"The Analysis of Multimedia through the Lens of Music Theory: A Model for Analyzing the Interaction of Auditory, Visual, and Narrative Stimuli in Multimediatic Artforms"

A DISSERTATION SUBMITTED TO THE FACULTY OF THE UNIVERSITY OF MINNESOTA BY

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

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April 2022

Acknowledgments:

I would like to thank…

…Matthew Bribitzer-Stull, for his infinite patience and guidance,

…Jessica Abazzio, for her wisdom and generosity,

…and Anne Briggs, for sticking with me through the dark times.

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Abstract

Scholars often separate the study of multimedia into distinct fields based on the platform of distribution: films and television, video games, staged performances (such as opera, ballet, and theater), and so on. While such fragmentation can provide a clear focus for research, it also prevents communication across the scholarly divide. In this dissertation, I suggest a model for analyzing narrative multimedia applicable across genres and platforms.

Synchronization schemas account for the combination of sonic, visual, and narrative elements through the shared metric of intensity. I explore the interaction of these various modalities by focusing on a particular synchronization schema I call *the plunge*—that moment when a narrative agent makes a risky and definitive choice, which can range from minor dramatic moments to piece-defining climaxes. Comparing instances of *the plunge* in television, film, opera, ballet, and video games demonstrates remarkable consistency in its presentation despite shifting genre conventions and styles.

I situate my work within the existing scholarship on musical topics and schemas to suggest expanding their purviews to include multimedia works. After a review of this literature, I present a method of analysis and define a variety of *plunge* sub-types with examples from filmic, staged, and ludic media. A focused study of the synchronization schema in the animated film *Spider-Man: Into the Spider-Verse* (2018) highlights the applicability of the proposed method. By generalizing narrative moments such as *the plunge*, underlying norms and deviations can be identified and analyzed, allowing for more nuanced engagement among scholars of multimedia.

1. Introduction

1.1. The Hero Rushes into Battle

Roughly thirty-six minutes into the premiere episode of *The Flash* (2014–present), the eponymous hero (Barry Allen) confronts the task of stopping a raging tornado threatening his city (a clip of the scene can be viewed through the MediaSpace link in the footnote below).[1] It's a challenge greater than anything he has faced so far, and—to any spectator familiar with the tropes of Western cinema—clearly this is *the* big moment. Everything points to this being the end-all-be-all fight for the hero, even if we are aware that this episode is only the first in a long-running series. Through a combination of music, cinematography, lighting, character action, and dialogue, we are drawn into the drama of what is about to happen. As the wind whips around him, Barry's teammates warn him of the danger over the radio. After some deliberation, he decides that he is going to use his superhuman speed to unravel the tornado, despite his friends' warnings. As the music builds and the camera zooms-in on Barry's determined face, we know what's about to happen—just as everything reaches an apex, he rushes into the storm to save the day.

Auditory, visual, and narrative cues combine to capture the drama of Barry's decision, and to signal the weight of the choice to the audience. In each channel of the multimedia whole, tension builds over the course of the scene, reaching a critical point that coincides with the moment of action. Cross-modal coordination overdetermines the event, marking its dramatic import through synchronization. In order to capture all the

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[1] https://mediaspace.umn.edu/media/t/1_g3vqk6pk. Clip taken from David Nutter, "Pilot," *The Flash* (The CW, October 7, 2014)

facets of this moment—and to interpret its possible meanings in the overall multimedia production—it is necessary to specify exactly how each channel generates intensity on its own and then examine how those channels interact with one another. To do this, I will first evaluate the affective power of each channel separately and then compare their intersections.

Auditory

Musically, the effect is that of a prolonged buildup of tension that is left, in many ways, unresolved. The scene begins with the two-chord title motive (**Example 1.1**), signaling Barry's heroism through blaring brass arpeggiating a B-flat major harmony and keying into long-established heroic and militaristic musical tropes.[2] This gives way to an agitated string ostinato (**Example 1.2**) that underlies the entirety of the scene, generating a sense of motion and excitement, as well as danger.[3] The ostinato simultaneously establishes the key of D minor and blurs the line between the tonic and the submediant. The brass instruments return on a low D and steadily climb an incomplete D-natural-minor scale for a full octave before launching into a series of appoggiaturas (**Example 1.3**). These continue rising, covering yet another octave and then some, emphasizing a quasi-subdominant harmony (G-E-D) to be resolved. This leads up to a high F that lingers as the persistent ostinato accompaniment shifts to tense tremolos that underscore the action to come. A long crescendo builds tension as all of this unfolds, culminating at

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[2] Various authors have discussed the musical parameters that help create a "heroic" sound, most notably Scott Burnham's work *Beethoven Hero* and Raymond Monelle's *The Musical Topic: Hunt, Military and Pastoral*.

[3] This figuration is reminiscent of the ostinato from Schubert's "Gretchen am Spinnrade," which is likewise in D minor and serves to imitate the motion of Gretchen's spinning-wheel and depict her growing excitement/obsession. Likewise, it resembles ostinati from minimalist and post-minimalist composers, notably Phillip Glass and John Adams.

the same moment. While much of this scene is devoid of non-musical sounds effects,

Barry's superhuman acceleration is accompanied by a loud "whoosh" that gradually

fades as he races towards danger.[4]

Example 1.1: two-chord "Flash" motive

Example 1.2: underlying string ostinato

Example 1.3: ascending D natural minor scale pattern
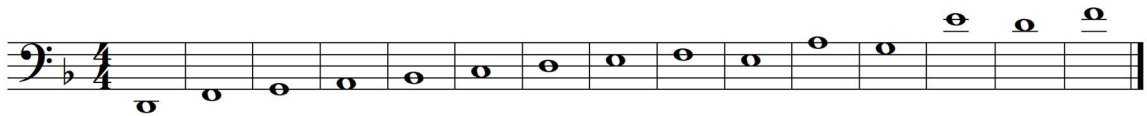
All these factors—rising pitch, increasing volume, accented non-chord tones,

etc.—signal the imminent arrival of a huge climax, but several things subvert a strong

sense of resolution. The final pitch of the build-up is the third scale-degree rather than

tonic, creating a sense of finality without full closure (in the traditional mono-tonal

sense).[5] The leap-up, step-down pattern created by the series of appoggiaturas ceases

abruptly, leaving the final pitch hanging. Although the strings default to the tonic

sonority, the rapidity of the tremolos leaves the arrival feeling tenuous at best. The

concatenation of these musical techniques can be understood as gestural, as a single

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[4] See https://www.asoundeffect.com/the-flash-sound-design/ for information on how this sound effect was designed and executed.
[5] Deryck Cooke, *The Language of Music* (London, New York: Oxford University Press, 1959).

gestalt that starts at a point of relative repose and builds to a point of heightened activity and suspense before plateauing.

A graphic representation of this gesture appears in **Example 1.4** below via an auditory intensity graph (IG). Although I will provide a more in-depth explanation of the benefits and pitfalls of such graphs in chapter 3, several points bear mentioning here. First, note that I have listed units for neither intensity nor time. While the latter has discrete units that can be measured in a variety of ways (seconds, measures, etc.), the former is unquantifiable. Because I am depicting the overall gestural shape via relational perceptions, specific units are not germane to my point. Second, and related, interpretation of intensity is entirely subjective, that is, qualitative rather than quantitative. I perceive a musical intensification throughout this scene due to the reasons I gave above, and the graph is simply an attempt to visually depict this perception.

Example 1.4: auditory intensity graph of _The Flash_ S1:E1 scene
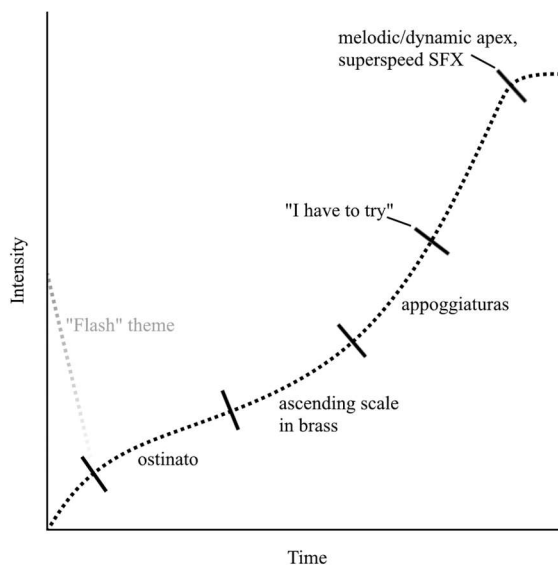
I have drawn two lines leading towards the "ostinato" designation on the graph because I perceive a collision of two competing musical processes. The fragment of the

"Flash" theme serves as a token of Barry's heroism, while the ostinatos that come in tie to the climactic moment yet to come. In the reality of the soundtrack the cues overlap, but in my interpretation, they represent separate musical ideas. The nodes I have chosen to represent here are salient points of change in the musical and/or auditory channel; they are by no means absolute demarcations of intensification and should be understood as guidelines. The points on this graph (and on the other graphs in this chapter) should be understood as relational, their status as more or less intense determined only in comparison with the other represented points on the graph. What this auditory IG shows is a generalized shape that attempts to account for the enmeshed nature of all auditory stimuli in the scene, creating a sum-total representation of perception and interpretation. I go into greater detail regarding this graphic-analytic machinery in chapter 3.

Visual

Just as several factors determine the auditory dimension's intensification, the same holds true of the visual channel's dynamic shape. There are effectively four shots that each have their own intensification strategies, the timeline of which is outlined in **Example 1.5–8**. Each colored-in region of the graph represents a different central figure or set of figures in the shot. The vertical height and positioning of each cut is meant to capture not only the relative degree of zooming (by representing how much of the screen is occupied by the shot's subject), but also the directionality of panning shots (by depicting frame left as the region above the dotted line and frame right below).

In the first ten seconds of the clip, the camera quickly zooms from a full shot to a close-up of Barry's face (**Shot A**). Throughout the remainder of the scene the camera gets closer and closer to Barry's face, interspersed with cuts of Cisco and Caitlyn in the

command center at Star Labs (**Shot B**) and of the tornado heading towards the city (**Shot C**). All of this is bookended by shots of Barry's father figure, Joe (**Shot D**). Further details for each shot (including screen captures) appear in **Examples 1.5a** through **1.5c** below.

<u>Example 1.5: shot synopsis of *The Flash* S1:E1 scene</u>
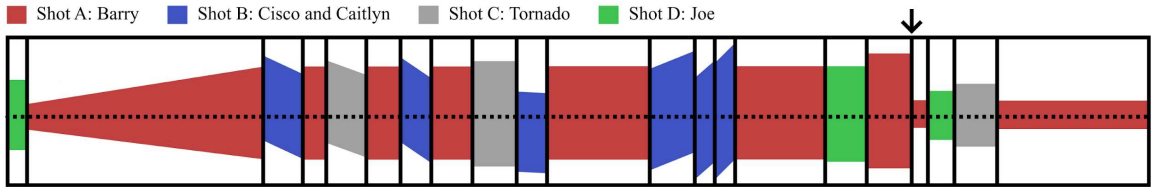
<u>Example 1.6: zoom-in on Barry</u>
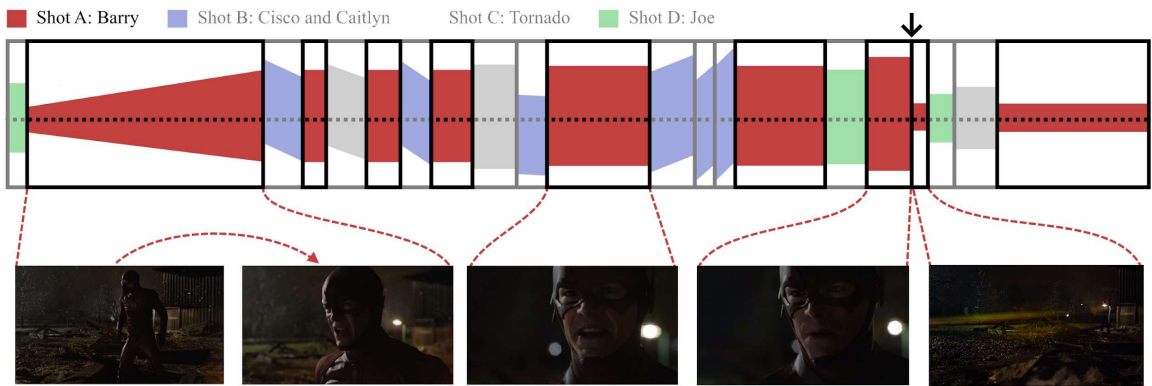
<u>Example 1.7: pan around Cisco and Caitlyn</u>
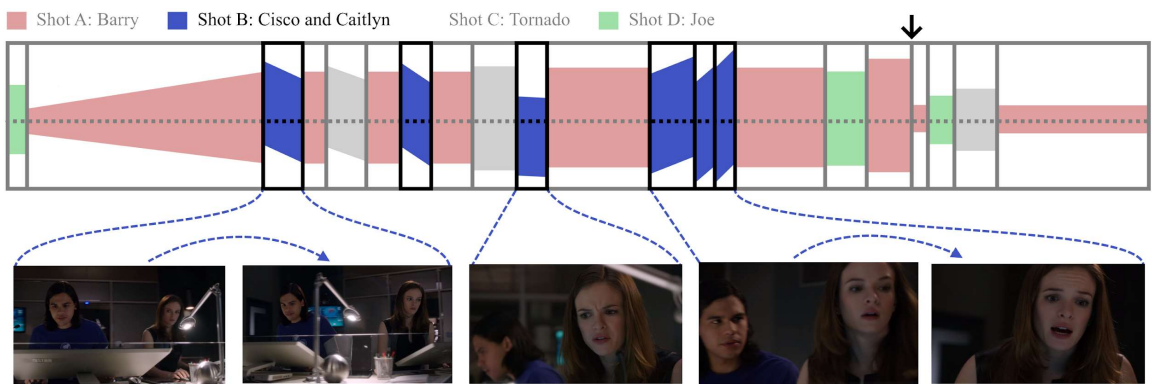
Example 1.8: mixed shots of tornado, static shots of Joe
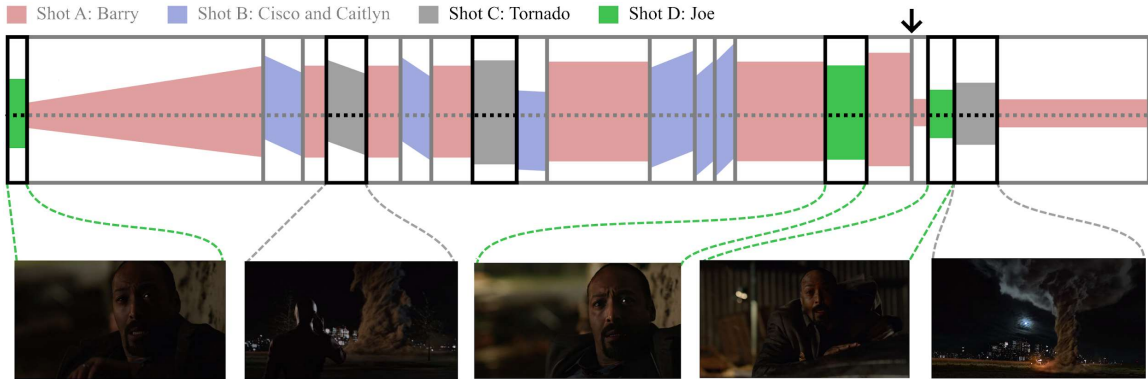
Each of these shots employs different filmic techniques as a means of increasing intensity. **Shot A** makes use of persistent close-ups, reaching the most extreme zoom at the moment of the plunge (indicated by the arrow). This is, in some respects, equivalent to the musical crescendo that accompanies the scene, slowly building intensity throughout. **Shot B**, on the other hand, uses near constant panning, frantically circling around Cisco and Caitlyn as they assess the situation. The tornado in **Shot C** is treated to both panning and zooming, but the composition of the scene pits the raging whirlwind against the backdrop of the city it aims to destroy. Joe's depiction in **Shot D** is static, watching in amazement as Barry saves him from debris and then rushes towards the storm. Beyond these simple filming techniques, the cinematography connecting the shots helps to communicate a building of tension using quick cuts and stark juxtapositions.

Example 1.9: visual intensity graphs of The Flash S1:E1 scene
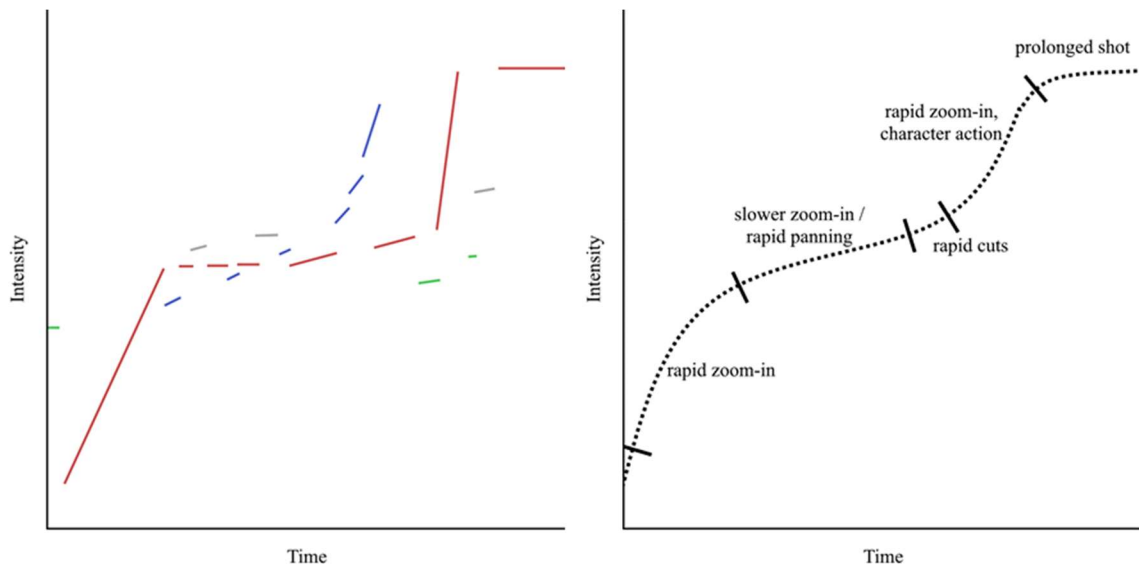
Example 1.9 contains two IGs that depict the gestural effect created by the visual

channel of the scene, considering cinematography, lighting, and character action. As with

the auditory intensity graph above, specific units are not given and all points should be

understood as subjective and relational. The IG on the left is meant as a translation of the

timeline from **Example 1.5** that interprets the intensity generated by each shot (colors

represent the same shots as before), whereas the IG on the right aggregates these

impressions into a single intensity curve. I consider the protagonist to be of primary

import, with the other shots interspersed throughout serving to highlight and amplify the

intensification process, which is why the second graph follows the red lines from the first

so closely.[6]

Narrative

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[6] One could easily imagine this scene taking place in a single shot, solely focusing on Barry and following
the same intensity curve as depicted above along with all of the same audio cues and dialogue while not
showing the crew at Star Labs.

Many of the narrative details of this scene have been covered in the synopsis provided earlier and throughout the auditory and visual analyses, but it is worthwhile to separate out the purely narrative aspects. There is a co-constitutive process at work here—the narrative is the backbone of the scene that gives each shot and audio cue purpose, but it is also only through the combination of shots and cues that the narrative is understood. In the broadest of strokes, Barry is confronted with a problem, he gathers information about the threat and suggests possible solutions, and, after deciding upon a course of action, he executes it. There are, of course, smaller points of intensification that may be gleaned from the dialogue. These are laid out in the narrative IG in **Example 1.10** below, which captures a variety of sub-peaks before Barry's climactic rush into action. The first peak occurs when Barry realizes that the tornado is moving towards the city and, for a moment, he is at a loss for how to stop it. The second peak occurs when Caitlyn warns Barry that trying to unravel the tornado might kill him and the third happens just as Barry takes off towards the tornado. Although it is beyond the scope of the clip in question, the narrative intensity keeps rising throughout the ensuing battle and eventually culminates in Barry's victory.

Example 1.10: narrative intensity graph of The Flash S1:E1 scene
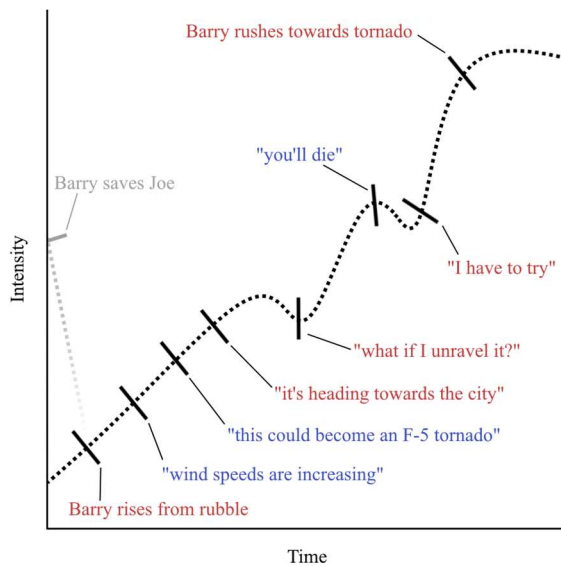
Composite

  The auditory, visual, and narrative channels of this scene follow divergent paths, but ultimately accomplish the same thing: they start from a point of relative repose and proceed to a point of heightened tension. A superimposition of the IGs of the scene is shown in the composite IG in **Example 1.11**. There are ebbs and flows in each channel but taken together they equal more than the sum of their parts, generating the overall affective power of the scene. The yellow circle indicates the point of synchronization that highlights the definitive action being taken by Barry. Each channel of the multimedia production reaches a point of low intensity at moment when Barry realizes the tornado is going to destroy the city. This is followed by a divergence and steady intensification, all leading to synchronized climaxes at the moment he rushes out to stop it. The presentation of the problem and the build-up to when Barry confronts it are essential in communicating the drama of the scene to the audience, but it is the synchronized highpoint that solidifies the definitive action.

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Example 1.11: composite intensity graph of The Flash S1:E1 scene[7]
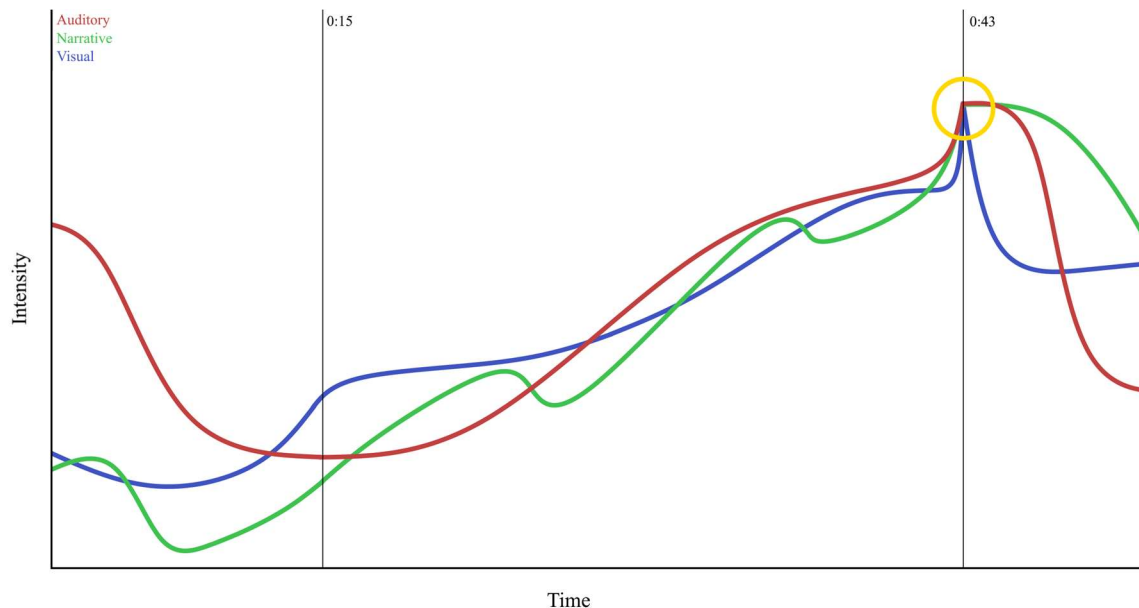
The composite IG on its own does not address the specifics of the scene in

question in the same way the individual IGs do, but instead it highlights the differences

and similarities in the multiple channels without compromising their independence.

