TEACHING VISUAL LITERACY THROUGH ANIMATION–LIVE-ACTION HYBRID CINEMA

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Abstract: This article examines the pedagogical potential of animation–live-action hybrid cinema for developing visual literacy and critical media-analysis skills in higher education. Taking Joe Pytka's Space Jam (1996) as a case study, it reframes the film not only as an example of visual and narrative hybridity but also as a structured learning resource through which students can investigate image layers, screen space, movement conventions, montage and the relationship between realism and exaggeration. The study combines qualitative film analysis with principles from visual-literacy education, film pedagogy and cognitive theories of multimedia learning. It proposes a five-stage instructional framework: preparatory concept activation, guided viewing, sequence analysis, creative reconstruction and reflective evaluation. A quasi-experimental design is also outlined to enable future empirical testing of the framework through pre- and post-assessments, performance-based tasks and student reflections. No experimental outcomes are claimed in this article; the contribution is a theoretically grounded pedagogical model and a transparent protocol for its evaluation. The article argues that purposeful film analysis can move students from passive viewing towards evidence-based interpretation and informed creative practice.

Keywords: visual literacy; film pedagogy; hybrid cinema; animation; live action; multimedia learning; media analysis; higher education; Space Jam.

1. Introduction

Contemporary students encounter images, moving pictures and audiovisual narratives across multiple platforms. Yet frequent exposure to visual media does not automatically produce the ability to interpret how images construct meaning. In higher education, particularly in animation, film and media programmes, students need to move beyond recognising what is shown on screen towards explaining how framing, composition, movement, editing, sound and visual style guide interpretation. This capacity may be described as visual literacy: the ability to observe, interpret, question and communicate meaning through visual forms (Abas, 2019).

Film can provide a productive environment for developing this competence because it combines visual, auditory, temporal and narrative information. However, screening a film without a clear learning task may leave students in the position of spectators rather than analytical participants. Research on film in university teaching therefore stresses the importance of film literacy, carefully selected excerpts, supporting materials and structured classroom activities (Nguyen, 2024). Critical media-literacy approaches similarly encourage students to examine not only production techniques but also the assumptions and meanings embedded in media texts (Walker, 2022).

Animation–live-action hybrid films are especially useful for this purpose. They place two distinguishable image systems within a shared narrative: photographic images of performers and

environments, and animated characters or elements governed by different visual and movement conventions. Their interaction makes the construction of screen reality unusually visible. The viewer can compare realistic movement with animated exaggeration, physical space with drawn space, and continuity editing with transitions between distinct fictional worlds. Franziska Bruckner (2015) proposes analytical parameters for examining these relationships within individual images and across montage, while Michał Piepiórka (2021) explores the narrative functions of different spaces in hybrid films.

This article uses Space Jam (1996), directed by Joe Pytka, as a pedagogical case. The original film combines live-action performance, including basketball player Michael Jordan appearing as himself, with traditionally animated Looney Tunes characters. Previous scholarship has discussed the film's spatial organisation and the comic possibilities created by combining animated freedom with the grounding effect of live action (Piepiórka, 2021; Holmaas, 2023). The present article shifts the emphasis from describing the film's aesthetic features to asking how those features can be converted into teachable analytical tasks.

The aim is to develop a pedagogical framework for using hybrid cinema to strengthen students' visual literacy and critical understanding of animation and film language. The article addresses three questions: (1) Which formal features of Space Jam are most productive for teaching visual analysis? (2) How can these features be organised into a structured learning sequence? (3) How could the effectiveness of such instruction be evaluated through a future pedagogical experiment?

2. Theoretical Framework

2.1. Visual literacy and learning through images

Visual literacy is not limited to naming objects or describing what appears in a frame. It involves connecting visible evidence with interpretation: students identify compositional choices, infer relationships, explain visual emphasis and support their conclusions with details from the image. Abas (2019) demonstrates how visual analysis can be taught through guided interpretation and reflection, helping learners translate visual observations into reasoned verbal explanations. For film and animation students, this process can be extended from a still image to a moving sequence, where meaning is also shaped by duration, movement, camera position and editing.

