ran a series of similar, anxiety-provoking ads focusing on the test ban issue. The daisy spot ran once on NBC’s “Monday Night at the Movies” and was then quickly pulled from the air due, in part, to an avalanche of criticism that it was unfair to Goldwater.

In spite of all the foregoing, is it possible that Kuleshov could indeed have reported precisely what happened and have obtained the results we have for so long believed? In the final analysis, is it our study that is flawed and not the Kuleshov effect? Not only is that possibility real, it is more probable than one

might think. The movie-goers of Kuleshov's time were undoubtedly both fascinated and mystified by the new medium of film. They had been born in an age when film did not exist and the medium was new and fresh to them. As we have already noted, film was not a novelty to Kuleshov's respondents, but the differences between his viewers and any possible group of modern viewers is so dramatic that this difference is not simply one of degree but of kind. By sharp contrast, the subjects who participated in the present study are every bit as much products of our own age as those post-revolutionary Russians were of theirs. Only now, the world has changed dramatically.

Current statistics tell us that by the time a typical American has graduated from high school he or she has seen approximately 350,000 commercials as well as the programs that surrounded those commercials.⁴⁵ The television has been on for an average of forty hours per week every day of that person's life.⁴⁶ Thus, the TV has been on for over one-third of our waking hours. While no one would claim that television and film are precisely the same mediums, the artistic presentations offered on a television screen are not dramatically different from those offered on a film screen. The close-up, the fade, and the shifting scene are now as much a part of our lives as baseball and the Fourth of July. There is every possibility that this increased sophistication on the part of our respondents could have accounted for the failure to replicate the original results obtained by Kuleshov. Nothing we could have possibly shown our respondents in the present study was unusual or novel in any sense of those words. The difference, as the Bard said, is not in the stars but in ourselves.

Kuleshov's claims to empirical truth cannot be verified for the simple reason we can never again precisely replicate the sample of people to whom he showed his original footage. But the results of the present study do provide some closure. The results obtained in this study argue persuasively that even if the Kulesov effect once did exist, that effect seems not to be a factor in the same way for the modern audience. Understanding the results of the present experiment, we can perhaps now find it possible to place Kuleshov into a new and more appropriate context in film history.

In sum, Kuleshov has provided a seminal legacy for film theory. His montage studies undergird many of our fundamental assumptions about editing and the viewer's interpretation of cinema. In many ways, the passive Kuleshovian viewer who misrecognizes the actor's expression and whose responses are predetermined by the logic of the montage is quite close in spirit to the cinema viewer of 1980s theory, under the spell of the Imaginary, positioned by desire and ideology to read the cinema spectacle as something other than what it is. Kuleshov's effects are also being felt in a more practical realm. As noted, no less a director than Hitchcock has invoked this legacy when he wished to explain the operations and power of his own montages.

Unfortunately, with little written record about the Mozhukin experiment and with the actual footage lost, the experiment lingers in a realm of legend as well as history. Thus, it is passed along as part of the folklore of the cinema. It

appears in empirical garb, but like all myths its real functions are symbolic and cultural. In the final analysis this essay does not seek to argue that myth has no value. The correct argument is that myth ought to be recognized as myth and not mis-identified as fact. Kuleshov's effect—understood in terms of shot juxtapositions rather than associational cues—may tell us little about film or visual communication, but its lingering power tells us a lot about the symbolic uses of the past.

Notes

1. See, for example, Dudley Andrew, *The Major Film Theories* (New York: Oxford University Press, 1976), 197; David Cook, *A History of Narrative Film* (New York: Norton, 1981), 139; Jack C. Ellis, *A History of Film* (Englewood Cliffs, N.J.: Prentice-Hall, 1990), 95; Louis Giannetti and Scott Eyman, *Flashback: A Brief History of Film* (Englewood Cliffs, N.J.: Prentice-Hall, 1986), 90; Gerald Mast, *A Short History of the Movies* (Indianapolis: Bobbs-Merrill, 1977), 183.
2. Giannetti and Eyman, *Flashback: A Brief History of Film*, 90.
3. Norman Holland, "Film Response From Eye to I: The Kuleshov Experiment," *South Atlantic Quarterly*, 88 (Spring 1989): 416.
4. See, for example, Pukovkin's account in *Film Technique and Film Acting*, trans. and ed. Ivor Montagu (New York: Grove Press, 1978), 168. Kuleshov offers a slightly different account in his interview with Steven Hill, "Kuleshov—Prophet Without Honor?," *Film Culture* 44 (Spring, 1967): 8.
5. *Kuleshov on Film*, trans. and ed. Ronald Levaco (Berkeley: University of California Press, 1974), 47.
6. *Ibid.*, 50, 193.
7. *Ibid.*, 52.
8. Kuleshov describes these studies in *Kuleshov on Film*, 52-53. Jay Leyda offers a summary in *Kino: A History of the Russian and Soviet Film* (London: George Allen & Unwin, Ltd., 1960), 164-65.
9. The influence has been noted by Richard Eagle, *Russian Formalist Film Theory*, Michigan Slavic Materials No. 19 (Ann Arbor: University of Michigan, 1981), 2; and by Levaco, *Kuleshov on Film*, 21-27.
10. Eagle, *Russian Formalist Film Theory*, 2.
11. *Kuleshov on Film*, 78.
12. *Ibid.*, 93.
13. Quoted in Eagle, *Russian Formalist Film Theory*, 78.
14. *Kuleshov on Film*, 80.
15. *Ibid.*, 91.
16. Kuleshov, "The Tasks of the Artist in Cinema," in *The Film Factory: Russian and Soviet Cinema in Documents 1896-1939*, ed. Richard Taylor and Ian Christie (Cambridge: Harvard University Press, 1988), 41.
17. The evidence on this is very clear. See, for example, J. B. Derogowski, "Real space and represented space: Cross-cultural perspectives," *Behavioral and Brain Sciences* 12 (1989): 51-119; Julian Hochberg and Virginia Brooks, "Pictorial Perception as an Unlearned Ability: A Study of One Child's Performance," *American Journal of Psychology* 75 (Dec. 1962): 624-28; Paul Messaris, "To What Extent Does One Have to Learn to Interpret Movies?," *Film/Culture*, ed. Sari Thomas (Metuchen, N.J.: Scarecrow Press, 1982), 168-83.
18. As Sol Worth noted, pictures can't say "ain't." See his "Pictures Can't Say Ain't," *Film/Culture*, 97-109. For an analogous discussion, see Edward Branigan, "Here Is