Rather than relying on an overall interpretation of intensity or subsuming one channel

within the interpretation of another, a composite approach holds the divergent paths in

tension with one another. This is in essence a background-level analysis of the scene,

with the individual IGs serving as middlegrounds and the more detailed investigations

(such as took place in the body of the text above) functioning as foregrounds. Unlike a

Schenkerian *Ursatz*, there is no grand unity or parallelism to be sought, only an

acknowledgement of the ever-increasing generalization that takes place as we move

towards the background structure. It is this very generalization that allows for direct

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[7] Note that timestamps provided here are relative to clip provided in the citation above. This will be the case for all further uses of timestamps in graphs.

comparison of auditory, visual, and narrative channels through a common perceptual frame: subjective experience of intensity.

1.2. The Plunge

The scene from *The Flash* is more than just an exciting and emotional scene, it is prototypical of a specific moment that happens across all kinds of narrative multimedia productions. I call it "the plunge," and it is readily recognizable to enculturated consumers of Western media. It is present in just about every movie, television show, video game, musical, ballet, and opera (with the exception of abstract and non-narrative forms). It's that moment when a character takes that definitive action and cuts the wire on the bomb, jumps from the helicopter, proceeds to the final boss fight, kills their new in-law Tybalt, takes the red pill, renounces love in order to steal the Rheingold, or bears the Ring to Mordor. Whatever the narrative situation, the plunge works in largely the same way.

There are varying degrees of dramatic weight the plunge communicates, ranging from minor confrontations to plot-defining climaxes. Likewise, the plunge appears in many different narrative situations and types of media, from Prince Désiré committing to waking the slumbering Aurora in Tchaikovsky's *The Sleeping Beauty* to Javert's suicide in *Les Miserables* to Miles' leap of faith in *Spider-Man: Into The Spider-Verse*. Despite this range of utility, there are nonetheless remarkable similarities in how the plunge appears. Musically, there is often a crescendo accompanying rising pitch, climbing to an apex and then abruptly cutting out. Visually, there is usually a focus on the character taking the plunge, whether that be zooming-in (in filmic media) or solos and spotlighting (in staged media). Narratively, there is typically an emphasis on the character taking the

plunge. The specifics may vary widely from one instance to the next, but in each case the constitutive media follow a similar intensity curve that helps engender the moment.

The plunge is an exemplar of what I call *synchronization schemas*—arrangements of audiovisual elements that communicate particular narrative moments through synchronization. These schemas represent a cultural warehouse of shared traits and techniques across all kinds of media, functioning much the same way as musical topics (to be discussed in detail in chapter 2). There are clearly schemas other than the plunge just as worthy of examination (e.g., "wondrous artifact," "transcendence," and "grief," just to list a few), but I have chosen to limit my investigation here for a few reasons. First, a thorough treatment of each synchronization schema would result in multiple book-length monographs which is beyond the confines of the present dissertation. Second, instances of the plunge are fairly easy to locate due to their connection to pivotal moments in the plot. Third, my initial interest in this topic was piqued by superhero movies and television, where the plunge occurs *ad nauseum*. Finally, the plunge is a narrative moment creators adapt quite a bit, highlighting not only its cultural relevance but also its ability to challenge the status quo and subvert societal norms.

1.3. The Case for Synchronization Schemas

The auditory, visual, and narrative aspects of synchronization schemas are often treated as totally separate fields. Scholarship and criticism do occasionally extend bridges between these domains (film studies will often examine the soundtrack of a film, musicology will sometimes venture into the effects of staging and program notes on interpretation, and narratology will hint at how sounds and visuals help in deciphering the plot), but by and large they are treated as ancillary materials, existing as either purely

conformant or contradictory.[8] What I propose in this dissertation is that multimedia works should be analyzed as composite artforms, with each channel being evaluated both on its own terms as well as in conjunction with the others. I view synchronization schemas as a locus of this intricate mosaic: concrete points in multimedia productions where no single channel can be ignored or sidelined. By theorizing synchronization schemas, I hope to bring to light the interpretive practices of audiences and creators alike.

Synchronization schemas—especially plunges—are frequently those moments audience members carry with them after the piece is over. Their overdetermination across multiple channels along with their frequent use at crucial narrative moments increases their memorability and impact. They are not just particularly affective moments, but also touchstones of the overall form of a work. Synchronization schemas can serve as loci of meaning where various plot threads, musical ideas, and visual motifs coalesce; they are moments towards which foreshadowing points and reminiscence echoes. Because of this capacity for internal referentiality, they often serve as poignant instances of associative fixity. Creators of operas, video games, and films frequently "spot" these kinds of pivotal moments in the plot first so that they can preempt and recall them later.

Paying attention to how such schemas are deployed in multimedia can open the door for new avenues of criticism, especially in situations where a moment does not adhere to the general schema. Conformance is often unremarkable, whereas divergence from the formula is used to play with consumer expectations or even to subvert hegemonic power structures. Synchronization schemas can also be deployed in

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[8] Further exploration of these terms takes place in Chapter 2.1 during my discussion of Nicholas Cook's work on multimedia analysis.

unexpected places, often generating humorous, surprising, or shocking effects. I explore many of these possibilities in the chapters to come.

1.4. Chapter Outline

In the following chapters, I will lay out a theory of synchronization schemas and apply it to a wide array of multimedia works.

Chapter 2 is a review of the music-theoretical literature that has inspired my current pursuit. I make the case that this body of scholarship, while insufficient on its own to tackle the complexities of multimedia works, nonetheless provides a large degree of methodological rigor that can be applied beyond the musical channel of multimedia works. I then discuss some of the work that has attempted to bridge the methodological gaps before laying the groundwork for some of the terminology and analytic techniques used in later chapters.

Chapter 3 outlines a model for identifying and analyzing the plunge synchronization schema that can be applied to various multimedia situations. I discuss my own analytic methodology and suggest potential pitfalls and issues that might arise. In this chapter I also identify several different types of plunges that cover an array of narrative situations.

Chapter 4 deals with specific case studies in different multimedia genres, addressing the unique factors that are encountered in filmic, staged, and ludic media. Each section provides a handful of prototypical examples followed by instances that break the formula in some way. Chapter 4.1 deals with the plunge in filmic media ranging from television to cinema, discussing the crucial role cinematography plays in communicating the plunge. While the plunge occurred in works that predate the advent of

the moving image, I consider film to be the definitive mode of presentation. Chapter 4.2 looks at staged media including ballet, opera, and musical theater, evaluating the differences in presentation that arise in live, fixed-frame productions. Chapter 4.3 focuses on ludic media wherein the consumer is also an active agent in the multimedia work, focusing primarily on video games and interactive art.

Chapter 5 is an analytic vignette of *Spider-Man: Into The Spider-Verse*. I explore the relationship between the plunge synchronization schema and leitmotivic scoring techniques within the film, arguing that they work together in inextricable ways to create a meaningful and memorable story.

Chapter 6 concludes the dissertation by suggesting future avenues of research. I recommend several possible synchronization schemas that might warrant further investigation and propose an alternate method for presenting analysis of said schemas.

2. State of the Field(s): the Analysis of Multimedia

2.1. Introduction

To analyze multimedia is to break it down into its constituent elements and evaluate both how they function independently and how they interact with one another. The elements for comparison and the ways they intersect vary wildly from one instance of multimedia (IMM) to the next. Audio, visual, and narrative modes of communication can be employed in a seemingly endless array of combinations, especially when their various genres, subgenres, and intersections are taken into account. For instance, a ballet involves much more than a simple pairing of music and dance: there is an interaction between coordinated bodies moving on stage and musical events, but there is also the set design, costumes, lighting, and individual dancers, not to mention the possibilities of an overarching story or interpretive program notes. Even if we group these into general categories such as sound/music, choreography/staging, set-design/narrative, we are still left with multiple domains of expression that bring with them all the baggage of conventional practices, field-specific terminology, and cultural significance.

Artists have long been interested in how their medium of choice interacts with others, often seeking to bridge the gaps between media. As but one example, art historian Phillipe Junod provides a substantial overview of how music and visual art have overlapped throughout history.[9] Junod chronicles the tension between what he terms "centripetal" and "centrifugal" aesthetics, wherein artists and critics seem to oscillate between valuing either unity or separation of media, respectively. He traces this counterpoint (as he calls it) through the use of metaphor and analogy (musical color,

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[9] Philippe Junod, *Counterpoints: Dialogues between Music and the Visual Arts*, trans. Saskia Brown (London: Reaktion Books Ltd, 2017).

visual dissonance, etc.) and through an extensive catalogue of multimedia works from the nineteenth century onwards.[10] Simon Shaw-Miller also contributes to this history by breaking down the philosophical background of hybrid artforms, focusing especially on the intersections of music and painting.[11] Each of these authors ties their discussion to the concept of the *Gesamtkunstwerk*, claiming Richard Wagner's synthesis across boundaries as fundamental in establishing a lasting interest in multimedia works from the nineteenth century onwards.[12] While artists throughout history were concerned with the intersections of artforms in what we might now call multimedia, it has only been relatively recently that scholars have started to theorize these intersections as such.

Perhaps the best-known venture into multimedia analysis in the musicological literature is Nicholas Cook's *Analysing Musical Multimedia* from 1998.[13] In it, Cook is broadly concerned with the meaning(s) communicated by multimedia works—from both auditory and visual modalities alone as well as the emergent properties created by their combination. His theory rests on the assumption that by first examining the individual elements of a work separately they can then be tested for congruence or difference and categorized accordingly. This results in a continuum from *conformity* (concurrent media communicating the same message) to *contest* (concurrent media communicating opposing messages), with *complementation* (concurrent media communicating different messages, but working together to create a third message) in the middle.[14] Cook's visual

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[10] An important touchstone for Junod is Sergei Eisenstein, whose concept of counterpoint in cinema directly influences Junod's deployment of the term here. (Eisenstein 1949, "A Dialectic Approach to Film Form")

[11] Simon Shaw-Miller, *Visible Deeds of Music: Art and Music from Wagner to Cage* (New Haven: Yale University Press, 2002).

[12] Wagner's ideas themselves emerged from his reading of ancient Greek dramas (particularly those of Aeschylus).

[13] Nicholas Cook, *Analysing Musical Multimedia* (New York: Clarendon Press, 1998).

[14] Cook, *Analysing Musical Multimedia*, 98–106.

representation of this procedure can be seen in **Example 2.1** below. Such categorization is useful insofar as it helps establish the relationship between the constituent media in a given work, but it falls short of explaining how specific affective states or narrative moments—such as the plunge—are communicated.

Example 2.1: Cook's similarity and difference tests[15]
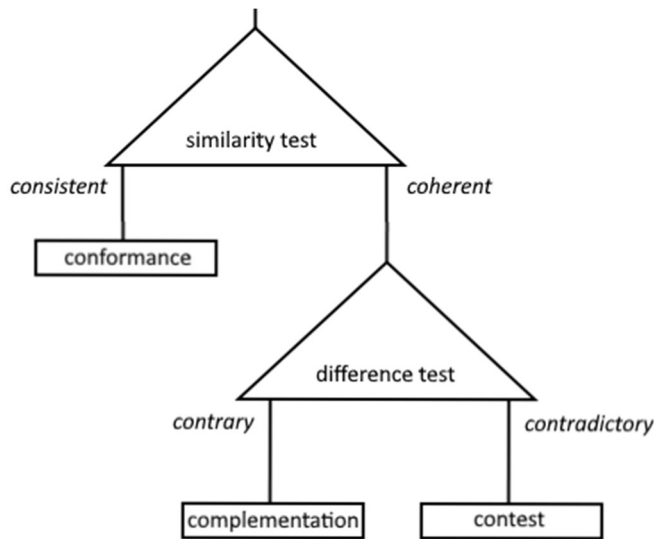
The analysis undertaken by Cook focuses almost exclusively on instances of complementation, being his preferred arrangement of media. Throughout the book, he analyzes a wide array of IMMs, including several advertisements, Schoenberg's *Die glückliche Hand*, a segment of Disney's *Fantasia*, and the music video for Madonna's *Material Girl*. The tripartite division of multimedia meaning highlights the array of possibilities inherent in musical-visual pairings; Cook, however, does not account for situations that incorporate more than two concurrent channels of media (or, at least, he does not address more than two). Because it is grounded in Lakoff and Johnson's theory of metaphor, the model he provides relates only two expressions (A and B) to some

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[15] Cook, *Analysing Musical Multimedia*, 99.

shared concept (C). Several reviewers of his work bring attention to this fact, often proposing ad hoc extensions or revisions to Cook's model. For instance, Lawrence Zbikowski relates it to the Conceptual Integration Networks (CINs) he uses in his own work on conceptual blending. He reevaluates Cook's analysis of *Die glückliche Hand*, shown in **Example 2.2** below, incorporating not only the music and stage action, but the lighting and drama as well.[16] Both Zbikowski and Lakoff and Johnson (and thus Cook, as well) are grounded in cognition and linguistics, highlighting the inherent inter-/multi-disciplinary nature of multimedia studies. Other reviewers such as Scott Lipscomb[17] and Annabel Cohen[18] comment on possible extensions to Cook's work, providing support for his ideas based in cognitive psychological experimentation.

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[16] Lawrence M. Zbikowski, "Music Theory, Multimedia, and the Construction of Meaning," *Intégral* 16/17 (2002): 251–68.

[17] Scott D. Lipscomb, "Modelling Multimedia Cognition: A Review of Nicholas Cook's Analysing Musical Multimedia," *Intégral* 16/17 (2002): 227–36.

[18] Annabel J. Cohen, "Musicology Alone?," *Music Perception: An Interdisciplinary Journal* 17, no. 2 (1999): 247–60.

Example 2.2: CIN for bars 125–53 of Schoenberg's *Die glückliche Hand*[19]
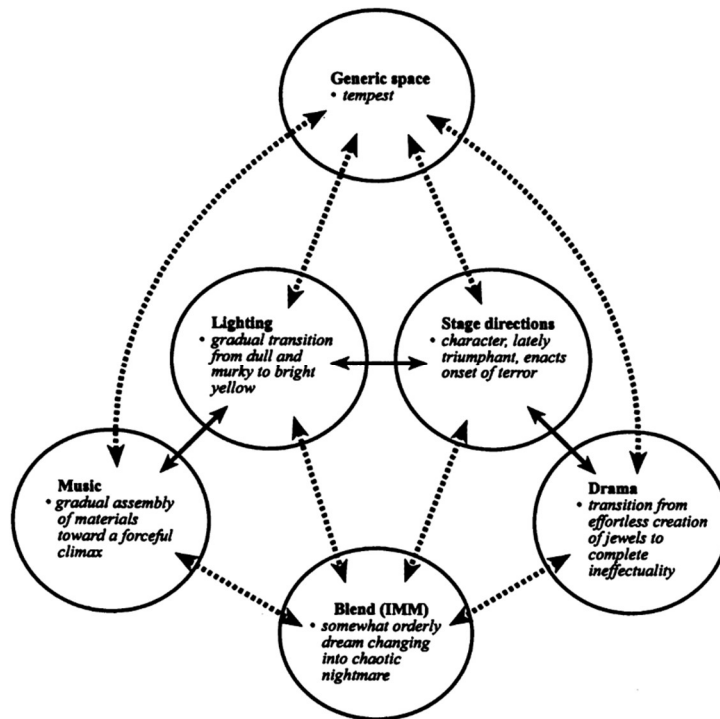
Cook's work sits at an uneasy juncture between Junod's aesthetic poles, leaning

into the meaning conveyed by separate media while simultaneously accounting for the

unique properties that only arise through their union. I believe this is exactly the kind of

dialectic needed to fully capture the nuances of multimedia. Although Cook provides a

methodology for dissecting moments that involve multiple concurrent modalities, his

approach has limitations. For instance, most of Cook's analysis happens through prose

rather than visualizations. While this is not inherently problematic, I believe that a strong

visual representation is imperative when drawing comparisons between multiple IMMs.

The literature on musical schema theory provides an excellent example for how effective

visuals can capture similarities across a diverse selection of pieces, especially in the work

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[19] Zbikowski, "Construction of Meaning," 264.

of Gjerdingen and Zbikowski (which I highlight in greater detail below).[20] Cook's theory also lacks cross-repertoire applications, in that he focuses almost exclusively on pairings of music and (often) a singular component of the visual channel. Although these two modalities factor heavily into synchronization schemas like the plunge, they are insufficient metrics with which to consider all instances.

While many of the elements of an IMM can be largely boiled down into either auditory or visual categories, it is more productive to treat them as distinct. While a dancing body, a change in lighting, a filmic technique, and an action in a game may communicate the same general meaning, they do so in vastly different ways. This sense of similar affects being communicated in disparate contexts is well explored by the literature on musical topic theory. These two subdisciplines of musicology—schema theory and topic theory—serve as the backbone of my model. I will provide a brief historical overview of each before discussing some of the more recent scholarship on multimedia that informs my work.

2.2. Schema & Topic Theory

Schema Theory

Schema theory deals with the study of mental constructs (schemas) and the processes that create them. It has ties to both gestalt psychology and cognitive sciences, where the understanding of how the mind forms thoughts and concepts is of primary consideration. In musical scholarship, however, it is used as a means of evaluating the ways in which listeners develop coherent interpretations of musical sounds. This manifests in a variety of ways—from empirical studies of listener expectations to

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[20] For a compendium of visual models, see Robert O. Gjerdingen, *Music in the Galant Style* (New York: Oxford University Press, 2007).

speculative theories of musical style. The unifying factor is the emphasis on how musical data is heard, processed, and interpreted. I break musical schema theory into three broad categories: representations of perception, descriptions of expectation, and compositional/analytical tools.

In the first category is Lawrence Zbikowski, who breaks down how he believes musical objects are heard and interpreted through categorization in *Conceptualizing Music*.[21] Drawing from cognitive science and theories of metaphor, he posits that listeners learn to ascribe meaning to music through the process of conceptual blending—the fusing of two or more concepts into one. He represents this pictorially through CINs (as can be seen in **Example 2.2** above), which capture the many inputs involved in creating blended concepts by highlighting the properties that emerge.[22] Where Zbikowski goes further than Cook is in mapping out the generic space—noting what specific elements of each medium map onto the others in order to create new properties (the blended space). While *Conceptualizing Music* deals primarily with the relationship between music and text (lyrics), Zbikowski's more recent *Foundations of Musical Grammar*, discusses a wider array of interactions.[23] His expanded approach includes combinations of music with text, emotion, gesture, and dance, bringing CINs even closer to a viable model of multimedia analysis.

In the same vein of schema as a representation of perception, Fred Lerdahl and Ray Jackendoff's book, *A Generative Theory of Tonal Music* (GTTM), formalizes a

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[21] Lawrence M. Zbikowski, *Conceptualizing Music: Cognitive Structure, Theory, and Analysis* (Oxford ; New York: Oxford University Press, 2002).

[22] Note that Zbikowski borrowed the idea of conceptual blending from the work of cognitive scientists Gilles Fauconnier and Mark Turner.

[23] Lawrence M. Zbikowski, *Foundations of Musical Grammar* (New York, NY: Oxford University Press, 2017).

theory of musical hierarchy based upon linguistic models.[24] GTTM offers a series of

"preference rules" that attempt to encapsulate the manifold variations of harmonic and

melodic progressions grouped together under the umbrella of tonal music. As Robert

Gjerdingen points out in a review, these rules are "similar to Gestalt laws in the sense that

they codify preferred modes of perceptually organizing complex musical patterns."[25] So,

while Lerdahl and Jackendoff do not address the notion of musical schemas directly, they

contribute to the discussion of pattern recognition as a primary aspect of musical

understanding.

The second broad category of musical schema theory comprises descriptions of

expectations. Leonard Meyer's *Emotion and Meaning in Music* provides a strong

backbone for this work, with an emphasis on the emotional power imparted through

expected continuations of harmonic and melodic patterns.[26] For Meyer, the very fact that

listeners have expectations is what allows music to have meaning at all, since they are

relating their present experience with past encounters.[27] Eugene Narmour builds on

Meyer's work with his implication-realization model presented in *Beyond Schenkerism*

and further elaborated in later publications.[28] He attempts to typify a variety of musical

contours and codify rules for their continuation. Each of these authors is concerned

primarily with the ability of the human mind to predict the outcome of musical patterns.

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[24] Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Cambridge, Mass: MIT Press, 1996).
[25] Robert O. Gjerdingen, "The Psychology of Music," in *The Cambridge History of Western Music Theory* (Cambridge: Cambridge University Press, 2002), 976.
[26] Leonard B. Meyer, *Emotion and Meaning in Music.* (Chicago: University of Chicago Press, 1956).
[27] Meyer, *Emotion and Meaning in Music*, 35.
[28] Eugene Narmour, *Beyond Schenkerism : The Need for Alternatives in Music Analysis* (Chicago: University of Chicago Press, 1977).

While both draw from gestalt psychology, Meyer focuses on communication of meaning and Narmour focuses on cognitive identification.

A more recent study explicitly concerned with expectation is David Huron's *Sweet Anticipation*, wherein he argues for the ITRPA theory of expectation, which maps the "feeling states" of one's perception of an event.[29] Starting from *imagination* of the outcome, *tension* rises as the event nears. *Prediction* and *reaction* responses follow, providing immediate assessment of the event. After all of this, *assessment* takes place, synthesizing all the preceding feeling states. He goes on to explore how different types of surprise contribute to a listener's comprehension of music, how various schemas are differentiated, and how to effectively measure listener responses through cognitive testing.

Example 2.3: Huron's ITPRA theory of expectation[30]
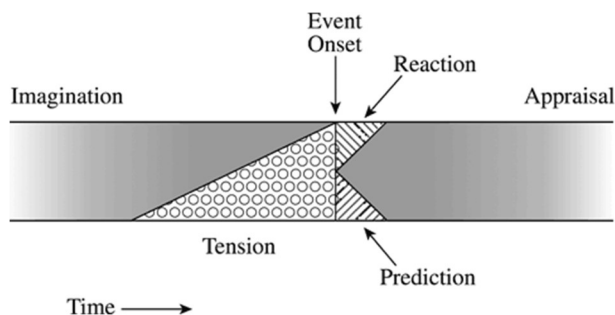
The third category—schema as compositional or analytical tool—is best exemplified by Robert Gjerdingen's *Music in the Galant Style*. Gjerdingen uses schemas as a means of comparing musical patterns across selections from various repertories of eighteenth-century music.[31] He identifies such patterns as important points of articulation

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[29] David Huron, *Sweet Anticipation: Music and the Psychology of Expectation.* (Cambridge: MIT Press, 2008).
[30] Huron, *Sweet Anticipation*, 17.
[31] Robert O. Gjerdingen, *Music in the Galant Style*.

in musical form, serving as either introductory or concluding gestures. Gjerdingen's schemas are not only graphic depictions of percepts, but representations of structures that can be identified through analysis replete with scale-degrees and designations of relative metrical weight (see **Example 2.4** below). Another work that fits into this category is Giorgio Sanguinetti's *The Art of Partimento*, which focuses on the formulaic musical patterns used in the realization of *partimento* exercises by eighteenth-century students and composers.[32] Where Gjerdingen is concerned primarily with how schemas can aid in the post-facto analysis and interpretation of music, Sanguinetti focuses on the application and realization of schemas by practicing musicians.