Mayer's cognitive theory of multimedia learning provides a complementary perspective. It proposes that learners process verbal and pictorial information through partly distinct channels, each with limited capacity, and that meaningful learning depends on active processing (Mayer, 2020). Applied to film teaching, this suggests that students should not be overloaded with extensive explanations while watching complex sequences. Instead, an instructor can divide a film into short excerpts, direct attention to selected features and provide focused questions before asking students to integrate the information.

2.2. Film pedagogy and critical media analysis

Film literacy requires learners to understand how audiovisual texts produce meaning, rather than treating films as transparent records of events. Nguyen (2024) argues that lecturers need a working understanding of film language when using feature films in teaching and highlights the value of selection criteria, contextual materials and purposeful classroom activities. Walker (2022) further emphasises the role of critical media literacy in film education, where technical practice should be accompanied by critical interpretation. Together, these approaches support a pedagogy in which students both analyse existing media and reflect on the creative decisions they make in their own work.

2.3. Hybrid cinema as an analytical learning object

A hybrid film makes the relationship between image systems visible. Bruckner (2015) examines live-action/animation hybrids through formal parameters that can be applied to single frames and to montage. Piepiórka (2021) focuses on the coexistence and interaction of different fictional spaces, while Holmaas (2023) explains how live-action/animation comedy combines the freedom of animated movement with the recognisable physical grounding of live action. These ideas can be adapted for teaching through four analytical dimensions: image-layer recognition, spatial organisation, movement conventions and montage-based meaning.

3. Research Design and Methodology

The present article is a qualitative, theory-informed pedagogical design study. It combines close textual analysis of selected sequences from Space Jam with a review of scholarship on hybrid film, visual literacy, multimedia learning and film pedagogy. The purpose is to develop an instructional framework and a proposal for its empirical evaluation. The article does not report data from a completed classroom experiment, and therefore makes no claims about measured learning gains or statistical significance.

The film analysis focuses on three sequence types identified by their narrative function rather than by exact timecodes: (a) the transition from the human world into the animated world through the golf-course opening; (b) scenes in which Michael Jordan and animated characters interact within the same frame; and (c) the climactic basketball game, in which animated movement conventions shape the action and comic effect. These sequences provide contrasting examples for examining spatial transition, interaction between image layers and the extension of physical movement through animation.

For future experimental evaluation, the proposed design is a quasi-experimental comparison involving students enrolled in animation, film or media courses. One group would participate in the structured hybrid-film learning sequence described below, while a comparison group would study the same film excerpts through a conventional screening and general discussion. Group allocation should follow institutional and ethical requirements; where random assignment is not feasible, groups should be compared on prior experience and baseline assessment scores. The sample size should be determined through an a priori power analysis rather than selected arbitrarily.

Data collection may include a short pre-test and post-test, a sequence-analysis task, a storyboard or animatic assignment, and a reflective questionnaire. Assessment should focus on students' ability to identify the two image systems, explain spatial transitions, interpret movement and montage, and transfer these observations into an original visual plan. Two independent assessors can use a shared rubric; inter-rater agreement should be checked before drawing conclusions. Quantitative changes can be examined using an appropriate comparison of pre- and post-test scores, while written reflections can be analysed thematically. This design makes the pedagogical proposal testable without presenting hypothetical results as completed findings.

4. Space Jam as a Resource for Teaching Visual Literacy

4.1. Recognising image layers and visual conventions

The first learning opportunity in Space Jam is the clear distinction between live-action and animated imagery. Michael Jordan and the human characters are represented through photographed performance, whereas Bugs Bunny, Daffy Duck and the other Looney Tunes characters are drawn animated figures. Students can be asked to identify the visual evidence that distinguishes these layers: contour and texture,

lighting, movement quality, interaction with objects, scale and the relationship between a character and the photographed environment. The aim is not simply to label one element "real" and another "animated", but to explain how their different visual properties remain legible while sharing the frame.