- a Picture of No Revolver: The Negation of Images and the Methods for Analyzing the Structure of Pictorial Statements," *Wide Angle* 8, nos. 3-4 (1986): 8-17. On the basic untranslatability of messages from one communicational mode to another, see Larry Gross, "Modes of Communication and the Acquisition of Symbolic Competence," in *Communications Technology and Social Policy*, ed. George Gerbner, Larry Gross, and William Melody (New York: Wiley-Interscience, 1973), 189-208. Gombrich offers a useful comparison of pictures and language in "The Visual Image," *Scientific American* 227, no. 3 (1972): 82-96.
19. Richard Taylor makes this point in *The Politics of the Soviet Cinema 1917-1929* (New York: Cambridge University Press, 1979), 35.
 20. Ippolit Sokolov, quoted in *Politics of Soviet Cinema*, 36.
 21. Frederick Taylor, *Scientific Management* (New York: Harper and Brothers, 1947), 7, 8.
 22. V. I. Lenin, "The Immediate Tasks of the Soviet Government," in *Lenin: Selected Works* (New York: International Publishers, 1976), 417.
 23. *Kuleshov on Film*, 99.
 24. *Ibid.*, 104, 99.
 25. Holland discusses this at length in "Film Response from Eye to I," 415-42.
 26. Mast, *A Short History*, 183.
 27. We are indebted to an anonymous *Cinema Journal* reviewer for the suggestion linking Kuleshov's work to speculative psychology. Not only is the term delightfully descriptive, it is most apt.
 28. Robert A. Baron, *Understanding Human Relations* (Boston: Allyn and Bacon, 1985, 13.)
 29. Robert G. Jahn and Brenda J. Dunne, *Margins of Reality: The Role of Consciousness in the Physical World* (New York: Harcourt Brace, Jovanovich, 1987), 3.
 30. Vance Kepley, Jr., "The Kuleshov Workshop," *Iris* 4 (1986): 21.
 31. See, for example, Arthur G. Miller, ed., *The Social Psychology of Psychological Research* (New York: The Free Press, 1972).
 32. See his remarks in Hill, "Kuleshov—Prophet Without Honor?," 8.
 33. François Truffaut, *Hitchcock* (New York: Simon and Schuster, 1967), 159.
 34. *Kuleshov on Film*, 71.
 35. Paul Ekman and Wallace Friesen, "Constants Across Cultures in the Face and Emotion," *Journal of Personality and Social Psychology* 17 (1971): 124-29.
 36. Martine Joly and Marc Nicolas, "Koulechov: de l'expérience à l'effet," *Iris* 4 (1986): 69.
 37. In Pudovkin's account, Mozhukin's face "did not express any feeling at all." See Pudovkin, *Film Technique and Film Acting*, 168. Jay Leyda, citing Pudovkin, describes the face as "neutral." See Leyda, *Kino*, 165.
 38. See, for example, Tom Gunning's reconsideration of the allegedly incredulous early cinema audiences, "An Aesthetic of Astonishment: Early Film and the (In)Credulous Spectator," *Art and Text* 34 (Spring 1989): 31-45.
 39. *Ibid.*, 43.
 40. *Ibid.*, 34.
 41. For a review, see R. Rosenthal, *Experimenter Effects in Behavioral Research* (New York: Appleton-Century-Crofts, 1966).
 42. Kuleshov, "Art, Contemporary Life and Cinema," *The Film Factory*, 68.
 43. *Kuleshov on Film*, 54-55.
 44. See his remarks in "Kuleshov—Prophet Without Honor?," 8.
 45. Joseph R. Dominick, *The Dynamics of Mass Communication* (New York: Random House, 1987), 509.
 46. F. Leslie Smith, *Perspectives on Radio and Television* (New York: Harper and Row, 1985), 550.