Example 2.4: schema of the preferred Galant Romanesca[33]
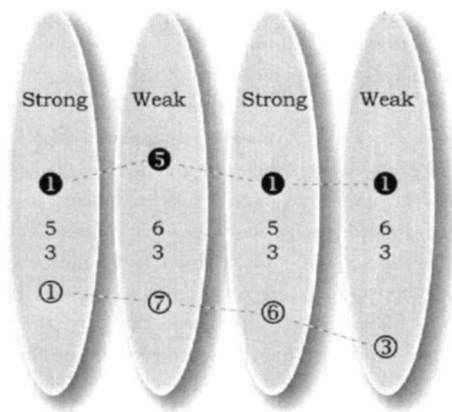
Each of the aforementioned authors uses schemas in a slightly different way, but they all examine how music is heard and interpreted. What they do not address is the role schemas might play in interpreting music in broader multimedia contexts. This is precisely the topic that was taken up by Marilyn Boltz, who investigated how soundtracks in films affected cognitive processing of narrative events through an experimental

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[32] Giorgio Sanguinetti, *The Art of Partimento: History, Theory, and Practice* (New York: Oxford University Press, 2012).
[33] Gjerdingen, *Music in the Galant Style*, 39.

study.[34] Participants were shown ambiguous film clips that were paired with positive, negative, or no music and then asked to not only describe the mood of the clips, but to extrapolate potential future events. Their recollection of the events of the clip were also tested after a week to examine how firmly they remembered the narrative. The results showed a positive correlation between musical affect and interpretation of narrative events. This experiment interacts with schemas in two ways. First, filmgoers have a set of culturally defined expectations for how scenes will play out (narrative schemas); and second, their recollection of events is influenced by the emotional valence of the soundtrack (cognitive schemas).

Another author relevant to the consideration of schema theory in multimedia is Annabel J. Cohen, whose work since the nineties has been broadly focused on the cognitive processes by which multimedia is understood.[35] The culmination of this arc in her scholarship is her Congruence-Association Model (CAM, included as **Example 2.5** below), which maps the many concurrent elements of a multimedia work in order to highlight how they influence one another and contribute to the working narrative of a piece. Her model is based on a myriad of empirical cognitive studies, observations, intuitions, and psychological theories that support her claim that the structure and the meaning of each individual element of multimedia combine to create the working narrative, or the consumer's conscious experience of the whole. The CAM addresses two

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[34] Marilyn G. Boltz, "Musical Soundtracks as a Schematic Influence on the Cognitive Processing of Filmed Events," *Music Perception: An Interdisciplinary Journal* 18, no. 4 (2001): 427–54.

[35] Sandra K. Marshall and Annabel J. Cohen, "Effects of Musical Soundtracks on Attitudes toward Animated Geometric Figures," *Music Perception: An Interdisciplinary Journal* 6/1 (1988): 95–112.;
    Annabel J. Cohen, "Congruence-Association Model of Music and Multimedia: Origin and Evolution," in *The Psychology of Music in Multimedia* (Oxford University Press, 2013), 17–47.;
    Annabel J. Cohen, "Congruence-Association Model and Experiments in Film Music: Toward Interdisciplinary Collaboration," *Music and the Moving Image* 8, no. 2 (2015): 5–24.

senses of the concept of schemas: the *working narrative* relates to the mental construct and affective object categories above, while the *long-term memory* correlates to the compositional/analytic apparatus category.

Example 2.5: Cohen's Congruence-Association Model with Working Narrative[36]
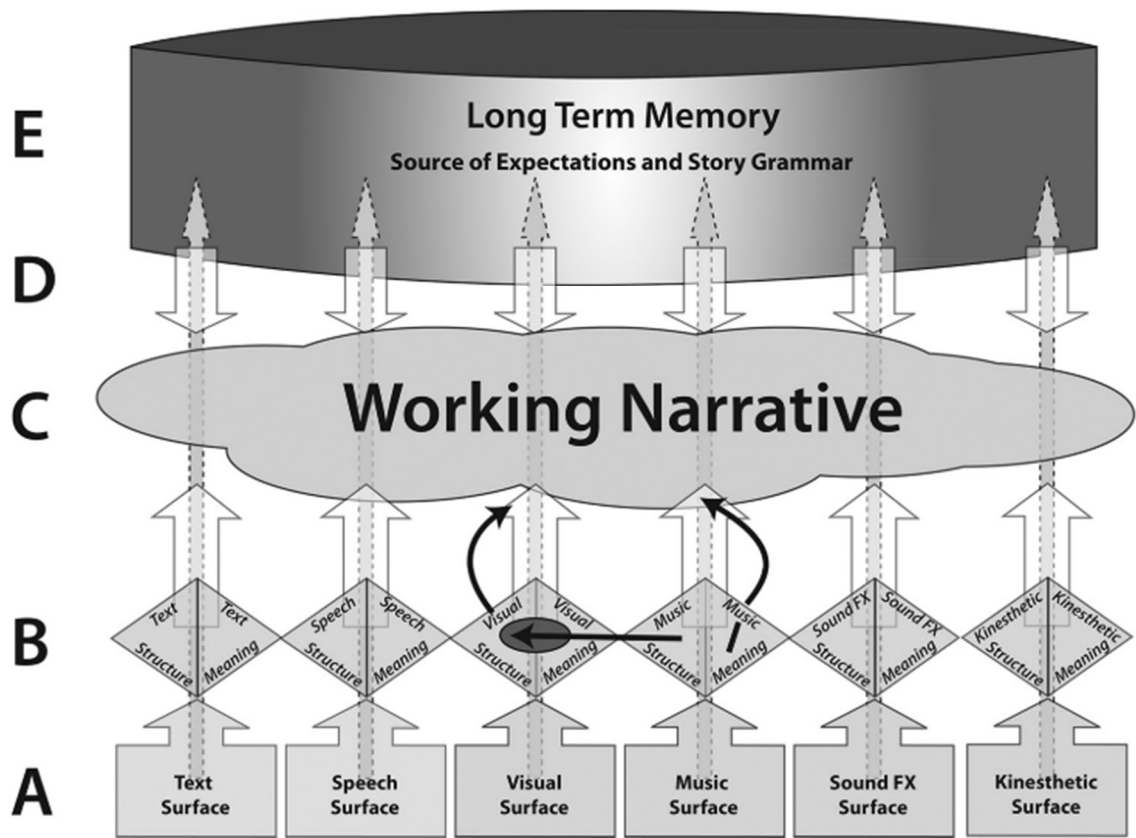
Because Cohen focuses primarily on congruence and, given that Boltz used value-neutral film clips, neither author really delves into the issue of audiovisual incongruence in their work. Recently, this has been productively explored by David Ireland, who looks at several uses of incongruence in multimedia including parodies, markers of authorial style, and means of participation.[37] While Ireland does not address the notion of schemas

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[36] Cohen, "Congruence-Association Model and Experiments in Film Music," 13
[37] David Ireland, "Great Expectations? The Changing Role of Audiovisual Incongruence in Contemporary Multimedia," *Music and the Moving Image* 10, no. 3 (2017): 21–35.

directly, he is nonetheless in dialogue with the idea that there are established norms of what music seems to fit with given visual stimuli. When read alongside authors such as Boltz and Cohen, these incongruencies serve to confirm the narrative schemas they subvert by providing a negative example.

The myriad ways in which music scholars use schemas can be a bit overwhelming, given that they each treat the concept in slightly different ways. I find that the notion of schemas is most useful when it is held lightly enough to encompass all three of the categories I explored above. When taken broadly as such, schemas can be said to encompass everything from a composer's idea to a listener's perception, even to an analyst's post-facto observation. My interpretation is that musical schemas are abstract representations of musical structures that capture the singular essence of the object in question. In this sense, a Schenkerian *Ursatz* is a schema of tonality (founded on the interdependence of harmonic structure and counterpoint) in the same way a musical topic is a schema of a commonly understood referential gesture. Thus, I use each of the authors primarily as inspiration for how to discover, interpret, and represent schemas in my analyses. Of import to my current project are Cohen, for her extensive detail in mapping the cognition of multimedia, Zbikowski, for his focus on the emergent properties of conceptually blended events, and Gjerdingen, for his detailed graphic representations of musico-structural schemas. I view the plunge as a type of schema that maintains certain properties linking it to similar events in other multimedia works. Beyond being a simple cadential gesture or harmonic pattern, however, moments like the plunge (synchronization schemas) bring with them the cultural baggage of consistent usage, much like musical topics.

Topic Theory

Topic theory examines how specific combinations of musical parameters can signify in a way that reaches beyond the piece itself to embrace memes, or units of cultural currency. It is, essentially, a study of culturally codified intertextual references to extramusical phenomena. Leonard Ratner coined the term and sparked the study of musical topics with his book *Classic Music*.[38] Ratner posits that topics are characteristic figures that encompass both *types* (complete pieces, such as dance forms) and *styles* (smaller figures within a larger piece). He lists a variety of examples for each before discussing how topics were employed by eighteenth-century composers as both a means for creating contrast and as a tool for pictorialism and/or text painting. One of Ratner's examples for the "polonaise" style is included below as **Example 2.6**, demonstrating the sorts of musical parameters he deemed essential for identifying such topics: meter (3/4 time), accent (syncopation and mid-measure pause), harmony (simple, major mode I-V-I progression), etc.

Example 2.6: *polonaise* from Beethoven, Serenade in D Major, Op. 8[39]

The first direct successor of Ratner's work was Wye Jamison Allanbrook, whose *Rhythmic Gesture in Mozart* took the concept of dance forms and explored the socio-political implications of their use in eighteenth-century music.[40] Through mimesis—art

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[38] Leonard G. Ratner, *Classic Music: Expression, Form, and Style* (New York: Schirmer Books, 1980).
[39] Ratner, *Classic Music*, 13.
[40] Wye Jamison Allanbrook, *Rhythmic Gesture in Mozart: Le Nozze Di Figaro & Don Giovanni* (Chicago: University of Chicago Press, 1983).

imitating the realities of life—certain meters could invoke class and social positions. She

posits a spectrum of meters that represent passions ranging from the lowly terrestrial

realm of social dances (triple meter) to the exalted domain of the divine (duple meter),

reproduced as **Example 2.7**. After highlighting the historical circumstances that led to

these associations, Allanbrook proceeds to analyze several scenes from *Le nozze di

Figaro* and *Don Giovanni* through the lens of what she terms rhythmic topoi—musical

gestures that encapsulate certain metrical stylings and can be employed by composers for

narrative and/or dramatic purposes. In a posthumously published collection of lectures,

titled *The Secular Commedia*, Allanbrook took this notion of mimesis even further,

arguing for the ubiquity of topics in eighteenth-century music and imploring analysts to

pay closer attention to the musical surface.[41]

Example 2.7: Allanbrook's spectrum of meters[42]
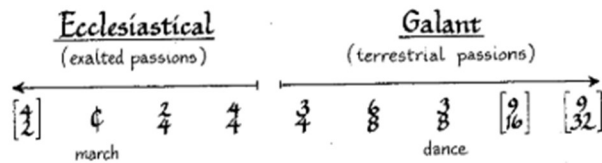
Kofi Agawu's monograph *Playing with Signs* expanded upon Ratner's

observations by tying them more closely to semiotic theories, specifically that of Charles

Peirce.[43] *Playing with Signs* provides an overview of eighteenth-century writings on

musical meaning and expression, tying historical perspectives to more recent explorations

of the subject. Agawu establishes a "provisional universe of topic," an open-ended list

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[41] Wye Jamison Allanbrook, *The Secular Commedia: Comic Mimesis in Late Eighteenth-Century Music*, Ernest Bloch Lectures (Oakland, California: University of California Press, 2014).
[42] Allanbrook, *Rhythmic Gesture in Mozart*, 22.
[43] Kofi Agawu, *Playing with Signs: A Semiotic Interpretation of Classic Music* (Princeton, N.J.: Princeton University Press, 1991).

that is subject to change as more pieces are analyzed and more topics are uncovered.[44] He

views topics as instances of extroversive semiosis wherein music is able to signify

beyond itself through the deployment of certain musical constructs, thus allowing for

interpretation of musical meaning. This is a corollary to the introversive elements of

harmony and form, which determine a piece's structure. In this separation of meaning

and structure, Agawu seeks to formalize topics as a tool for hermeneutic interpretation

and analysis.

Another major contributor to the study of topics was Raymond Monelle, who

delved into cultural history in order to demonstrate how particular topics came to be

associated with certain musical traits.[45, 46] Monelle continued in the semiotic tradition,

explicating the signifieds and signifiers of the hunt, military, and pastoral topics. For

instance, by looking at the historical use of hunting horns (the signified) and their

subsequent imitations in music (the signifier), he was able to establish a detailed account

of how the hunt topic developed and evolved from the middle ages to the present.

Monelle's contributed to the study of topics not only by emphasizing the shift from

natural and/or human-made sounds to artistic representations of those sounds, but also by

broadening the historical period in which he applied topical analysis beyond the

eighteenth century. For instance, **Example 2.8** depicts a passage that Monelle discusses

from Hanz Werner Henze's *König Hirsch* (1956), in which the composer makes use of

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[44] Agawu, *Playing with Signs*, 30.

[45] Raymond Monelle, *The Sense of Music: Semiotic Essays* (Princeton, Princeton, N.J.: Princeton University Press, 2000).

[46] Raymond Monelle, *The Musical Topic: Hunt, Military and Pastoral*, Musical Meaning and Interpretation (Bloomington: Indiana University Press, 2006).

the hunt topic in a decidedly twentieth-century style that nonetheless retains strong

conventional associations.

Example 2.8: horn call from Henze, *König Hirsch*, 1956[47]

Offstage horns (sounding)

come si allontanasse la caccia

Robert Hatten added to Ratner's list of topics and introduced the concepts of

markedness, expressive genres, and troping to the discussion, greatly expanding the scope

of the theory and giving nuance to the means by which topics are interpreted.[48]

Markedness refers simply to the means by which one musical parameter sets itself apart

from others, which is mostly relevant for Hatten in instances of marked opposition that

can be read as meaningful. Expressive genres are kinds of dramatic trajectories that music

can take, irrespective of form. Hatten uses this concept to discuss how Beethoven can

compose a tragic-to-transcendent narrative across many pieces with differing

instrumentations and formal expectations. The idea of troping relates to the combination

and/or juxtaposition of multiple musical topics to create a broader musical metaphor—for

example, a peaceful pastoral section followed by an aggressive military section serving as

a metaphor for the destruction of nature. Hatten's later work goes further, proposing a

theory of musical gesture that accounts for the significance of energetic shaping through

time.[49] He argues that gestural tokens can not only correlate with general expressive or

structural actions but serve a variety of strategic compositional functions as well.

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[47] Monelle, *The Musical Topic*, 82.

[48] Robert S. Hatten, *Musical Meaning in Beethoven: Markedness, Correlation, and Interpretation*, Musical Meaning and Interpretation (Bloomington: Indiana University Press, 1994).

[49] Robert S. Hatten, *Interpreting Musical Gestures, Topics, and Tropes: Mozart, Beethoven, Schubert*, Musical Meaning and Interpretation (Bloomington: Indiana University Press, 2004).

Although the concept of the topic was originally developed to explain intertextual referentiality in the music of the Classical period of Western art music, it has also become a popular tool in the analysis of nineteenth- and twentieth-century compositions, popular music, contemporary film music, and more. This involves both identifying when (and how) topical signifiers from the past are used in new works as well as marking the creation of new topics. For instance, Rebecca Doran Eaton identifies the use of musical minimalism as a signifier of mathematics and machinery in contemporary film, marking the creation of an association between the genre and computation.[50] She goes further to draw a connection between minimal music and the depiction of genius, which relies on a more metaphorical interpretation (the "machine" of the mind working exceedingly fast or well). This topical association was further explored by Janet Bourne, who analyzed the film *Hidden Figures* through an intersectional lens using topics and troping.[51] By comparing it to other genius narratives like *A Beautiful Mind*, the film's music suggests that black women must work to be perceived as intelligent while white men are considered to have innate genius.

Topic theory has also been fruitfully applied to the analysis of video-game music. Tim Summers uses topic theory as a vehicle to explore texturing in video games, arguing that topics serve not only to immerse the player in the game world, but also to fill in the gaps left by the other textual modalities and even contribute to gameplay by providing cues to the player.[52] In a more specific vein, Sean Atkinson's 2019 article addresses what

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[50] Rebecca M. Doran Eaton, "Marking Minimalism: Minimal Music as a Sign of Machines and Mathematics in Multimedia," *Music and the Moving Image* 7, no. 1 (2014): 3–23.
[51] Janet Bourne, "Hidden Topics: Analyzing Gender, Race, and Genius in the 2016 Film Hidden Figures" (AMS/SMT, San Antonio, TX, November 3, 2018).
[52] Tim Summers, *Understanding Video Game Music* (Cambridge University Press, 2016).

he identifies as the soaring topic, which is used to depict moments of flight in video games.[53] He locates the roots of the topic in film music, tracing a lineage from early cinema to modern games, before moving on to detailed analyses of flying sequences in specific games.

All of this is to show that the field of musical topic theory is incredibly variegated, encompassing wide swathes of musical practices under its umbrella. While practitioners have sometimes gotten flak for simply labeling topics without critically examining their meaning,[54] it seems to me that such critiques have been adequately answered by authors like Allanbrook, Monelle, and Hatten. I find topics compelling as an analytic tool, especially in regard to the analysis of multimedia. By evaluating how various topics are created and deployed, the authors discussed in this section have established a powerful apparatus for interpreting musical meaning. Of particular import for my project are Hatten's theories of topical troping and musical gesture, both of which are crucial elements of not only the plunge, but of synchronization schemas in general. Moments like the plunge are in dialogue with topics—they are used to invoke similar effects but are a bit more concrete in that they connote a fixed kind of dramatic event rather than a more generalizable affect.

2.3. Other Influential Works

In my interpretation, schemas and topics are not so different. Each involves both pre- and post-compositional literacy, on the part of the composer and the listener. Being aware of the intertextual commonalities, regardless of intentionality, helps aid in both the

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[53] Sean E. Atkinson, "Soaring Through the Sky: Topics and Tropes in Video Game Music," *Music Theory Online* 25, no. 2 (July 1, 2019), http://mtosmt.org/issues/mto.19.25.2/mto.19.25.2.atkinson.html#FN5REF.
[54] See especially Susan McClary's scathing indictment of topic theory here: (Susan McClary, review of *Review of The Sense of Music: Semiotic Essays*, by Raymond Monelle, *Notes* 58, no. 2 (2001): 326–28.)

invocation and the reception of certain emotions and effects. The plunge works the same way; creators and consumers are "in on" the conventions, recognizing the dramatic power of the combination of techniques that engender the moment. I seek to combine the hermeneutic utility of topic theory with the structural formalism of schema theory in order to explain the concatenation of stimuli that create "the plunge" and moments like it. Beyond the subdisciplines detailed in the previous section, my analytic claims rely on an understanding of harmony/tonality and musical energy that has been shaped by several scholars whose approaches vary greatly. As before, I don't adopt any one analytic strategy wholesale, but rather pick and choose the parts that best complement the material I am analyzing—there is no single theory that can effectively capture every musical practice.

Harmony & Tonality

Harmony and tonality are hotly contested topics in music theory, and nearly every claim can be countered by one theory or another. I take inspiration from many sources, including the work of Dimitri Tymoczko, Daniel Harrison, and Richard Cohn. From Tymoczko's *Geometry of Music* I take his malleable conception of tonality, which he claims is composed of five components: conjunct melodic motion, acoustic consonance, harmonic consistency, limited macroharmony, and centricity.[55] This five-fold definition encompasses the common practice core but extends well beyond to include many practices that are outside of the realm of so-called "Classical" music. While I do not adopt the geometric representations he uses, I do make use of his fastidious distinctions in order to effectively describe how musical events can operate similarly in many

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[55] Dmitri Tymoczko, *A Geometry of Music: Harmony and Counterpoint in the Extended Common Practice*, Oxford Studies in Music Theory (New York: Oxford University Press, 2011).

instances of multimedia despite stylistic differences. I likewise take parts of Harrison's

scale-degree focused theory of harmonic function, especially in circumstances where

more traditional and/or Schenkerian analytic methods fall short.[56] Harrison has recently

expanded his theory to include twentieth- and twenty-first-century tonality, which

accounts for many of the forms of multimedia I contend with.[57] I find that Cohn's brand

of neo-Riemannian analysis works quite well for a large portion of the materials I have

analyzed, from Romantic operas and ballets to modern film and video games. Of

particular interest to me are the notions of chord "universes" (collections of standard

triads and/or tetrachords that adhere to a given hexatonic or octatonic system, as can be

seen in **Example 2.9** below) and pitch "neighborhoods" (collections of major and minor

triads that all contain one central pitch as depicted on a *Tonnetz*) forwarded in his 2012

monograph.[58] The staggering diversity of situations in which the plunge appears demands

a flexible method of analysis—analytic multiplicity is therefore central to my endeavor.[59]

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[56] Daniel Harrison, *Harmonic Function in Chromatic Music: A Renewed Dualist Theory and an Account of Its Precedents* (Chicago: University of Chicago Press, 1994).

[57] Daniel Harrison, *Pieces of Tradition: An Analysis of Contemporary Tonal Music*, Oxford Studies in Music Theory (New York, NY: Oxford University Press, 2016).

[58] Richard L. Cohn, *Audacious Euphony: Chromaticism and the Consonant Triad's Second Nature*, Oxford Studies in Music Theory (New York: Oxford University Press, 2012).

[59] Matthew Bribitzer-Stull, "The A♭–C–E Complex: The Origin and Function of Chromatic Major Third Collections in Nineteenth-Century Music," *Music Theory Spectrum* 28, no. 2 (2006): 167–90. Bribitzer-Stull combines multiple analytic approaches, namely Schenkerian and Neo-Riemannian analyses, to capture sequences in which transposition or modulation by major third are common.

Example 2.9: Cohn's version of Jack Douthett's 4-Cube Trio[60]

▲ = minor seventh chords
☆ = French sixth chords
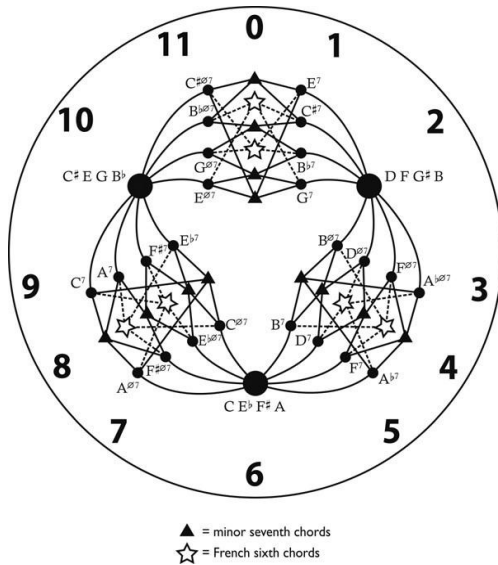
Musical Forces

My larger bibliography is extensive, covering many more authors than I could

hope to effectively summarize in this chapter, or whose work has contributed less directly

to my current project; nonetheless, I would be remiss if I did not mention a few of them

here. I owe a great deal of my approach to the late Steve Larson, whose work in *Musical*

Forces outlines a theory of metaphorical energetic forces—such as gravity, inertia, and

magnetism—as they might be found in music.[61] Musical gravity refers to the tendency of

a melody to move downwards to a stable platform (i.e.: *appoggiaturas*), musical inertia is

the tendency for a melody to continue in the same direction, and musical magnetism

refers to the tendency of an unstable pitch to resolve to the nearest stable one (i.e.:

leading-tones). Larson's forces have been further developed by Robert Hatten, who

focuses on how these forces may contribute to the interpretation of virtual agency in

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[60] Cohn, *Audacious Euphony*, 158. I have made a slight alteration, adding a '♯' to the 'C' at 10, where the original did not have one.