A useful classroom task is a frame annotation exercise. Students select a still from a scene and mark the live-action elements, animated elements, points of contact, visual focus and cues that help the viewer understand the spatial relationship. They then write a short explanation of how the composition guides attention. This task develops observation and evidence-based interpretation before students move to more complex temporal analysis.

4.2. Understanding screen space and transitions

Piepiórka (2021) discusses Space Jam through distinct but connected fictional spaces: the human world, the Looney Tunes animated world and the world associated with the alien antagonists. This spatial arrangement can be used to teach students that screen space is not merely a background. It organises narrative information, establishes rules for character behaviour and makes transitions between different levels of reality meaningful.

The golf-course opening provides a clear example of a threshold between worlds. Students can map the sequence as a spatial diagram: the initial location, the point of transition, the new environment and the change in the protagonist's status. They can then discuss how camera framing, character movement and editing prepare the audience for the transition. The pedagogical outcome is an understanding that a change of space can also signal a change in narrative rules.

4.3. Analysing movement, exaggeration and comic effect

The film's animated characters follow movement conventions that differ from the physical limitations of live-action performers. Stretching, compression, sudden acceleration and exaggerated reactions create comic effects that would be difficult to reproduce through ordinary human movement. In the climactic basketball sequence, Jordan's body is subjected to an exaggerated extension that temporarily brings the live-action character into the logic of the animated world. Holmaas (2023) describes this type of hybrid comedy as a meeting between animation's expressive freedom and live action's grounding realism.

For teaching purposes, students can compare the preparation, action and reaction phases of a movement. They may identify where exaggeration begins, how timing shapes the gag and how the live-action performer responds to the animated environment. They can then redraw the action as a short storyboard, indicating key poses, timing and the interaction between the animated and photographed elements. This connects film analysis with practical knowledge of animation principles and screen performance.

4.4. Interpreting montage and continuity

Hybrid film also provides a focused way to teach editing. The relationship between an animated character and a live-action performer may be constructed within one composite image or across successive shots. Students can examine whether eye-lines, screen direction, shot scale and timing maintain continuity. They can also ask how the alternation between realistic and exaggerated movement shapes the rhythm of a comic scene. Bruckner's (2015) framework is useful here because it encourages analysis of both the hybrid image itself and the montage through which different image types are connected.

A practical task is to select a short sequence and create a shot table containing shot number, image layer, camera distance, action, movement type, editing relation and narrative function. Students should support each interpretation with a visible or audible detail. Such a task develops a vocabulary for discussing film form and discourages unsupported statements such as "the scene is funny because it is animated".

5. A Five-Stage Pedagogical Framework

On the basis of the theoretical discussion and film analysis, the article proposes a five-stage framework for teaching visual literacy through hybrid cinema. It is designed for undergraduate students in animation, directing, cinematography, film studies and media production. The stages can be adapted to a single 90-minute session or expanded into a short teaching unit.

Stage 1. Preparation and activation of prior knowledge. The instructor introduces the terms live action, animation, hybrid image, screen space, montage and visual literacy. Students complete a brief diagnostic task in which they describe how they recognise animated and photographed elements. This creates a baseline and helps the instructor identify misconceptions.

Stage 2. Guided viewing. Students watch selected excerpts rather than the entire film without interruption. Before each excerpt, the instructor provides one or two questions, such as: Which image layers share the frame? What indicates a transition between worlds? Which movement violates ordinary physical expectations? Short, focused prompts help manage cognitive load and direct attention.

Stage 3. Analytical decomposition. Working individually or in small groups, students complete a scene-analysis grid covering image layers, composition, camera, movement, space, editing and narrative function. Each observation must be supported by a specific frame, action or sound cue. Groups then compare their interpretations and explain differences.