[61] Steve Larson, *Musical Forces: Motion, Metaphor, and Meaning in Music* (Bloomington: Indiana University Press, 2012).

music.[62] For instance, can a melody "fight against" musical gravity? Is there a negative corollary to magnetism, such as repulsion, that implies a resistance or pushing away? Hatten's answer would be yes, and that these actions would suggest an imagined willful agent. Between these two authors, there is an extensive catalog of analogs between music and motion. While both Larson and Hatten were primarily interested in describing purely instrumental music, I see strong potential for cross-medium comparison through the shared dimension of movement. Lee Rothfarb identifies in Larson's work reverberations of the so-called energeticist tradition of musical analysis, stemming from the work of theorists such as Ernst Kurth and Paul Hindemith.[63]

Climaxes

Austin T. Patty's 2009 article is essential to my analytic framework. Patty discusses the types of musical parameters that contribute to a listener's experience of musical climaxes including dynamic level, pacing, textural density, and melodic register.[64] He describes a variety of "pacing scenarios" that contribute to our experience of climaxes in music. He separates these into two broad categories—intensification and abatement—the former describing the buildup of tension leading into a climax and the latter describing the dissipation of tension afterwards. He then breaks these down even further, describing the impact of tempo and pacing on our experience of such moments (shown in **Example 2.10** below). For intensification scenarios, "surge" refers to the sensation of rushing or racing towards the climax, while "struggle" describes the feeling

[62] Robert S. Hatten, *A Theory of Virtual Agency for Western Art Music*, Musical Meaning and Interpretation (Bloomington, Indiana: Indiana University Press, 2018).

[63] Rothfarb, Lee. "Energetics." Chapter. In *The Cambridge History of Western Music Theory*, edited by Thomas Christensen, 927–55. Cambridge: Cambridge University Press, 2002.

[64] Austin T. Patty, "Pacing Scenarios: How Harmonic Rhythm and Melodic Pacing Influence Our Experience of Musical Climax," *Music Theory Spectrum* 31, no. 2 (2009): 325–67.

of fighting against some force to reach the goal. Similarly with abatement, "tumbling" is the sensation of surplus energy being expended or released, whereas "settling" relates to a gradual resolution or coming to rest.

Example 2.10: Patty's four pacing scenarios[65]

	Intensification	Abatement
Acceleration	Surge	Tumble
Deceleration	Struggle	Settle

The real strength of this approach is that it allows the same technique to be used for opposite effects, freeing analysis from rigid one-to-one equivalencies between form and meaning. How each musical climax is created is contextually dependent, and these pacing scenarios provide a starting point for interpretation. I find Patty's formulation to be very helpful in describing not only musical situations, but all sorts of dramatic climaxes. This is especially important when drawing comparisons between different types of media, each of which contributes to the overall sense of drama in multimedia settings. For instance, a zoom-in effect in one situation may contribute to a sense of building tension, but a wide shot may be just as effective while conveying a different type of dramatic event. Synchronization schemas are used to convey wildly variable narratives with all kinds of genre expectations and authorial styles, and so the analytic apparatus must be malleable enough to accommodate all of them.

Kofi Agawu identifies highpoints as one of six fundamental criteria for the analysis of Romantic music, alongside topics, beginning-middle-end paradigms, modes

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[65] Patty, "Pacing Scenarios," 330.

of enunciation, periodicity, and narrative.[66] In his formulation, highpoints are poignant moments of extreme tension or salient releases of built-up tension. He claims that, "attending to the high point is attending to the form as a whole … it is to gain access to the peculiar contours of the foreground not as autonomous structure but as a parametrically entangled, emergent set of qualities."[67] Agawu's terminological distinction between highpoint and climax comes from his 1984 article on Robert Schumann's *Dichterliebe*, where he suggests that a climax necessarily involves a process of tension building whereas high point merely denotes a moment of extreme tension.[68]
Ji Yeon Lee develops this distinction to propose a "climax archetype" for *verismo* opera that accounts for similar musical techniques applied over a given repertory—like the third type of schema evaluated above (schemas as compositional or analytical tool).[69]

Intensity Curves

The notion of drawing "intensity curves" for music has a long history, but really came into favor in the latter half of the twentieth century with music theorists such as Ratner,[70] Berry,[71] Agawu,[72] and Meyer.[73] A generic graph like the ones shown in **Example 2.11** can be found on the chalkboard of nearly every class on musical form. The practice has often been met with criticism for being overly subjective, reductive, or

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[66] Kofi Agawu, *Music as Discourse: Semiotic Adventures in Romantic Music*, (Oxford: Oxford University Press, 2008).
[67] Agawu, *Music as Discourse*, 65
[68] Kofi Agawu, "Structural 'Highpoints' in Schumann's 'Dichterliebe,'" *Music Analysis* 3, no. 2 (1984): 160.
[69] Ji Yeon Lee, "Climax Building in Verismo Opera: Archetype and Variants," *Music Theory Online* 26, no. 2 (September 1, 2020), https://mtosmt.org/issues/mto.20.26.2/mto.20.26.2.lee.html#FN8REF.
[70] Leonard G. Ratner, *Music, the Listener's Art*, 2d ed., (New York: McGraw-Hill, 1966), 314–15.
[71] Wallace Berry, *Structural Functions in Music.* (Englewood Cliffs, N.J.: Prentice-Hall, 1976).
[72] Agawu, "Structural Highpoints," 163–66.
[73] Leonard B. Meyer, *Style and Music: Theory, History, and Ideology*, (Philadelphia: University of Pennsylvania Press, 1989), 311.

prescriptive. These points are well taken; nonetheless, I find graphic representations such as intensity curves to be extraordinarily helpful when communicating analytic insights due to their ambiguous (yet readily recognizable) gestural representations. This is especially relevant when comparing the dramatic impact of musical events with those of visual and narrative processes, allowing for them to be compared with the same tools and on the same playing field, so to speak.

A generic musical intensity curve is shown in **Example 2.11** below, taken from Patty's article discussed above. While the axes are not specifically defined here, it seems clear that the x-axis (horizontal) represents time and the y-axis (vertical) represents intensity/tension. These parameters are general enough to apply to all of the component channels of synchronization schemas. Lee uses a similar intensity graph to depict her climax archetypes (**Example 2.12**), which utilize the same axes and much of the same terminology as Patty. Intensity graphs also appear with some frequency in narratology via plot analyses. Freytag's Pyramid is perhaps the most widely recognizable model, but others such as the standard three act structure exist in common parlance as well (**Example 2.13**).

Example 2.11: generic musical intensity curve[74]

Intensity/Tension: Intensification   Climax   Abatement
                        increases   *peaks*   *decreases*
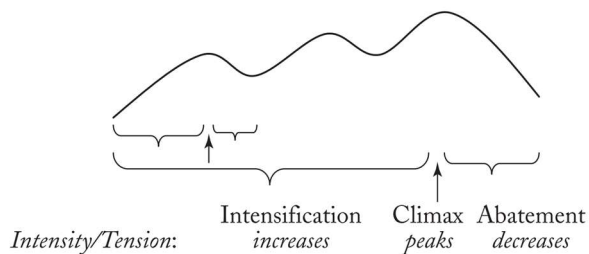
[74] Patty, "Pacing Scenarios," 328.

Example 2.12: tension trajectory in the climax archetype[75]

(delay)

----- initiation----- intensification-----highpoint---abatement---------
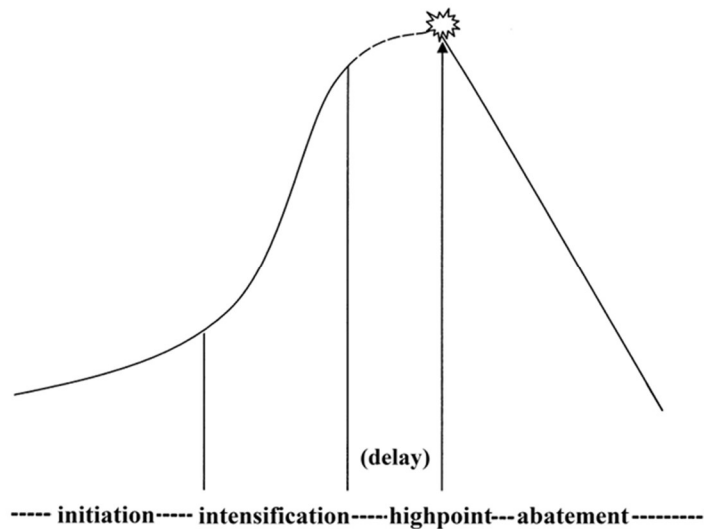
Example 2.13: Freytag's Pyramid and the three act structure[76]
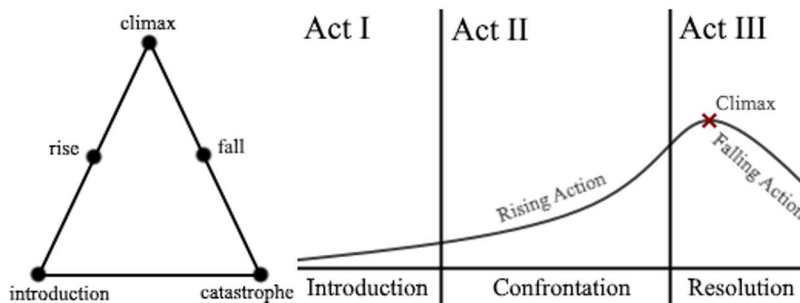
Michel Chion

In stark contrast to many of the other authors reviewed in this chapter, Michel

Chion deals directly with the hybrid nature of multimedia. In *Audio-Vision*, he lays out a

formalist theory of sound film that positions the auditory and visual elements as equal

participants in the whole.[77] *Film, A Sound Art* continues developing this theory,

expanding the scope of examples and concepts as well as refining and clarifying many of

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[75] Lee, "Climax Building," example 2.
[76] Recreated by the author.
[77] Michel Chion, *Audio-Vision: Sound on Screen*, trans. Claudia Gorbman, Second edition (New York: Columbia University Press, 2018).

his rigorous definitions.[78] Much of Chion's work has been deeply influential in shaping my understanding of multimedia, especially regarding its co-constitutive nature.

Chion provides many concrete definitions for phenomena that consumers routinely take for granted and that prove imminently valuable to my current pursuit. For instance, he describes "added value" as the process by which sound enriches an image such that they seem naturally linked, a situation especially evident in foley sound effects and Mickey-mousing.[79] He discusses "temporal vectors," or the directional indices of sounds, images, or dialogue that animate otherwise static elements in time.[80] In a similar vein, "unification" describes the temporal and spatial continuity that may be afforded by sound to otherwise unrelated images.[81] He writes of the "vertical" or "harmonic" nature of sound film (as opposed to a "contrapuntal" relationship), pointing out that all sounds are placed in relation to some image or vice-versa on a moment-by-moment basis.[82] He references Pierre Schaeffer's notion of "acousmatic" sound—sound one hears without seeing the source—in order to posit "visualized" sound as its opposite and to discuss the ways cinema plays with these diegetic boundaries.[83]

The concept for which I am most indebted to Chion is the notion of "synchresis." A portmanteau of synchronism and synthesis, synchresis captures the inextricable link forged between sonic and visual events when they occur simultaneously.[84] "Synch points" are then the moments that mark audiovisual rhythm and pacing, both

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[78] Michel Chion, *Film, a Sound Art*, trans. Claudia Gorbman (New York: Columbia University Press, 2009).
[79] Chion, *Audio-Vision*, 5–9.
[80] Chion, *Audio-Vision*, 12–19.
[81] Chion, *Audio-Vision*, 47–59.
[82] Chion, *Audio-Vision*, 35–40.
[83] Chion, *Audio-Vision*, 22–28.
[84] Chion, *Audio-Vision*, 64.

temporalizing and contributing to the overall experience of a given scene.[85] I hold these definitions lightly—many of the moments I identify as synch points might not count for Chion and I am certainly using the notion of synchresis far more liberally than he does in his analyses. I do this for three reasons. First, it allows me to directly link my concept of narrative multimedia schemas with Chion's body of scholarship; second, it broadens the definition of synchresis to include more than just filmic media; and third, it allows for the inclusion of fringe cases where synchronization is imperfect or where there is not a one-to-one correspondence between multimedia channels.

2.4. Concluding Thoughts

All the works I have discussed thus far have been specific to music, despite my own insistence that multimedia must be approached as a multifaceted amalgam. Music studies, and music theory in particular, have a highly developed technical language that is criticized as often as it is praised. Music theory is my jumping off point, not only because it is my area of study, but because I find the fastidious definitions and practical applications of theories to be imminently helpful when evaluating multimedia. My analyses in the sections to come intersect with other disciplinary studies, including film and media studies, dance and movement studies, ludology, narratology, and more. While each of these fields has much to contribute to my interpretation of individual IMMs, they do not factor heavily into my general analytic procedure. As such, I will address each discipline as they are relevant during the following chapters, rather than outline each here.

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[85] Chion, *Audio-Vision*, 59.

Analyzing multimedia is a tricky process. There are so many variables to take into consideration, that attempting to cover all of the aspects of a given piece is almost impossible. With a smaller focus on schematic narrative moments, I will demonstrate how such moments are created, how each individual medium contributes to the overall effect, and how the identification and analysis of these moments can contribute to the broader study of multimedia writ large. By identifying common traits in a large variety of works, I aim to establish a new model of analysis that is flexible enough to handle any narrative multimedia.

3. Modeling Synchronization Schemas

3.1. Analytic Issues

In order to propose a model for the analysis of synchronization schemas, it is necessary to discuss some of the attendant problems and pitfalls. Measuring intensity (in any capacity) is a particularly thorny issue that lies at the very center of my process. Similarly, the huge variability in the plunge's temporalization complicates both identification and interpretation. Perhaps the most difficult part is generalizing across not one type of multimedia production, but *all* of them—determining what corollaries lie between the diverse intensification techniques of film, television, ballet, opera, video games, and so on. The challenges of analyzing synchronization schemas in filmic, staged, and ludic media is the topic of the next chapter. In this chapter, I outline a method for interpreting and visualizing the plunge and then present a series of types that possess common structures and narrative applications.

Measuring Intensity

The question of how exactly to measure the aesthetic and emotional force of works has a long history. While each field of scholarly inquiry related to the arts has its own set of standards for interpreting shifting emotional states, music theory has perhaps the most highly developed terminology to deal with them directly. Dating back to ancient Greece, philosophers and practitioners alike have been interested in music's dynamism and have attempted to segment the various parameters of music into discrete categories in order to measure degrees of tension and repose. The work of so-called "energeticists," such as Ernst Kurth and Paul Hindemith, are especially concerned with charting intensity. Lee Rothfarb identifies reverberations of this line of thought in the more recent work of

Steve Larson, Fred Lerdahl, Carol Krumhansl, and Wallace Berry.[86] The common factor in all these works is the centrality of musical motion and, more so, the appeal to some kind of underlying, impelling force that gives rise to that motion. Hinging on metaphors of energetic flow relates individual musical works (and interpretations of them) to a more fundamental, corporeal level of human understanding.

Motion is a major component of gesture, dance, and performance studies, contributing to the interpretation of both informative (passive) and communicative (active) movements. Movement is also a central concern for choreographers, stage directors, cinematographers, and video game designers, not to mention the performers, audience members, and players themselves. Even in static artforms such as painting, photography, and sculpture, movement can be read onto figures (as in a photo of a person running or a depiction of a falling object). Objects in visual artforms are oriented in space, either real or imaginary, which thereby perceptually subjects them to the laws of the physical universe. Perhaps this is why music has developed such a detailed technical language to describe musical energies: concepts such as gravity and inertia that can be easily assigned to visual stimuli are not so easily afforded to auditory percepts.[87]

While movement might be central to recognizing gradual changes in emotional states that contribute to interpretations of intensity, it does little to help with their quantification. Motion can be broken into discrete units (distance traveled over time) and rates of change can be determined; however, there is no equivalent measurement for intensity. Intensity is a non-metric element, meaning that there is no way to quantify or

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[86] Rothfarb, Lee. "Energetics." Chapter. In *The Cambridge History of Western Music Theory*, edited by Thomas Christensen, 927–55. Cambridge: Cambridge University Press, 2002.

[87] See Huron 2015 for more information on how an "ethological" auditory stimulus could contribute to cross-modal interpretations of biological signals.

objectively measure the difference between one instance to the next. In other words, there is no agreed-upon unit of intensity. While it is possible to measure individual parameters of various artforms, there is no set equivalency between them. The qualitative differences over time within these parameters often do more work to communicate meaning than any quantitative measurement could. It is in this sense that I view intensity as both *relative* and *relational*; relative in the sense that each individual moment is measured against those surrounding it (each moment is more or less intense than the last); relational in the sense that the trajectory between moments is what creates the overall interpretation of intensity over time.

Context is everything. Nearly every technique that could intensify a scene could just as readily release tension instead; the determination of which takes place is co-constituted between the creator(s), consumer(s), and critic(s). Patty acknowledges as much with his different pacing scenarios, where he separates formal techniques from the interpretive values often ascribed to them.[88] Most can be easily placed on a spectrum: volume can range from silent to deafening, light level can range from total darkness to blindingly bright, movement speed can range from completely still to blazingly fast, and so on. **Example 3.1** lists several parameters across different channels that could be conceptualized this way.

Example 3.1: possible intensity continua

	Parameters	Continua
Auditory	Volume	Loud / Soft
	Pace (rhythm/tempo)	Fast / Slow
	Texture	Thick / Thin
	Register	High / Low
	Quality	Dissonant / Consonant

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[88] See chapter 2.3 for a more detailed discussion of Patty's article.

Visual	Positioning	Near / Far
	Motion	Fast / Slow
	Focus	Specific / General
	Brightness	Light / Dark
	Angle	High / Low
	Pace (of cuts)	Fast / Slow
Narrative	Pace (of action)	Fast / Slow
	Stakes	High / Low
	Information Density	High / Low
	Knowledge	Known / Unknown

When determining the affective impact of a scene, it is important to mind exactly how a change of state affects interpretations of intensity. Most of the time, a parameter will not remain constant throughout a scene. In these cases, it is often simple to determine the directionality of change and acknowledge its impact. I refer to these as *dynamic parameters*, due to the fact that their tensile power comes from changes in state over time. Changes can be either *continuous* or *discrete*, in the sense that some exist on a potentially infinite spectrum (like a measurement of light levels within a scene) and some exist in finite units (such as the number of cuts within a given unit of time). There are, of course, other types of parameters that affect interpretation that cannot be placed on a continuum as easily: specific types of camerawork, intertextual references, musical topics, associative elements, and the like. I call these *fixed parameters*—set objects that contribute to a scene's intensity without necessarily changing over time.

Ascription is what I call the process of assigning a direct correlation between a given parameter and interpreted intensity. This is a necessary step in measuring intensity and (ideally) every parameter that is confronted in a scene will be ascribed. For example, if a scene features a constant zoom throughout, I would first need to decide how that change affects the perceived intensity, then I would ascribe an intensity continuum to the

parameter. In this case, I could say that getting closer seems to increase tension ([far →
near = intensifying]), which also determines the opposite ([near → far = abating]). Such a
process rejects the limiting notion of predetermined one-to-one equivalencies between
values and allows for a more fluid interpretive lens without sacrificing precision. Even
with a malleable approach to ascribing parameters, it is necessary to maintain an open
mind about *how* changes in state occur. An abrupt shift from one extreme to the other
usually has the effect of increasing intensity sharply, especially when the shift contradicts
an ascribed correlation (i.e.: a steady increase in volume followed by sudden silence
when [quiet → loud = intensifying] could produce further intensification).

An important part of determining how given parameters ought to be ascribed is
separating them from one another. Chion's three modes of listening are helpful here,
especially if they are expanded to pertain to more than just the auditory channel. Causal
listening "consists of listening to a sound in order to determine what is producing it."[89]
This is broken down into causal-figurative (determining the cause of a sound within the
active fiction) or causal-detective listening (determining how a sound was produced in
real life). Codal listening "aims to decode the signal to get the message."[90] This applies to
not only parsing the semantic meaning of language, but determining the affect of a
particular timbre, sound effect, or musical topic. The final form of listening is reduced
listening, which is "the listening mode that focuses on the traits of the sound independent
of its cause and meaning."[91] In other words, it is the process of building an inventory of
descriptions that attempt to capture the sound in question. I take each of these types to be

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[89] Chion, *Audio-Vision*, 22.
[90] Chion, *Audio-Vision*, 25.
[91] Chion, *Audio-Vision*, 25.

valuable for not only auditory parameters, but all parameters that might affect interpretations of intensity. *Reduced analysis* of the auditory, visual, and narrative channels is critical to separating out the various parameters that might be ascribed.

Visualizing Intensity

As outlined in chapter two, scholars have attempted many ways to graphically depict intensity. Intensity curves or graphs (IGs) chart changes in intensity over time. While they cannot and do not give objective measurements of intensity at any given moment, they nonetheless provide an overall, gestural sense of the dynamic shape of a scene. The plunge relies on a formulaic intensity curve—across each of the multimedia work's constituent channels—to communicate a general dramatic event. In each instance, the level of tension starts relatively low and builds throughout the scene. The highpoint of this build-up coincides with a character's decisive action, whatever that might be in the context. This is followed by either maintaining the established level of intensity or its slowly diminishing. **Example 3.2** presents a generic graphical representation of this trend, which is equally applicable to any of the constituent multimedia channels.

Example 3.2: generic intensity graph of the plunge (any channel)
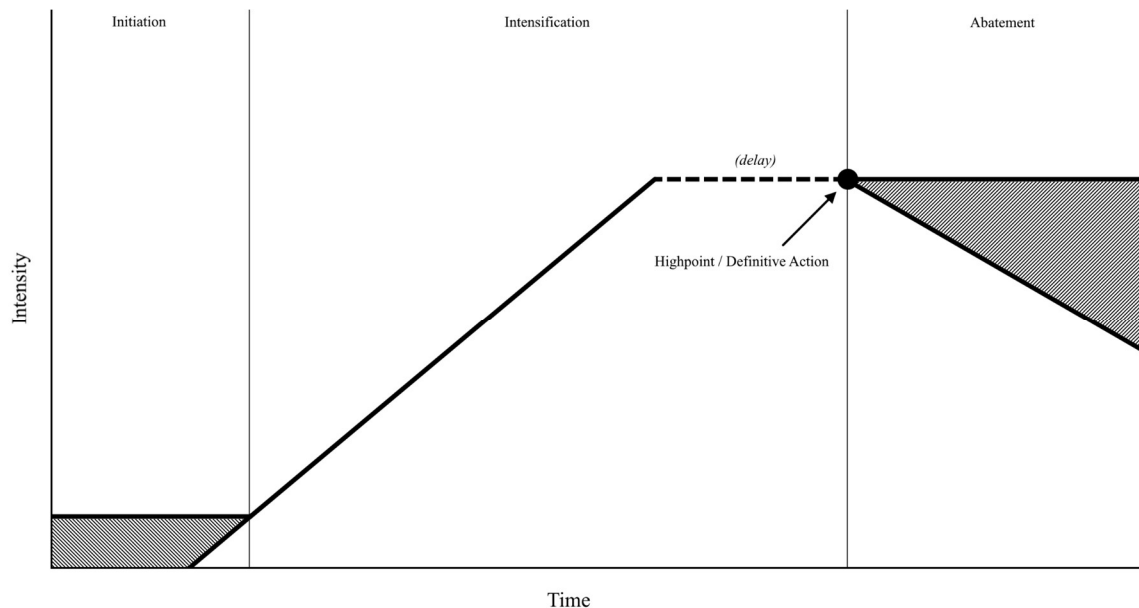
The initiation and abatement phases of the graph in **Example 3.2** are depicted as areas and are meant to capture a range of possibilities for how the plunge schema is approached and/or left. The main thrust of what makes a plunge identifiable to enculturated consumers is the intensification phase and the subsequent highpoint, with the initiation and abatement phases serving mostly as buffers within the larger context of a given work. As such, these bookend portions of the schema are frequently overwritten by other audio-visual cues or even completely elided. In my formulation here, I have borrowed terminology from Ji Yeon Lee's article on climax building in *verismo* opera.[92] I do this for several reasons: first, her terms are consistent with much of the other scholarship relating to intensity and climaxes I have surveyed thus far (namely, Patty and Agawu); second, her emphasis on archetypes and deformations resonates strongly with my own take on schemas as malleable models; and third, the features and operational

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[92] Lee, "Climax Building in Verismo Opera"

parameters Lee posits for musical climaxes translate well to the other forms of media I seek to evaluate (sound effects, cinematography, gesture, narrative, etc.).

All the ad hoc IGs in Chapter 1 follow the general shape presented above. The discussions surrounding these graphs highlight the subjective and relational nature of interpreting intensity, a topic that bears more detailed exploration here. How can we as analysts generate these intensity graphs in a way that is true to both the material reality of the work and our own experience of it? I believe the answer lies in progressing from concrete details (pitch, volume, shot type, color saturation, dialogue, etc.) out through varying levels of abstraction that accommodate multiple individual aspects, resulting in the level of the auditory/visual/narrative IGs. **Example 3.3** demonstrates a progression through several degrees of abstraction that might generate an IG.

Example 3.3: progression through degrees of abstraction
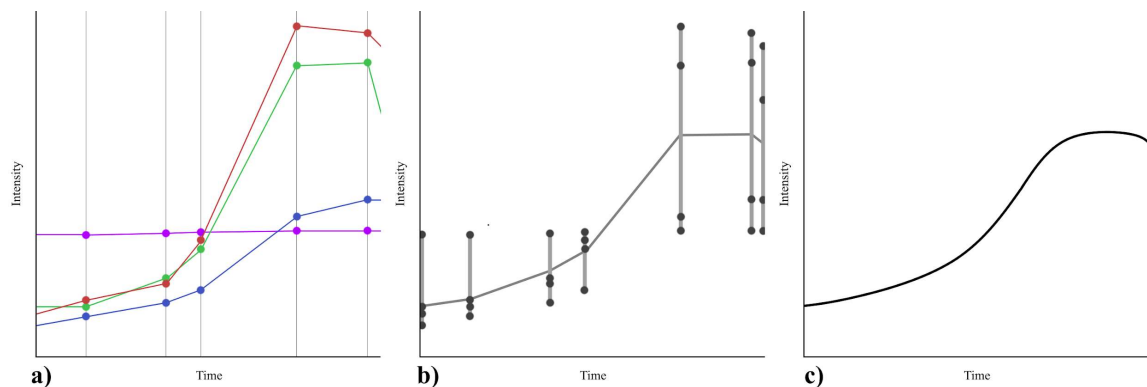
3.3a depicts a fictional collection of possible parameters that might influence the interpretation of a channel's intensity curve—for the purposes of this example, let's call it the auditory channel. Each of the colored lines would represent a relevant aspect of the audio of a scene that could be ascribed (for instance, purple: tempo, red: volume, green: pitch, blue: ambient sound effects). Every aspect has the capacity to change over the course of the scene; as such, points can be made at arbitrary junctures in order to

"measure" the degree of change. These junctures may be unrelated to the channel at hand (for instance, visual cuts segmenting audio IGs or dialogic cadences segmenting visual IGs), but should correspond to salient points of demarcation in the multimedia whole under scrutiny.

Once each aspect is graphed, they can be aggregated into a single linear graph. Generalizing the data in this way creates a more readily legible visual representation and opens the possibility for future comparison to other instances in diverse contexts (to be discussed in detail in Chapter 4). **Example 3.3b** demonstrates one possible method of combination. I treat each aspect as an equal contributor to intensity, although different situations may call for weighing one over the others. Due to the imprecise nature of these qualitative estimates (again, subjective, relative, and relational), calculating the actual average between points is meaningless.[93] Instead, a "best guess" approach is sufficient to capture the gestural thrust of the scene while still accounting for the influence of multiple concurrent aspects. Interpretations will surely differ from one analyst to the next, but such disagreements can serve to enable discussion. Rather than attempt to capture some sort of reasonable consensus or appeal to a fallacious idea of an "average listener," I use intensity graphs to offer my own judgments as an expert listener.

Having condensed the strata into a single line, the vertical points can be removed and a final graph, like **3.3c**, can be smoothed out as seems fit. There is undoubtedly much guesswork at play in this method of analysis. Such lack of precision would be enough to make most analysts balk in the context of *just* music, *just* cinematography, or *just*

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[93] One could use ratios to precisely calculate the geometric mean between points at each juncture; however, such a result would be superfluous because each point is already non-metric and IGs themselves are meant to be *representations* of perception rather than exact *measurements*.

narrative; it should not, however, diminish the value of combining so many historically isolated factors that contribute to our perception of multimedia. Accepting some messiness on the small scale opens the door to talking about more generalized commonalities across large and diverse collections of works.

Time and Temporality

Measuring intensity is the most difficult part of analyzing synchronization schemas, but it is not the only variable that must be considered. Timing plays a large role in determining not only recognizability, but also the overall impact of moments like the plunge. Where the plunge occurs within the chronology of a work helps determine its meaning and can provide crucial context for character development. A plunge that occurs near the beginning can quickly inform the audience of a character's role. This can be seen not only in the standard "call to arms" incipient narrative device, but also in the common trope of opening a work with a scene of the villain committing some heinous and irredeemable act (as is the case in *Das Rheingold*, which is analyzed in chapter four). Similarly, a plunge that occurs near the end of a work can function as the climax of the whole piece, often representing the ultimate confrontation of good versus evil or some other type of conclusive story beat. These moments are typically teleologically determined, serving as the culmination of the entire work.

Synch points themselves are teleological in nature, and thus synchronization schemas are as well. The contributing channels move in and out of synchronization, each moment of convergence serving as a local goal. The plunge is no exception: the auditory, visual, and narrative channels all strive towards the apex no matter where they begin. The continua listed in **Example 3.1** can all contribute to this directionality as they shift over

time (growing louder, zooming out, getting darker, etc.). Another feature of plunges (and in fact all synchronization schemas) is their durational variability. The characteristic build-up of the intensification phase can take place in just a few seconds or over the course of an entire scene. There is no standard amount of time between the various component parts of the plunge, just a necessary sequence of events. In the case of the plunge, the intensification phase usually occupies the most time and is almost always proportionally longer than the initiation or abatement phases. Time dilation, through techniques such as slow-motion and pregnant pauses, plays with the difference between real time and narrative time and affects the perceived continuity of the schema.

3.2. Types of Plunges

Given the wide breadth of situations in which the plunge appears, it is fruitful to further categorize plunges by type. Different types of plunges are defined primarily by their narrative context, meaning they depend on which character is taking the plunge and what the result of that plunge may be. A plunge taken by a protagonist will likely look and sound very different than one taken by their antagonistic counterpart unless narrative tropes are being subverted in some way, such as through the redemption of a villain or to draw similarities between protagonist and villain (as is the case with anti-heroes). Sonic and visual cues are equally important in determining the category of plunge, providing clues in the form of culturally generic idioms like musical topics or visual symbolism. This can be especially pronounced when associative materials are involved, providing an intratextual layer of meaning.[94] As culturally recognized archetypes of aesthetic

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[94] See Bribitzer-Stull 2015, Ch. 4, pp. 79–108 for a detailed account of associative meaning in music.

communication, plunges typically overdetermine the narrative events to which they are bound and help the listener/viewer identify what is happening in the plot.

Beyond the aforementioned contextual signifiers, there are also structural commonalities that separate types of plunges. The various channels that contribute to a given multimedia production frequently have intensity graphs that conform to the schemas presented below (although, as I have stated before, the determination of said graphs is far from an exact science). The list of types that follows is by no means exhaustive, but it does capture the more common occurrences of the plunge that I have encountered throughout my research. This is not meant to preclude the possibility that there are other narrative contexts that utilize similar intensification strategies or that the suggested categories are absolutely delineated—the boundaries between types are permeable. Each entry will contain a description of common narrative contexts in which it may appear, a generic intensity graph depicting its prototypical structure (which can, as in **Example 3.2**, just as readily apply to an individual channel as to the composite whole), and an example that clearly demonstrates how the plunge type typically looks and sounds. Most of the multimedia referenced in the section is filmic in nature, for reasons that will be explored in chapter four.

Heroic

The heroic plunge is by far the most common iteration of the plunge, accompanying climactic actions of protagonists in all kinds of narrative situations. It occurs most frequently to underscore benevolent and selfless deeds, such as stepping in to deflect a mortal blow or charging headlong into battle. Unsurprisingly, this type of plunge occurs frequently in superhero and fantasy stories where the heroes are larger than

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life and often unambiguously virtuous. The typical heroic plunge features common auditory signifiers such as major-mode rising melodies, blaring brass, march topics, battle cries, and the like. Visually, they often center on the hero taking the plunge by zooming in on their face or by depicting their exertion (or use of supernatural powers), oftentimes culminating in a flash of bright light or a series of fast cuts or quick movements.

Many heroic plunges are precursors to longer scenes, involving an initial climax that highlights the moment of engagement and another involving the collision with whatever obstacle the hero is up against. The scene will usually continue to build even further, resulting in the hero's ultimate triumph or failure. The moment of the plunge takes place with the initial engagement, with the sequence that follows falling into other narrative paradigms. **Example 3.4** below depicts a generic IG for the type. The boxed-off section in the bottom left corner represents the schema for the heroic plunge while the remainder of the graph depicts a possible continuation.

Example 3.4: generic composite IG for the "heroic" plunge
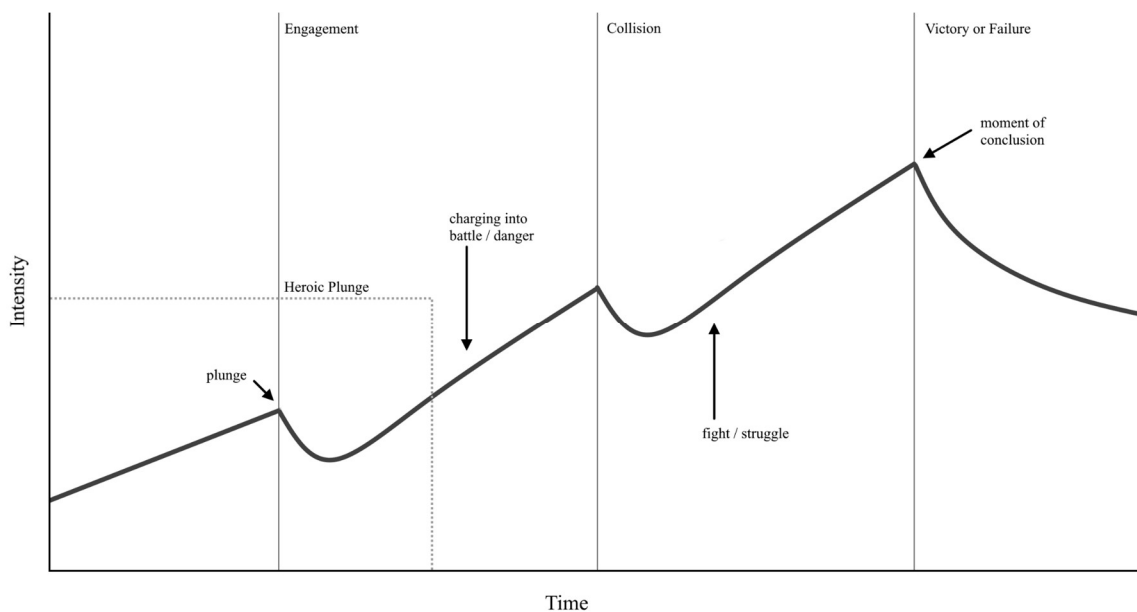
The scene from *The Flash* analyzed in Chapter 1 is but one of many throughout the series—in fact, Barry ends up taking a heroic plunge in nearly every episode when it becomes clear that running faster is the only way he can save the day. Although I did not continue beyond the plunge schema in that scene, Barry does go on to fight and defeat the tornado-wielding metahuman. Another prototypical example occurs at the beginning of Marvel's *Black Panther* (2018) when T'Challa drops out of an aircraft to attack a caravan of human traffickers.[95] As shown in **Example 3.5**, there is a dramatic upswell into the moment of the plunge followed by a sustained intensification up until the moment the electricity-nullifying devices connect with the vehicles.[96] The narrative channel ebbs and flows, but trends generally upwards while the musical and visual channels have more extreme variation in their intensities.

Example 3.5: composite IG from *Black Panther*

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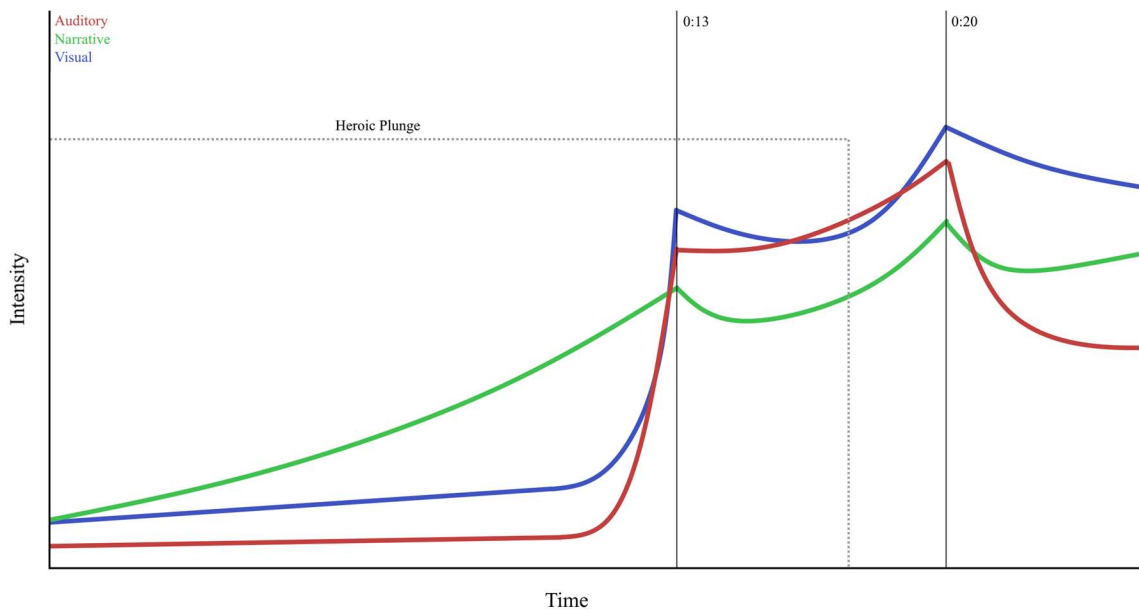
[95] *Black Panther* https://mediaspace.umn.edu/media/t/1_lza8ay01
[96] This coincides with a fetishization of advanced warfare technology. Rather than seeing T'Challa land and survive, we are shown how his advanced technology enables him to do remarkable things.

Villainous

The villainous plunge focuses on evil deeds performed by stories' antagonists, usually emphasizing their cruelty or lack of humanity. It occurs often during fateful encounters with the villain, usually showing a death by their hand or some other irredeemable act. This can happen in a narrative's exposition as the antagonist is introduced, or later on as they perform other heinous deeds. Topical resonances in the audio and video channels signal the nefarious nature of these plunges and mark the character as an evildoer through such devices as tense tremolos, dissonant harmonies, dark shadows, and the like.[97]

A very common convention associated with such moments has the evildoer stop and give a speech of some kind before going through with their action. This can be a short phrase or an entire monologue; in the case of wordless productions, it can take the form of prefacing their action with some kind of display. Whatever the case may be, the villain broadcasts their evil intent and demonstrates their knowledge of their own ignobility. Along with this trope comes the propensity for a delay in the schema. In such cases, the intensity will build to a fever pitch before halting (or even lessening) and then quickly build again to the point of the definitive action, as can be seen depicted in **Example 3.6**.

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[97] The musical devices listed here are reminiscent of the "ombra" topic. Clive McClelland, *Ombra: Supernatural Music in the Eighteenth Century*, Lanham, Md.: Lexington Books, 2012.

Example 3.6: generic composite IG for the "villainous" plunge
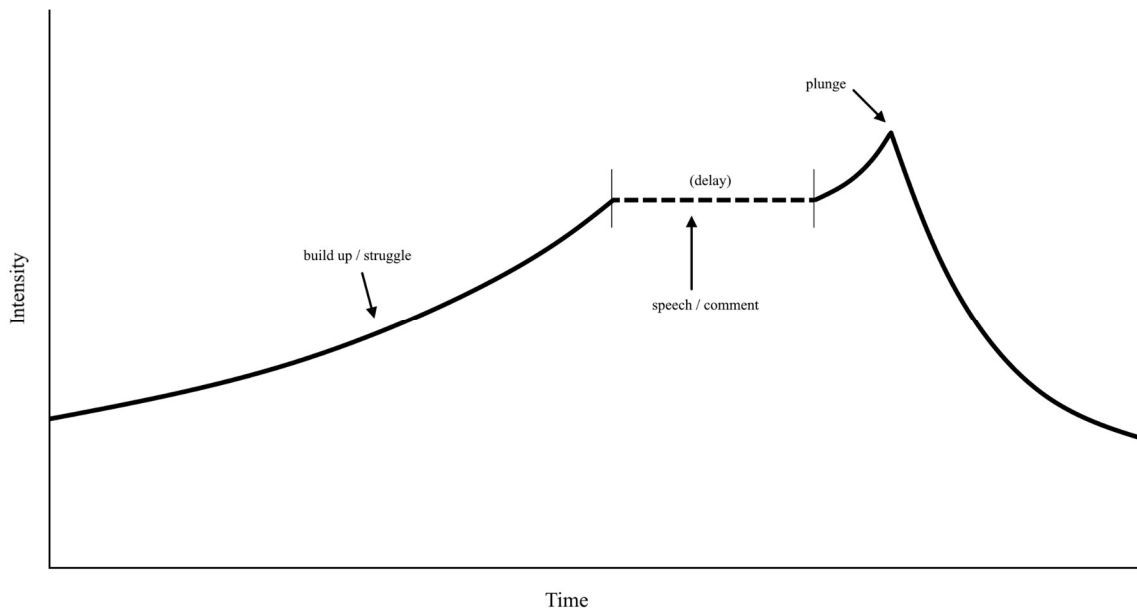
A great instance of a villainous plunge comes towards the end of *Avengers: Infinity War* (2018), the penultimate film in the MCU's (Marvel Cinematic Universe) Infinity Saga.[98] Wanda (Scarlet Witch) uses her powers to destroy the Soul Stone along with her love interest, Vision, in order to stop Thanos from getting the stone and wiping out half of all living things. Thanos then uses the Time Stone to undo Vision's destruction and proceeds to kill him all over again and emerge victorious. Another classic example comes from *The Lion King* (1994), when Scar commits fratricide by throwing Mufasa from a cliff face into a horde of charging wildebeests in order to ascend to the throne of the Pride Lands, graphed in **Example 3.7** below.[99] A similar example comes from the first act of *Gladiator* (2000) when Commodus murders his father, Emperor

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[98] *Avengers: Infinity War* https://mediaspace.umn.edu/media/t/1_b5fg9t0y
[99] *Lion King* https://mediaspace.umn.edu/media/t/1_jdsaumlp

Marcus Aurelius, after being told that power will pass to Maximus Meridius instead of himself.[100]

Example 3.7: composite IG from *The Lion King*
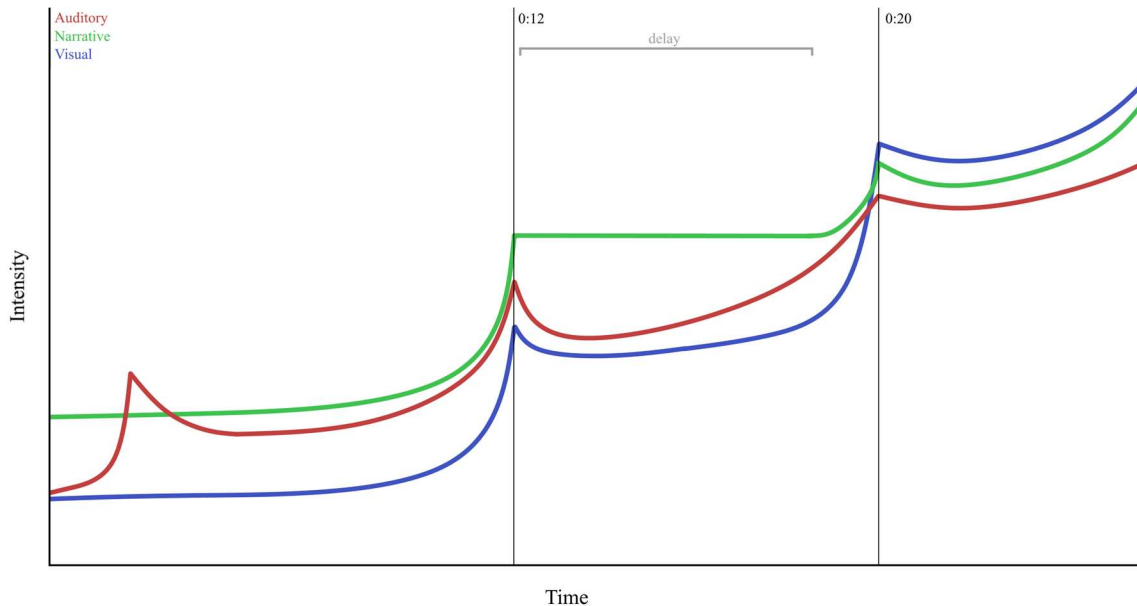
Faustian

  The "deal with the Devil" trope is often accompanied by a plunge at one point or another, whether that be when the contract is signed or when the Devil's nefarious end of the bargain comes to fruition. The Faustian plunge bears resemblance to the villainous type, sharing many structural similarities and topical signifiers. Narrative context is the main distinction, which heaps the onus of the plunge onto the character who is accepting the deal rather than the devilish character offering it. The phases of the schema that depict struggle between characters thus shifts instead towards inner turmoil and indecision. While the motivations and bargains differ wildly from one story to the next, there is

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usually a sense of the protagonist succumbing to their own baser desires and taking the metaphorical easy way out.