Stage 4. Creative reconstruction. Students design a short hybrid scene as a storyboard or animatic. They choose a simple action involving a live-action performer and an animated character, define the spatial rules, plan points of contact and indicate how editing will preserve continuity. Where equipment is available, the storyboard may be developed into a brief test using a recorded live-action plate and a drawn or digitally animated element.

Stage 5. Reflection and evaluation. Students present their work, explain the choices they made and assess whether the intended interaction is readable. Peer feedback should address visual clarity, spatial coherence, movement, timing and narrative purpose. A short reflective statement asks students to identify what they learned from analysing the source film and how they applied that learning in their own production.

6. Assessment Criteria and Experimental Validation

To evaluate the proposed framework, student performance can be assessed through four dimensions. First, image-layer recognition: the student accurately distinguishes live-action and animated elements and identifies how they are integrated. Second, spatial and narrative interpretation: the student explains transitions between fictional spaces and connects them to story development. Third, formal analysis: the student interprets composition, movement, timing and montage using appropriate terminology and visual evidence. Fourth, creative transfer: the student applies these principles in a storyboard or animatic that communicates a coherent hybrid action.

A rubric can rate each dimension on a four-level scale: emerging, developing, proficient and advanced. The descriptors should specify observable performance. For example, an emerging response may merely name an animated character, while an advanced response explains how the character's scale, movement and point of contact establish its relationship to the photographed environment. The same rubric should be used for the pre-intervention and post-intervention tasks where task equivalence can be maintained.

The main hypothesis for a future experiment is that structured viewing and scene reconstruction will produce stronger gains in visual-analysis performance than unstructured screening and discussion. A second hypothesis is that students who reconstruct a hybrid scene will demonstrate better transfer from theoretical observation to practical planning. These hypotheses remain to be tested. Any report of results should include the number and characteristics of participants, intervention duration, assessment instruments, statistical procedures, effect sizes and limitations. Without such evidence, it would be inappropriate to claim that the framework has already been experimentally validated.

7. Discussion

The proposed approach treats a popular hybrid film as a text that can be examined critically and used to connect theory with practice. Its pedagogical value does not arise simply because students may find the film entertaining. Rather, the film offers clearly observable differences between visual systems and a narrative structure in which those differences have consequences. Students can identify the formal choices, explain their function and then test related principles in their own work.

The approach also helps connect analytical and creative learning. Film literacy is developed when students interpret how a sequence works; production literacy is developed when they use that understanding to plan a shot, storyboard or animatic. The process reflects the broader principle that learners benefit from actively organising and explaining information rather than receiving it passively (Mayer, 2020). However, instructional design should avoid presenting too many concepts at once. Short excerpts, focused questions and scaffolded tasks are therefore preferable to a single lengthy lecture accompanying a complete screening.

There are limitations. Space Jam is a Hollywood comedy produced in a particular industrial and cultural context. Its conventions should not be treated as universal rules for all hybrid films or all audiences. The proposed framework should be tested with other examples, including films that combine animation and live action in different genres, styles and cultural contexts. In addition, the learning outcomes may differ according to students' prior experience, age, language proficiency and familiarity with animation software. These factors should be considered in future empirical work.

8. Conclusion

This article has reframed Space Jam (1996) as a pedagogical resource for developing visual literacy and critical film-analysis skills in higher education. The film offers a practical context for examining the interaction of photographed and animated images, the organisation of fictional space, exaggerated movement and montage. By connecting these formal features with guided viewing, scene analysis and creative reconstruction, instructors can help students move from passive spectatorship towards evidence-based interpretation and informed visual production.

The proposed five-stage framework combines preparation, guided viewing, analytical decomposition, creative reconstruction and reflective evaluation. A quasi-experimental design is

outlined to assess its potential, but the framework has not yet been empirically validated and no learning gains are claimed. Future research should implement the intervention with clearly defined student groups, reliable assessment criteria and transparent reporting of results. More broadly, animation–live-action hybrid cinema can become a valuable component of film and animation education when its visual complexity is translated into purposeful learning activities.

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