Example 3.8: generic composite IG for the "Faustian" plunge
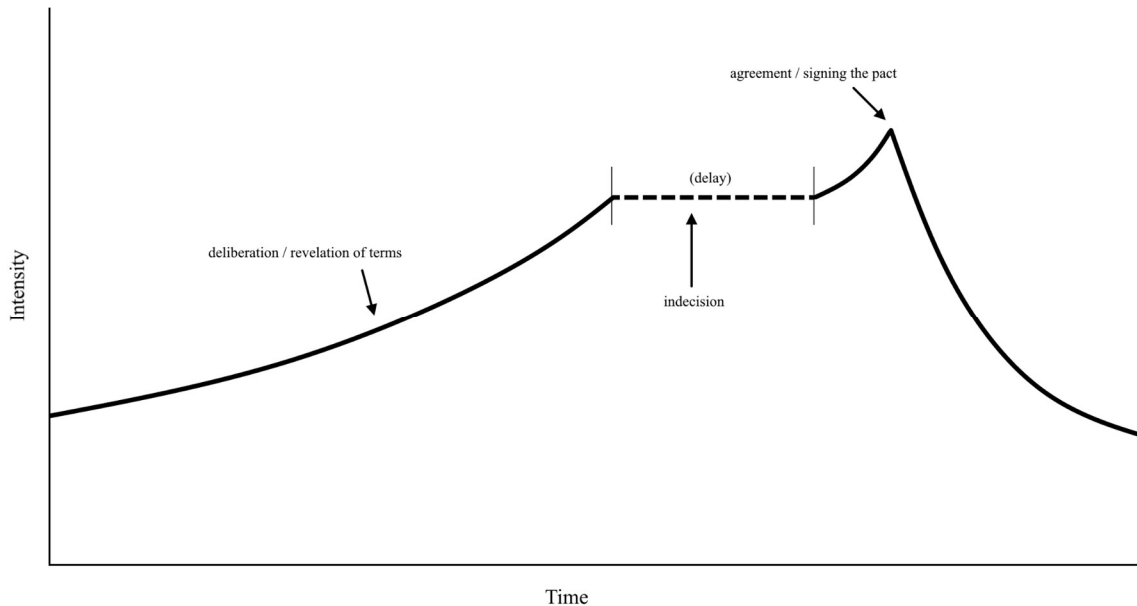
In F. W. Murnau's classic film version of *Faust* from 1926, this type happens several times.[101] First when Faust summons Mephisto to acquire the power to heal the plague victims in his town (27:53–29:07); then when Mephisto grants Faust youth in an effort to get him to succumb to carnal pleasures (35:39–37:15); then again when Faust agrees to let their pact stand for all eternity (48:01–48:55). Of course, this story has been told over and over again in a variety of mediums and in countless guises, and so the Faustian plunge appears frequently. A great example of an ironic (and humorous) Faustian plunge occurs in the episode "The Devil's Hands Are Idle Playthings" of the animated television show *Futurama* when Fry makes a deal with the Robot Devil to get new hands from a "random robot somewhere in the universe" and it ends up being the

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[101] Full film can be found on YouTube: https://www.youtube.com/watch?v=Cmz3RVvydOU&vl=en

Robot Devil himself, who must then fulfill his end of the bargain to his own detriment

(**Example 3.9**).[102]

Example 3.9: composite IG from _Futurama_
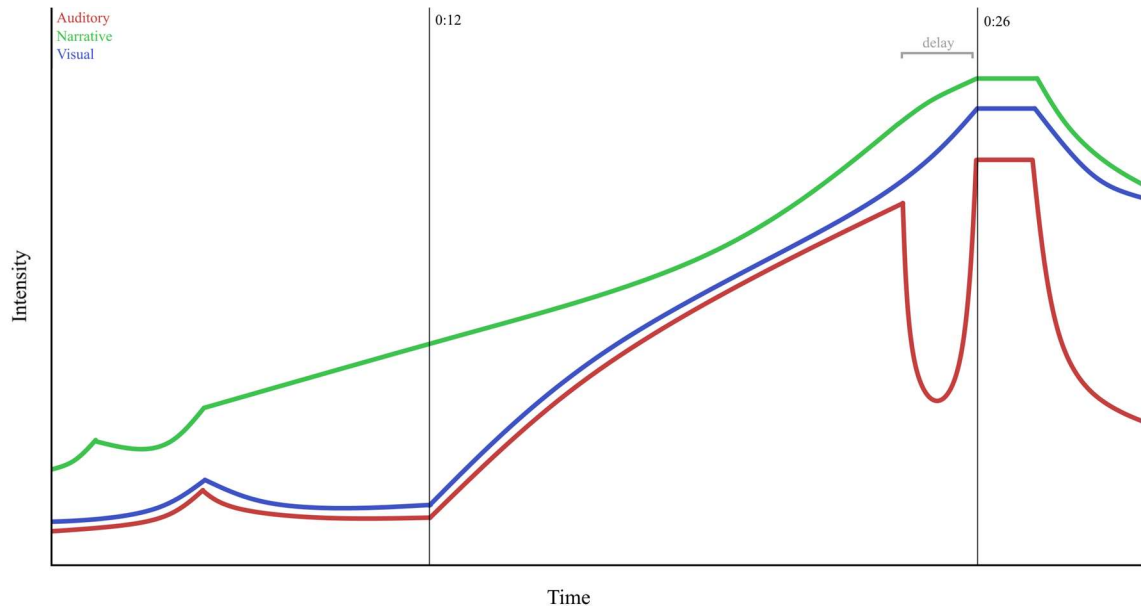
Sacrificial

The sacrificial plunge is an extremely common application of the schema,
accounting for those moments where a character gives something up for the benefit of
others. The object of sacrifice can range from material objects and/or information to a
character's body and/or life. Whatever is traded, it often makes the difference between a
good and a bad outcome for other characters in the narrative. Deceleration is a common
trend across all channels in this type—slower musical tempo, slow motion shots,
exaggerated movements, and slowed narrative time are all common techniques used to
modulate intensity.

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[102] *Futurama*, season 5, episode 16, "The Devil's Hands are Idle Playthings"
https://mediaspace.umn.edu/media/t/1_x0mk1e3b

The build-up to the definitive action is fairly standard in the sacrificial plunge, where it diverges is in the abatement phase. While the plunge itself still happens at the highpoint of intensity, what follows is either a long and gradual deintensification or an elision of the abatement phase altogether. Regarding the former, one common iteration of this tendency is a fade-away. When this occurs, the sacrificed object or character slowly exits the perceptual field both visually (slowly moving out of view, fading to black, dissipating/dematerializing) and aurally (fading echoes of diegetic sound, extended release of non-diegetic music). Sacrificial plunges that make use of this slow decline in intensity can occur over significant timespans while remaining cognitively linked to the schema.[103] In the case of elision, there is a sudden drop-off in intensity that is not used as a delay (which would pick up at the same level of intensity after a brief pause). When this occurs, it often leads directly into a scene tinged with a sense of pathos or grief, highlighting the loss of whatever was sacrificed and frequently focusing on the reactions of those for whom sacrifice was made. Such scenes rely on a separate set of tropes and may well constitute a distinct "grief" synchronization schema.[104]

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[103] It often takes time for the narrative terms of a sacrifice to become apparent—this creates an imperative for creators to dwell on what is lost and/or traded.

[104] I provide a slightly more detailed exploration of potential synchronization schemas beyond the plunge in the conclusion to this dissertation.

Example 3.10: generic composite IG for the "sacrificial" plunge
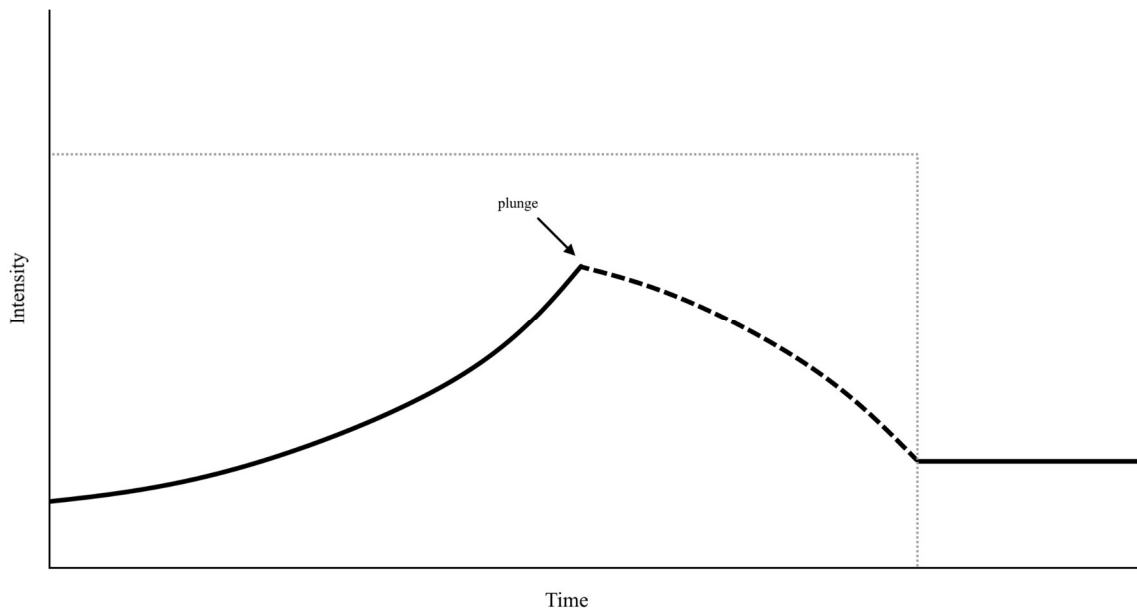
A quintessential example is in the 1999 animated film *The Iron Giant* (1999), when the gigantic robot protagonist intercepts a missile that would destroy his human friend's town, but ultimately destroys himself in the process (**Example 3.11** below).[105] Every protagonist in *Star Wars: Rogue One* (2016) takes a sacrificial plunge at some point in order to complete their mission to send information about the Death Star's singular weakness to the Rebellion. Characters like Gurgi from *The Black Cauldron* (1985)[106] and Bing Bong from *Inside Out* (2015)[107] sacrifice themselves to help the films' respective protagonists. In video games, this type of plunge frequently overlaps with the trope of the unwinnable fight. This is true of Noble 6's final stand in *Halo: Reach* (2010) and John Marston's death scene in *Red Dead Redemption* (2010), which each funnel the

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[105] *The Iron Giant* https://mediaspace.umn.edu/media/t/1_efzfszbm
[106] *The Black Cauldron* https://mediaspace.umn.edu/media/t/1_j7bxle8a
[107] *Inside Out* https://mediaspace.umn.edu/media/t/1_kkew438p

player into a situation where they cannot succeed and are ultimately overtaken by enemies.[108]

Example 3.11: composite IG of sacrificial plunge from *The Iron Giant*
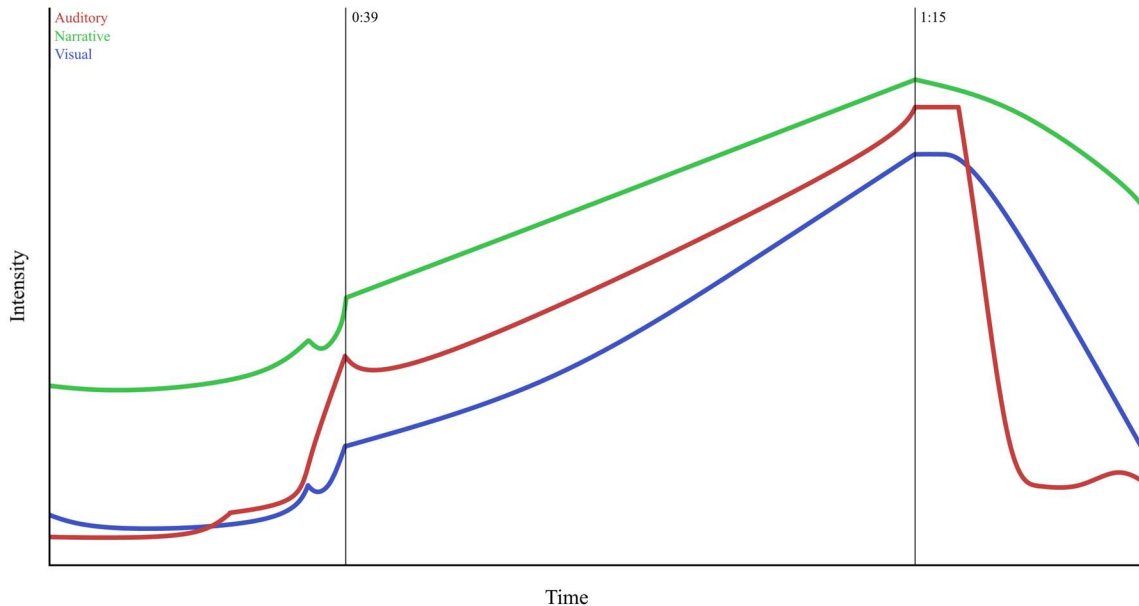
Defiant

The defiant plunge highlights the risk a character takes to break from the expectations put upon them by loved ones, superiors, or society at large. There are innumerable narrative contexts where this type takes place ranging from innocuous teenage rebellion to life-altering decisions. Many runaway stories feature this type of plunge at the outset, establishing a character's departure from a bad or undesirable situation. Structurally, the defiant plunge resembles the heroic plunge with its gradual intensification and sharp abatement; however, whereas the heroic type typically leads to further action within the scene, the defiant frequently leads to a separate scene entirely. The auditory and visual channels are usually fairly generic, depicting more of a general

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[108] A discussion of "funneling" as a technique in game design can be found in Chapter 4.3.2.

dramatization of the moment than any particular sort of tropical or tropological meaning.

Example 3.12 depicts the generic shape for the defiant type.

Example 3.12: generic composite IG for the "defiant" plunge
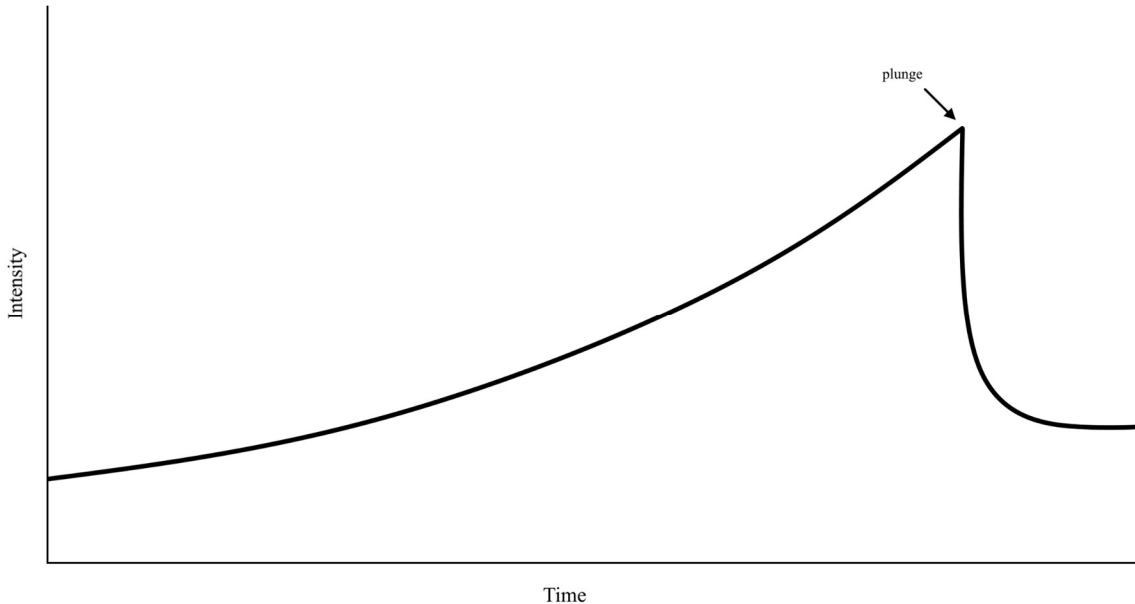
While the defiant plunge can service serious narrative moments, it also commonly appears in comedies or during comedic scenes where the definitive actions have less severe consequences. The action comedy/parody movie *Hot Fuzz* (2007) offers a brilliant example of this—after uncovering the horrifying truth behind a series of grisly murders and unsuccessfully confronting the culprits, Sergeant Nicholas Angel is left broken and dejected.[109] He stops at a gas station to buy supplies and, upon seeing a display of buddy-cop DVDs, is inspired to return to the village and take out the murderous Neighborhood Watch Alliance in one of the most over-the-top third acts in cinema. A graph of the scene is included as **Example 3.13** below.[110] Other examples of the defiant type can be found in

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[109] *Hot Fuzz* https://mediaspace.umn.edu/media/t/1_08nbmlar
[110] Coincidently, this also demonstrates how the humor of this particular scene functions – by accompanying a low intensity narrative event with excessive auditory and visual intensification techniques.

The Expanse (discussed in chapter 4) and *Spider-Man: Into the Spider-Verse* (discussed in chapter 5).

Example 3.13: composite IG from *Hot Fuzz*
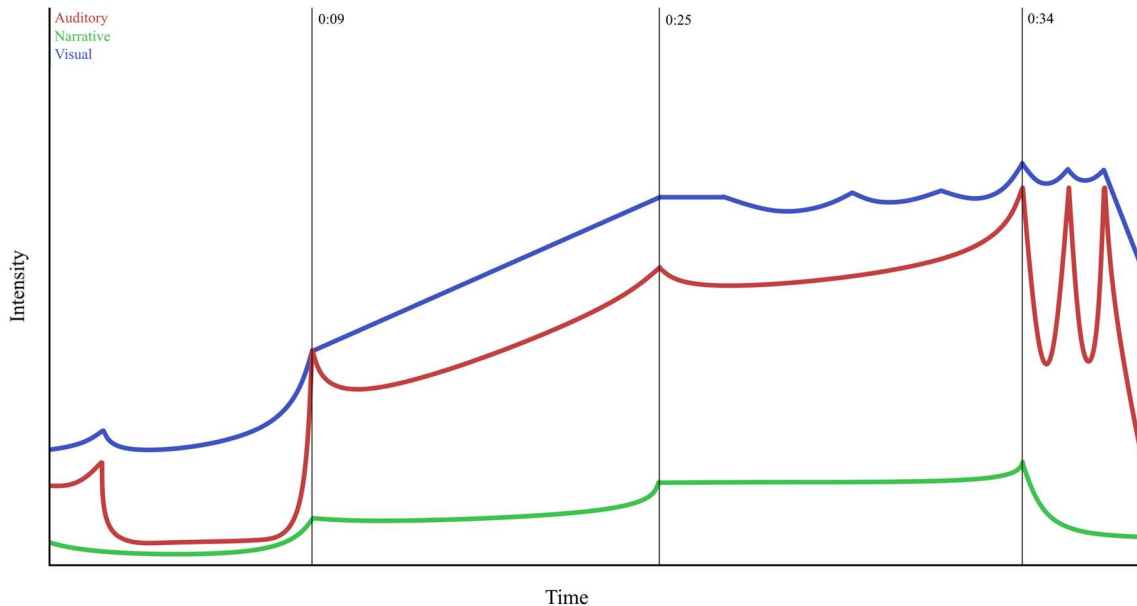
Suicidal

When a character in a narrative takes their own life, it is frequently lent a degree of gravitas through the deployment of a plunge. Suicides can take place within a story for any number of reasons, but they are typically posed as a last resort or as the only way out of a horrible life for a character. One key element is character agency—in a sense, they are taking the final act of their life into their own hands and imposing their will on their own fate. This can be an act of desperation, defiance, or even spite, but the end result is the same.

A suicidal plunge blends elements of the sacrificial and defiant types, falling somewhere between the two in terms of narrative usage and structure. Which it resembles more depends on context. Questions like why the suicide is included in the story, who is taking their own life, who else is affected by the death, where and how it is done, and

when it takes place all play a part in determining how a given instance will be interpreted. In many cases, the distinction between the types is a moot point; however, there are instances of suicidal plunges that cannot be readily lumped into the defiant or sacrificial categories and it thus deserves its own classification. The composite IG in **Example 3.14** poses two dashed lines for the abatement phase, accounting for the variable nature of this type.

Example 3.14: generic composite IG for the "suicidal" plunge
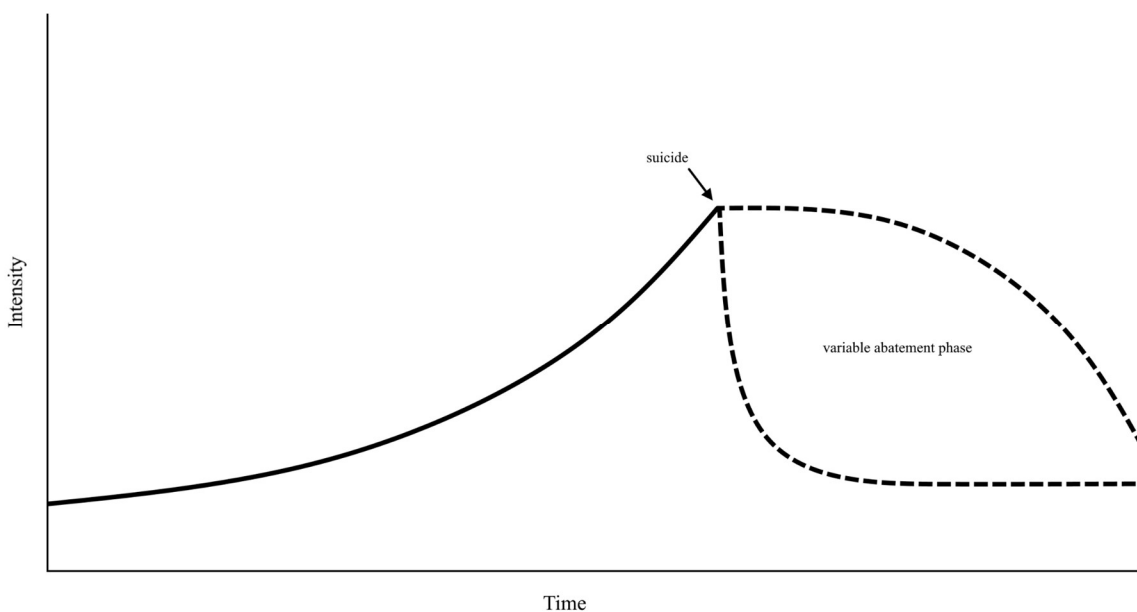
One example of a suicidal plunge that has significant overlap with the defiant type comes from the ending of *Predator* (1987), when the eponymous villain self-destructs out of pure spite.[111] An example that leans more towards the sacrificial is Ripley's suicide in *Alien 3* (1992), where she throws herself into a vat of molten lead in order to kill the alien queen gestating inside her.[112] Suicidal plunges can even imitate heroic plunges in certain cases, such as in *Independence Day* (1996) when Russell Casse flies his plane into the

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[111] *The Predator* https://mediaspace.umn.edu/media/t/1_vgyuvur7
[112] *Alien 3* https://mediaspace.umn.edu/media/t/1_9axgwzsc

invading extraterrestrials' mothership in order to destroy it and save the world.[113] Given the similarities between suicidal plunges and other types, I will not include an analytic graph for any one example here. One example of a suicidal plunge that does not have clear ties to another type comes from *Madama Butterfly* (1904, performed by the Orquesta Reino de Aragón on August 14, 2020).[114] Having forsaken her ancestral religion and her family in order to appease the duplicitous Pinkerton, Cio-Cio-san (Carmen Solís) chooses to take her own life and die with honor (**Example 3.15**).[115]

Example 3.15: composite IG from *Madama Butterfly*
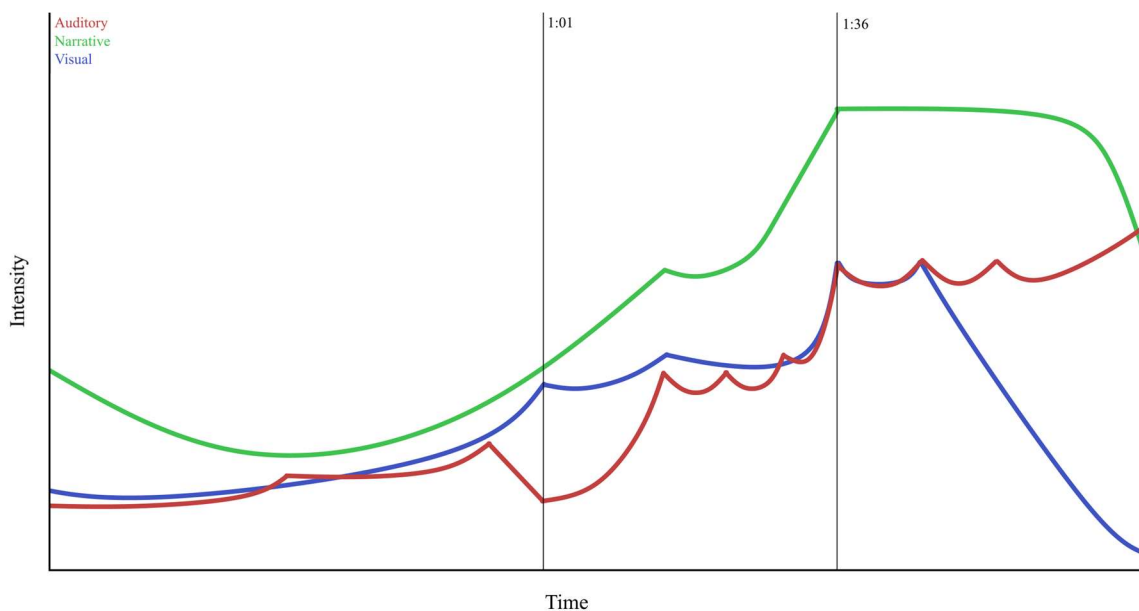
Fantastic

The fantastic plunge accompanies a departure from the mundane into the supernatural. This can take place for a single character, a group of characters, or even for the work as a whole. Each multimedia channel employs common signifiers in order to

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[113] *Independence Day* https://mediaspace.umn.edu/media/t/1_7q0ibkuc
[114] *Madama Butterfly* https://mediaspace.umn.edu/media/t/1_v4yu2s51
[115] It is worth pointing out that this example is much longer than the other filmic media examples examined in this chapter. The issue of temporality in staged media is discussed in chapter 4.2.1.

invoke a sense of mystery and awe, usually one after the other. Musical techniques include symmetrical scales (such as whole-tone and octatonic), prolonged diminished-seventh chords, and harp glissandi during the intensification phase before shifting towards major-modes (or major-adjacent modes such as lydian or mixolydian) and majestic/wonderous musical topics for the abatement. Visual devices such as close shots, dark lighting, or blurring effects often obscure part or all of the fantastic elements for some time before revealing the object(s) of wonderment, at which point there is usually a drastic shift towards bright lights and colors, wide and/or distant shots, and clarity.

Structurally, the fantastic plunge often maintains a steady, low level of intensity before quickly spiking at the moment of the plunge. In many cases, the highpoint that is built towards is not necessarily a definitive narrative action, but the reveal of the fantastic element to the audience—when this occurs, it is common for a delay to occur between the action and the reveal. Once the highpoint takes place, the intensity may plateau at a high level of intensity during the abatement phase; depending on the length of the scene, it will sometimes even slowly increase as more wondrous things are revealed. **Example 3.16** attempts to capture the general shape of this type.

Example 3.16: generic composite IG for the "fantastic" plunge
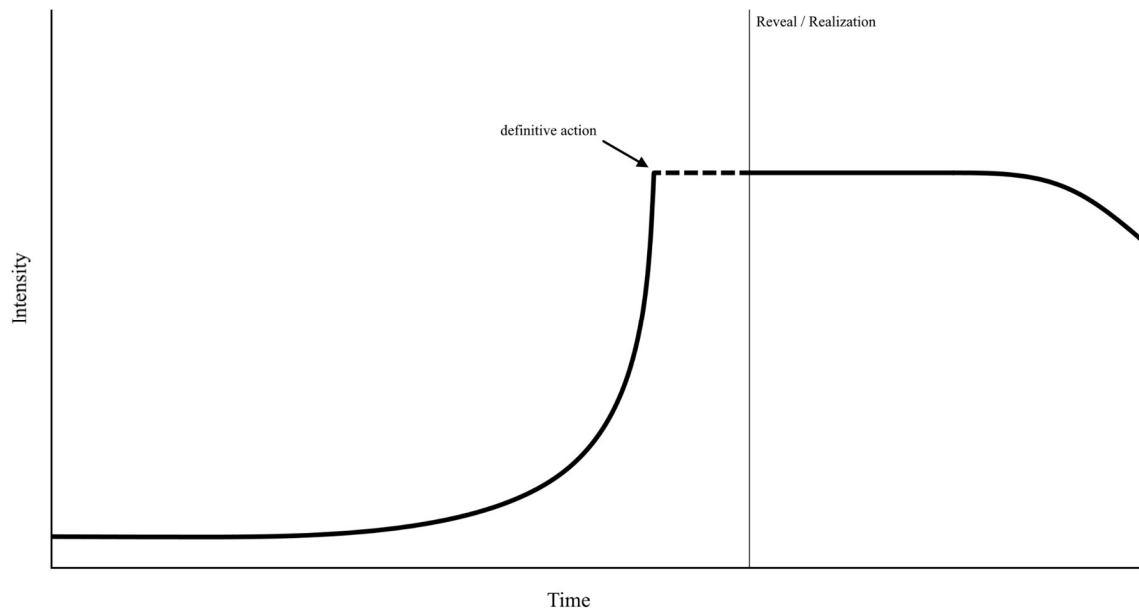
Prominent examples include Alice falling down the Rabbit hole in *Alice in Wonderland* (1951),[116] the first reveal of dinosaurs in *Jurassic Park* (1993),[117] the player character leaving Vault 101 in *Fallout 3* (2008),[118] and Jack entering the city of Rapture in *Bioshock* (2007, graphed in **Example 3.17** below).[119] This type can overlap with Joseph Campbell's theory of the monomyth, aligning with the "crossing of the first threshold" step which marks the hero's transition into the realm of the unknown.[120] Just because a narrative moment exhibits structural characteristics of the plunge schema, it does not mean it will be given the same weight afforded to true plunges. For instance, in *The Wizard of Oz* (1939) where the "crossing of the threshold" arguably occurs when

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[116] *Alice in Wonderland* https://mediaspace.umn.edu/media/t/1_qikjboel
[117] *Jurassic Park* https://mediaspace.umn.edu/media/t/1_akxf4ghs
[118] *Fallout 3* https://mediaspace.umn.edu/media/t/1_y4t6vl1m
[119] *Bioshock* https://mediaspace.umn.edu/media/t/1_6psojjy7
[120] Campbell, Joseph, *The Hero With a Thousand Faces*, 3rd Edition. (Novato, California: New World Library, 2008).

Dorothy's house is swept up by a tornado, but her "fantastic plunge" takes place later when she opens the door and reveals the outside world to be in Technicolor.[121]

Example 3.17: composite IG for _Bioshock_[122]
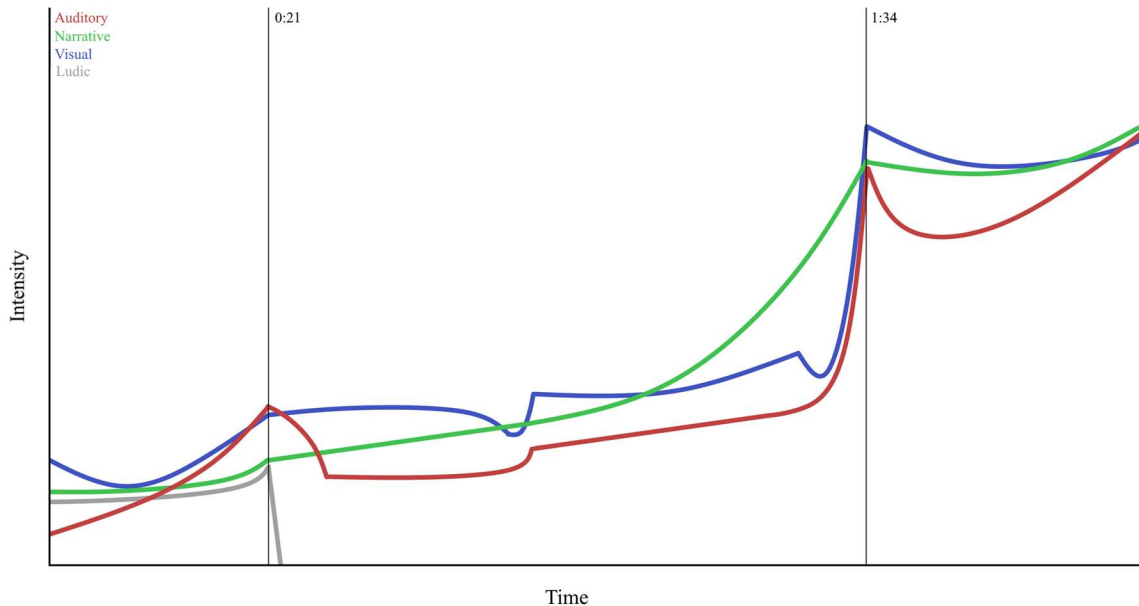
Special Case: Deceptive Plunges

Whatever the narrative situation, the techniques that create the plunge can be used to build up anticipation of an event and then thwart that expectation. This deceptive deployment of the plunge schema portrays a character as being on the verge of doing something—often something brazen, impetuous, and/or wicked—and then metaphorically "stepping back from the ledge" before committing to the action. Usually this is shown as an act of resistance, with the character overcoming the impulse to do something bad; other times it is depicted as a character being stopped by an outside force

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[121] _The Wizard of Oz_ https://mediaspace.umn.edu/media/t/1_nbedaafd. Matthew Bribitzer-Stull suggests that this scene may be the progenitor of the "fantastic" plunge type, given how well it is known and what a dramatic effect it had on audiences at the time. Further investigation into fantastic plunges in media before _Oz_ would be a fruitful line of inquiry.

[122] I discuss how ludic elements affect impressions of synchronization schemas in chapter 4.3.1.

before they can follow through. The deceptive plunge (or any deceptive use of a synchronization schema, for that matter) works in the same manner as a deceptive cadence in tonal music or a metric fake-out in: by capitalizing on the expectation established by culturally understood organizational paradigms in order to surprise the viewer/listener.[123]

The two subtypes of the deceptive plunge are *subverted* and *negated*. Each of them follows the standard intensification strategies of one of the other types of plunge, but never arrives at the definitive action that would be expected. The subverted deceptive plunge builds to what would be a climax, but then gradually loses steam and lessens in intensity. The resulting intensity graph typically has an almost parabolic shape, increasing and decreasing at commensurate rates (**Example 3.18**). An example of this subtype comes from *The Fellowship of the Ring* (2001), when Galadriel considers accepting Frodo's offer to take the One Ring.[124] Another great example comes from the chase scene of *Point Break* (1991).[125] FBI agent Johnny Utah discovers that his friend Bodhi is involved with the series of bank robberies he has been investigating and Utah chases him from the scene of the crime until his knee injury prevents him from pursuing farther. As Bodhi climbs a fence to escape, Utah lines up a clear shot, but can't bring himself to shoot, instead firing his gun into the air while screaming in anger.

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[123] Huron ____, __ discusses expectation and surprise.
[124] This scene is discussed in greater detail in chapter 4.1.2.
[125] *Point Break* https://mediaspace.umn.edu/media/t/1_utasgish

Example 3.18: generic composite IG for the "subverted deceptive" plunge
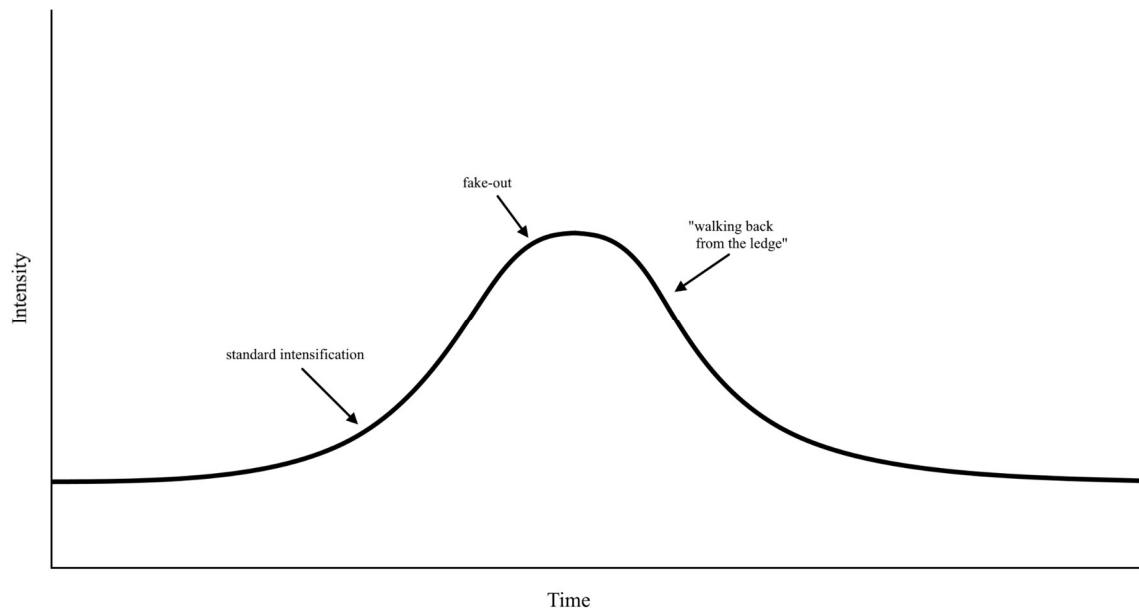
In the case of the negated deceptive plunge, the scene once again builds towards an apex but is suddenly cut off before it occurs. Intensity graphs for this subtype resemble a sawtooth (**Example 3.19**). An example of a negated deceptive usage occurs in *Raiders of the Lost Ark* (1981), when Indiana Jones threatens to destroy the ark of the covenant towards the finale of the film.[126] Jones ambushes René Belloq and his Nazi military cohort with a rocket-propelled grenade launcher aimed at the ark. The scene builds as if Jones is going to pull the trigger, but, as Belloq points out, he can't bring himself to destroy such an important archeological artifact.

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[126] *Raiders of the Lost Ark* https://mediaspace.umn.edu/media/t/1_qt9prtt9

Example 3.19: generic composite IG for the "negated deceptive" plunge
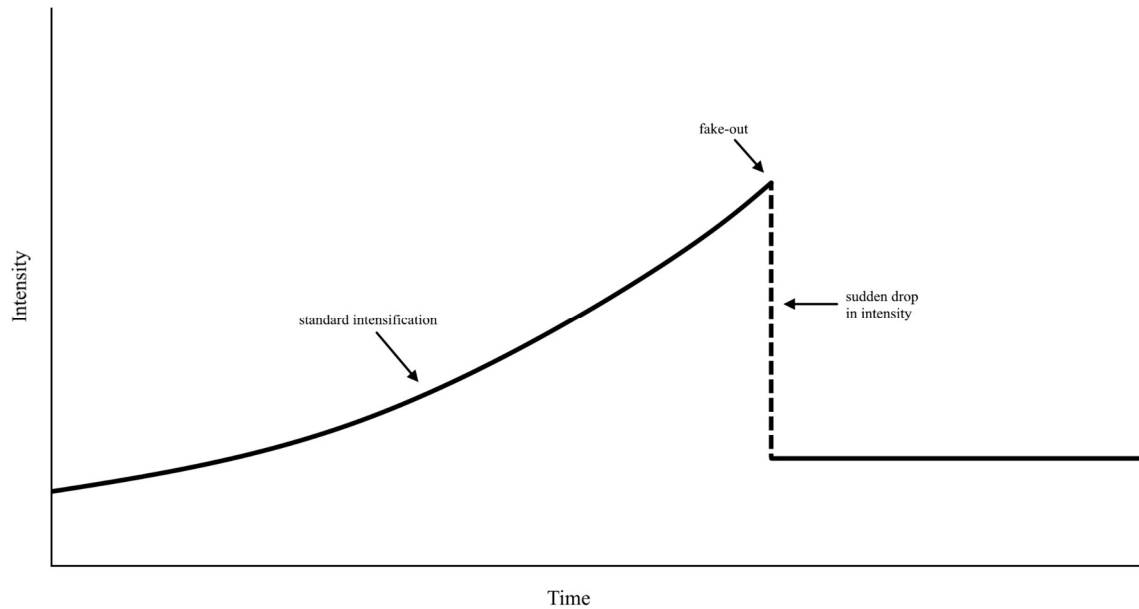
Special Case: The Leap

Sometimes, a scene is structured like a plunge would be, but the climactic moment does not necessarily involve any kind of definitive action or decision. Many times, this will involve a character narrowly escaping harm, perhaps by leaping out of the way of a rolling boulder or slamming the door on a pursuing monster or reflexively dodging an attack. This pseudo-plunge shares a similar intensity curve, but the narrative events are usually far simpler—there is danger, and the character avoids it. The leap, as I call it, is a hallmark of the action and horror genres in both film and video games, adding a layer of excitement to chases, fights, and traps.

4. The Plunge in Various Media

This chapter is devoted to explaining how the plunge occurs across multiple genres of multimedia productions, separated into the three large categories of filmic, staged, and ludic media. While each of these terms can represent vastly different repertories for different people, I will define them as follows. "Filmic media" includes most productions viewed through a screen, such as cinema and television, as well as smaller-form digital videos. "Staged media" encompasses those productions that are often performed live, such as opera, ballet, and musical theater. "Ludic media" consists of video games and other interactive productions. These categories of media can incorporate aspects of the others—recorded performances of staged media, interactive films, video game cutscenes, etc.—but they each have hallmark characteristics that are easiest to discuss in terms of their most common forms.

4.1. Filmic Media

Plunges as they occur on screen are the quintessential exemplars of the synchronization schema. In filmic media (including cinema, television, YouTube videos, and the like), they tend to be more clearly delineated and shorter in duration, which simplifies both identification and analysis. While the plunge did develop out of traditions that began on stage, film has become the primary site where it is employed by creators and experienced by audiences. The sheer volume of movies and television shows that exploit the device sets the medium apart from the rest, establishing it as the main point of exposure for most twenty-first-century consumers.

Cinematography is what sets film apart as a medium, providing several unique story-telling devices that can be used to articulate moments like the plunge. Zooms and

pans alter the viewer's perspective over time, cuts shift focus instantaneously, and the maneuverability of the camera allows for viewing angles not possible in staged media (such as extreme close-ups, panoramas, or overhead shots)—all of which are used to manipulate tension in the visual channel. The ubiquity of these techniques speaks to their utility and highlights just how effectively they can control the emotional impact of a scene. The speed at which such devices can be employed allows for much more concise iterations of the plunge in film as well, further accounting for its prevalence in the medium. A narrative moment that unfolds over several minutes in staged media like opera and ballet might be achieved in a matter of seconds on screen.

4.1.1. Conformant Examples

The Plunge as Heroic Action in the "Arrowverse"

Before examining some of the more exceptional plunges I have encountered in filmic media, it is prudent to look at a few that work as expected. The example from *The Flash* in Chapter 1 is one of many from the "Arrowverse"—the collection of DC superhero shows from The CW Network that take place within a shared universe. In fact, an examination of the other pilot episodes from the franchise shows that the same type of grandiose heroic plunge takes place in each. Featuring such moments prominently serves to highlight these characters' unique abilities and motivations, as some of the heroes were introduced in other shows in the shared universe before receiving their own spin-offs.

The premiere episode of the show that launched the entire connected universe, *Arrow* (2012–20), depicts Oliver Queen setting up his secret base of operations in an abandoned warehouse.[127] He is shown moving heavy equipment, altering the building,

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[127] *Arrow* https://mediaspace.umn.edu/media/t/1_30yu6oxx

fashioning arrows, and performing various feats of athleticism through an extended montage, all accompanied by a slowly building musical number featuring intimations of the title track, pulsing strings, rising horns, and driving drums. Upon opening the box containing his bow, the music cuts and begins building again as he deftly shoots bouncing tennis balls out of the air. While his wealth and power put him in a singular position, it is this demonstration of his signature skill that solidifies his heroism for the audience. The plunge here does not highlight Oliver's heroic or sacrificial actions, but rather emphasizes the unique talents that set him apart and allow him to establish himself as a vigilante. **Example 4.1** shows how the music serves as the backbone of the plunge in this case, establishing multiple peaks throughout the scene while the visual and narrative intensity curves trend generally upwards.

Example 4.1: *Arrow* S1:E1 (heroic)[128]
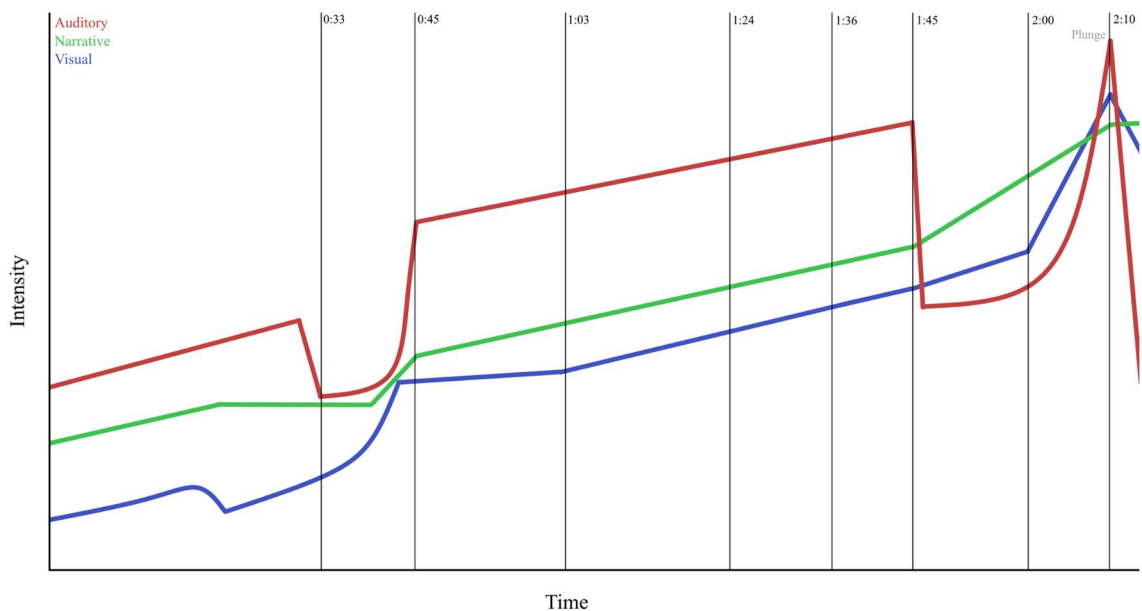
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[128] As in chapter one, all timestamps given are in relation to the clip provided.

The plunge from *Supergirl* (2015–21), the third show in the franchise, is much more reminiscent of that from *The Flash*.[129] Kara Danvers has been hiding her superpowers for most of her adult life but is forced to use her powers when her adoptive sister's plane is sabotaged and about to crash. The scene depicts her rushing out of a restaurant, pulling off her (fake) glasses, and using her x-ray vision to examine the situation. Realizing that the plane will go down without her intervention, she runs to help. She tosses off her jacket as she runs down an empty alleyway, preparing to fly for the first time in years. She jumps once, not quite managing to make it the whole way off the ground, and then successfully launches off the pavement. This is accompanied by an intensified version of the show's title music that builds throughout and culminates in a definitive statement of the theme at the moment of the plunge. All of this is depicted in **Example 4.2** below. Note that all three channels continue to trend upward very shortly after the plunge, where they continue to support Kara's daring rescue of the plane.

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[129] *Supergirl* https://mediaspace.umn.edu/media/t/1_zfetbr7c

Example 4.2: *Supergirl* S1:E1 (heroic)
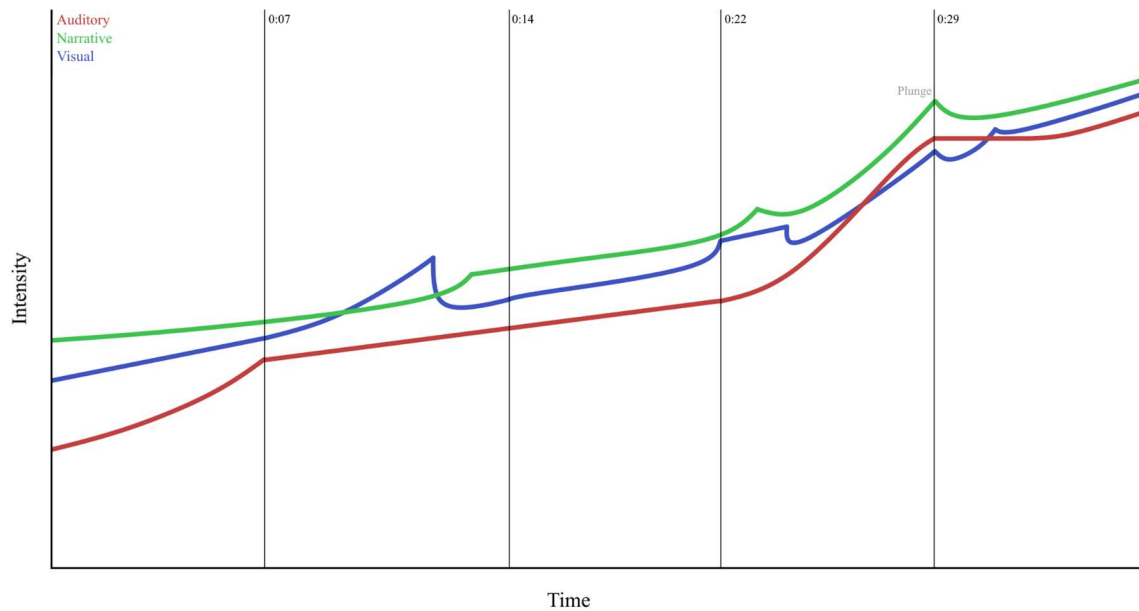
DC's Legends of Tomorrow (2016–present) is one of the most ambitious

crossovers of the Arrowverse, pulling eight different characters from various other shows

and assembling them into a time-travelling supergroup. Rip Hunter, a vengeful time

traveler set on saving the future from a genocidal megalomaniac, collects these characters

in a quick montage at the beginning of the first episode.[130] There are several microscopic

plunges as Rip shoots each of them with a flash gun, rendering them unconscious. He

gathers them together in order to lay out the mission for which they are needed. Each of

these features a musical swell and zoom-in effect leading up to the burst of bright light

(shown below in **Examples 4.3–7**). Once he has collected all the heroes, he gives them

thirty-six hours to decide if they will join him. They all accept, of course, and when they

take their first sojourn through time as a team there is a monumental plunge dedicated to

their departure.[131] The time ship flies into a wormhole in a dazzling display of special

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[130] *Legends of Tomorrow*, intro montage https://mediaspace.umn.edu/media/t/1_6od9t0t0
[131] *Legends of Tomorrow*, time ship departure https://mediaspace.umn.edu/media/t/1_1hm53f5s

effects while the title theme sounds in earnest. This plunge fits the 'fantastic' archetype, marking the characters' departure from the mundane world (which in this case is full of superheroes) into the unknown. **Example 4.8** is an intensity graph for this final plunge. The interesting aspect of this full introductory sequence is that each of the micro-plunges builds on the previous ones, creating a cumulative intensification effect. The ultimate payoff of this build up does not come until the ship travels through the wormhole nearly fifteen minutes later.

Example 4.3: *Legends of Tomorrow* **S1:E1 (fantastic), Atom**
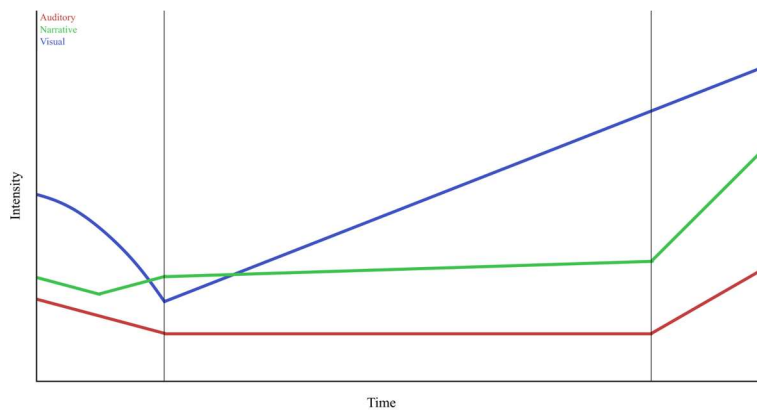
Example 4.4: *Legends of Tomorrow* **S1:E1 (fantastic), White Canary**
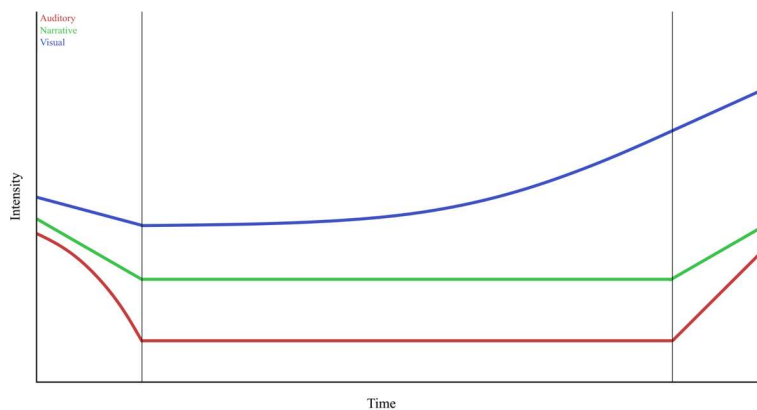
Example 4.5: *Legends of Tomorrow* **S1:E1 (fantastic), Firestorm**
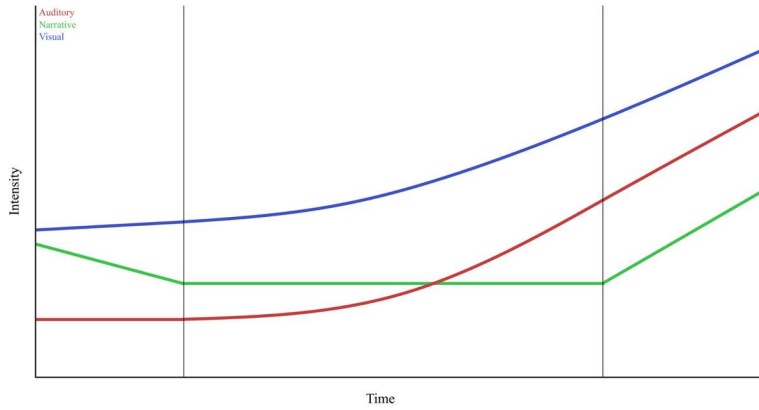
Example 4.6: *Legends of Tomorrow* **S1:E1 (fantastic), Hawkman & Hawkgirl**
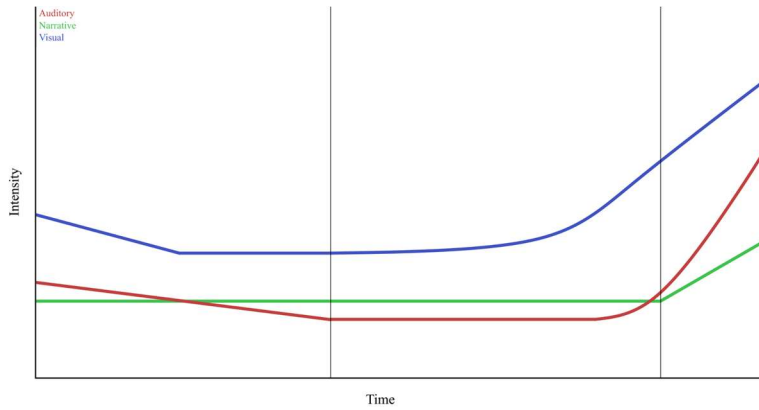
Example 4.7: *Legends of Tomorrow* **S1:E1 (fantastic), Captain Cold & Heat Wave**
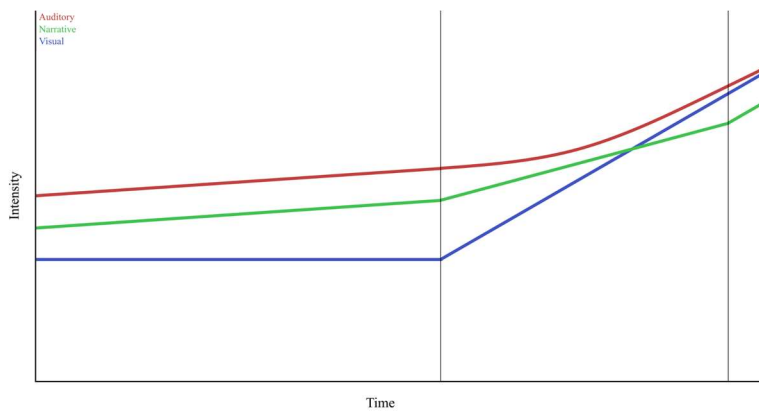
Example 4.8: Full crew plunge from *Legends of Tomorrow* S1:E1 (fantastic)
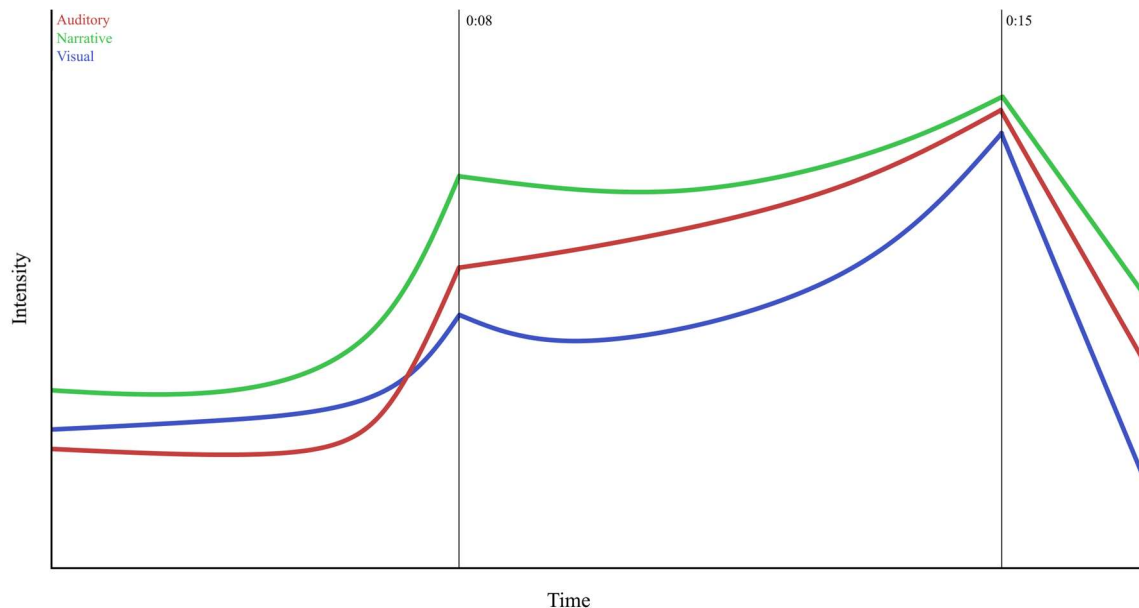
The Plunge as Definitive Decision

There are many plunges that occur throughout the science-fiction series *The Expanse* (2015–22), ranging from daring acts of courage to horrific acts of violence, but none have stood out so clearly to me as a simple decision to log a distress call in the premiere episode.[132] After picking up a mysterious distress call, the captain of the Canterbury decides it must be pirate bait and instructs the crew to erase it from their records. The ship's executive officer, James Holden, goes along with the order at first, but is clearly uncomfortable with not seeing whether the message was authentic. The scene in question takes place later while the rest of the crew is asleep, and Holden is alone on the main deck. He pulls up the distress call and listens to it again, gradually sifting through the static and the gentle chirping of the beacon to uncover a hidden recording of a woman pleading for somebody to help her. As he raises the volume on the

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[132] *The Expanse* https://mediaspace.umn.edu/media/t/1_w69m1vil

computer (and consequently for the audience), the music builds and the camera zooms in (**Example 4.9**).

Example 4.9: *The Expanse* S1:E1 (defiant)
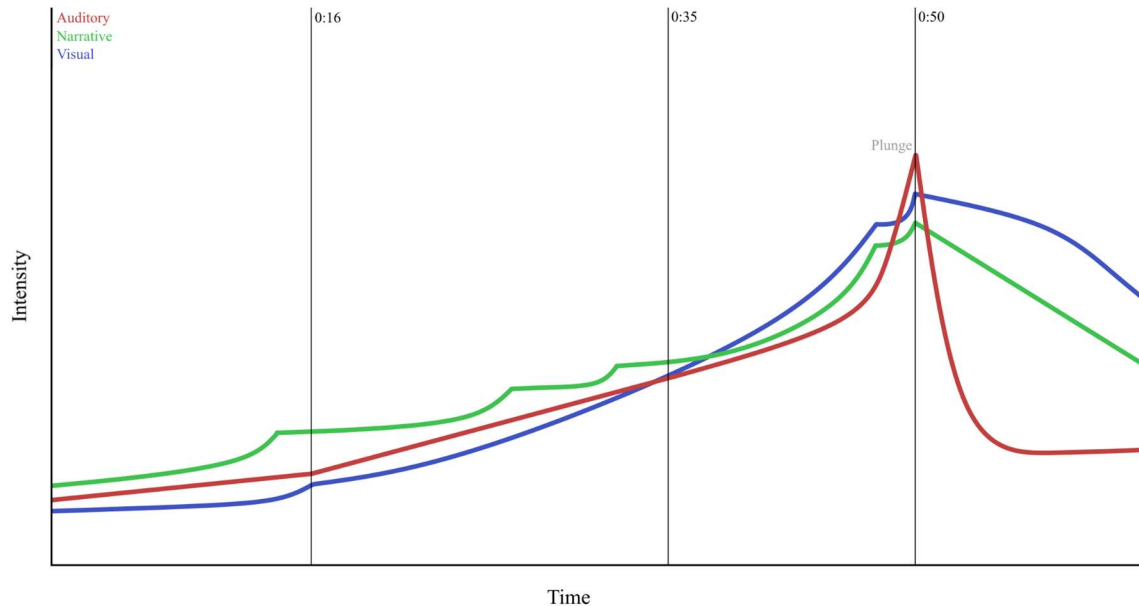
The definitive action that cements the climax of the plunge is not Holden jumping out of an airlock to save her or anything quite so drastic, but merely him turning his head to see if anyone else is listening. This action demonstrates his decision to go against orders and log the call, wordlessly bringing us into his inner turmoil and advancing the plot. Although the audience doesn't know it as the scene unfolds, this plunge has severe repercussions for the overall narrative of the show.[133] It is Holden's action that forces the Canterbury to respond to the beacon and to eventually be destroyed as part of a cover-up. The first episode spends much of its time exploring the mundane interpersonal relationships of the crew, heightening the impact of his decision to jeopardize his friends' safety even more.

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[133] This is assuming that the audience is unfamiliar with the plot of *Leviathan Wakes*, the novel by James S.A. Corey (pen name of authors Ty Frank and Daniel Abraham) upon which the television series is based.

This type of plunge happens frequently in slow-burning television dramas like *The Expanse* or *Game of Thrones* (2011–19), but also occurs in the more curtailed dramatic arc of films. A prime example of such a plunge can be found during the "Council of Elrond" scene in the first *Lord of the Rings* (*LOTR*) film, when Frodo volunteers to carry the Ring to Mordor.[134] As envoys from various factions of Middle Earth argue about who should take the Ring, Frodo stares at the artifact intently. The sounds of fighting fade away and ominous music builds. The camera focuses on Frodo's face and, following a swell in the auditory track, captures him turning his head with a look of determination. This is the moment of the plunge, where he *decides* to take the Ring.

4.1.2. Exceptional Uses: Narrative Repurposing and Associative Thematization

Gandalf's Sacrificial/Heroic Plunge

Towards the central climax of the 2001 film adaptation of *Lord of the Rings: The Fellowship of the Ring* (*FOTR*), the heroes fight a seemingly endless army of orcs on their way through the Mines of Moria. Surrounded, they ready themselves for a valiant last stand when a distant roar echoes throughout the mine and stops everyone in their tracks. An ominous orange glow appears in the distance, causing the orcs to scatter in fear. Gandalf orders the party to flee when he realizes that the enemy approaching them—an ancient demon called a Balrog—is too powerful for them to fight head on. An extended chase sequence leads the party to the Bridge of Khazad-dûm.[135] Gandalf knows that escape from the mines lies just beyond the yawning abyss and that the narrow bridge

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[134] *Lord of the Rings: Fellowship of the Ring*, Council of Elrond
https://mediaspace.umn.edu/media/t/1_cd6j7jpl
[135] *Lord of the Rings: Fellowship of the Ring*, Bridge of Khazad-dûm
https://mediaspace.umn.edu/media/t/1_zog7ehfd

is their only hope for salvation. He takes up the rear as the party crosses one-by-one. He then turns to face the creature, exclaiming, "you cannot pass!" (0:45, in the clip) The others look on helplessly as the old wizard squares up against the towering behemoth. Gandalf deflects an attack from the Balrog before shouting, "you shall not pass!" as he slams his staff down onto the bridge with a violent flash of light (1:30). What appeared to be mere posturing proves to be a strategic choice when the Balrog charges Gandalf, the now weakened bridge crumbling under its weight. The Balrog lets out a roar as it falls into the chasm to its demise.

The scene up to this point has capitalized on the narrative intensity that had been building since the fellowship entered the mines. The Balrog is framed as the ultimate adversary the party has faced, more fearsome than orcs, ringwraiths, and even the Watcher in the Water.[136] For a few brief seconds after it falls into the pit, it seems as though Gandalf might have defeated it. The loud and discordant music that accompanied the battle—comprising primarily notes from D dorian—swells to a climax on a cluster chord (D-E-F-A-B-C) and fades while an extended overhead shot shows its descent into the darkness as it fades from view, Gandalf breathes an exasperated sigh of relief as he turns to leave. If the fight was won, this is how it might look; a flaming whip reaches up and coils around his leg, however, tripping him before he can rejoin the others (1:53). He falls to the ground and barely manages to grab on to the ledge as dark brass instruments blare out planing, descending minor triads (see **Example 4.10** below). Frodo cries out his name as Gandalf tries to clamber back up, but to no avail. As the enormity of the situation sets in, the orchestration is reduced to a single sustained D and the shot settles

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[136] This is the name given to the Kraken-like creature the fellowship encounters outside the Door of Durin before entering the Mines of Moria.

on a close-up of Gandalf's face. With a final desperate breath, he utters, "fly, you fools,"

before falling into the darkness below as the final note fades (2:11).

Example 4.10: *Fellowship of the Ring,* **Gandalf's fall transcription**
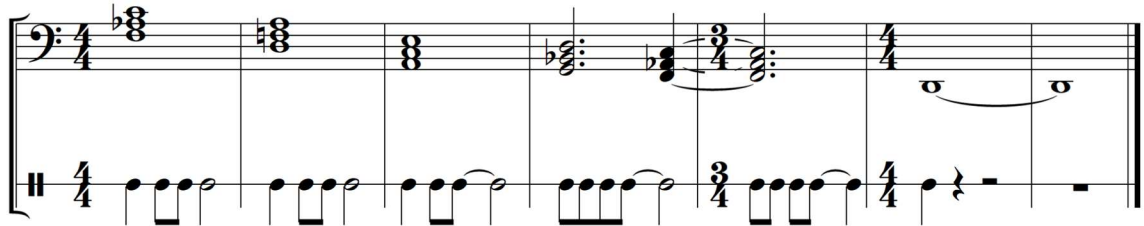
Example 4.11: *Fellowship of the Ring,* **Gandalf's sacrificial plunge**
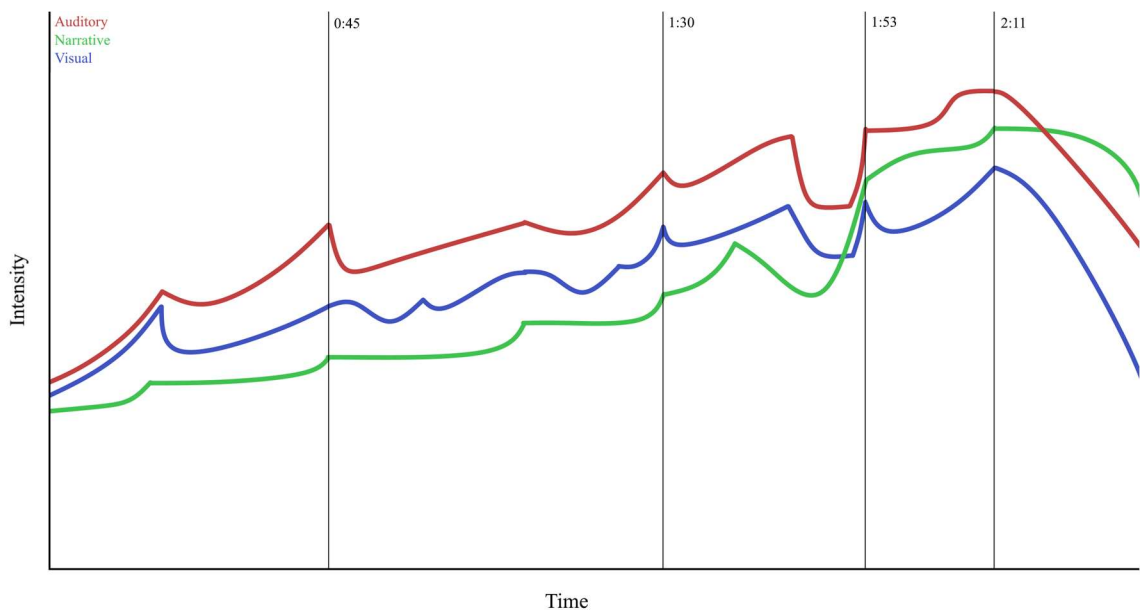
The presentation of this moment is prototypical for the sacrificial plunge

archetype. The action seems to have subsided after building to the climax where the

Balrog charges Gandalf, but then tension quickly builds back up as the latter is pulled to

the precipice. The tension heightens through typical narrative and visual means, while the

sonic tension is created through a strategic reduction of texture to near silence via the

sustained bass note. The scene that follows depicts the fellowship's realization of

Gandalf's demise and their grief surrounding it through Frodo's desperate cry and

Aragorn's dismayed expression. They have just lost their most wise and powerful ally and their hope of success along with him.

At least, that is what they (and the audience) are led to believe. Gandalf makes no appearance throughout the remainder of the film and we are left to assume that he has died. This scene is reconfigured, however, at the opening of the second film, *The Two Towers* (*TTT*, 2002), to show that Gandalf did not give up, but rather decided to follow the Balrog down the pit and finish the fight.[137] After hearing faint echoes of the original fight scene, the camera zooms in from a sprawling shot of snow-covered mountains to a reprisal of the battle from *FOTR*. Gandalf once again tricks the Balrog into stepping on the weakened bridge and, likewise, he is again tripped by the creature's whip (0:16, 0:38). The same shots and dialogue accompany the scene until this moment while the music is rescored slightly and transposed up to E rather than D.[138] In the first film, Gandalf exclaims, "fly, you fools!" before the camera pans to a down-ward angle that shows him falling, accompanied by total silence in the soundtrack for several seconds before Frodo cries out, "no!" However, in the second film, Frodo lets out his cry *before* Gandalf lets go and continues yelling his name afterwards during his descent (1:00). The subtle reordering of these events reframes Gandalf's action to give the character more agency—making it seem as though it is his choice to let go (in defiance of Frodo's protestation) rather than an inability to hold on (prompting Frodo's desperate exclamation). At the moment he releases his hold, a descending B-A-G-F♯ brass motive blares out and the camera suddenly shifts to an oblique angle shot that quickly pans to

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[137] *Lord of the Rings: The Two Towers*, Bridge of Khazad-dûm
https://mediaspace.umn.edu/media/t/1_9qsem29w
[138] D minor is often associated with the forces of evil throughout the trilogy, so it is appropriate that the music be transposed out of that key here.

follow his descent. The music builds, reprising the 'Moria' motive heard during the battle

earlier to suggest that their conflict is not over quite yet. Gandalf rushes towards the

Balrog, grabbing his sword along the way as the camera tracks his fall. Just as the music

reaches a climax, Gandalf lets out a yell and charges his enemy.

Example 4.12: ***The Two Towers*, Gandalf's heroic plunge**
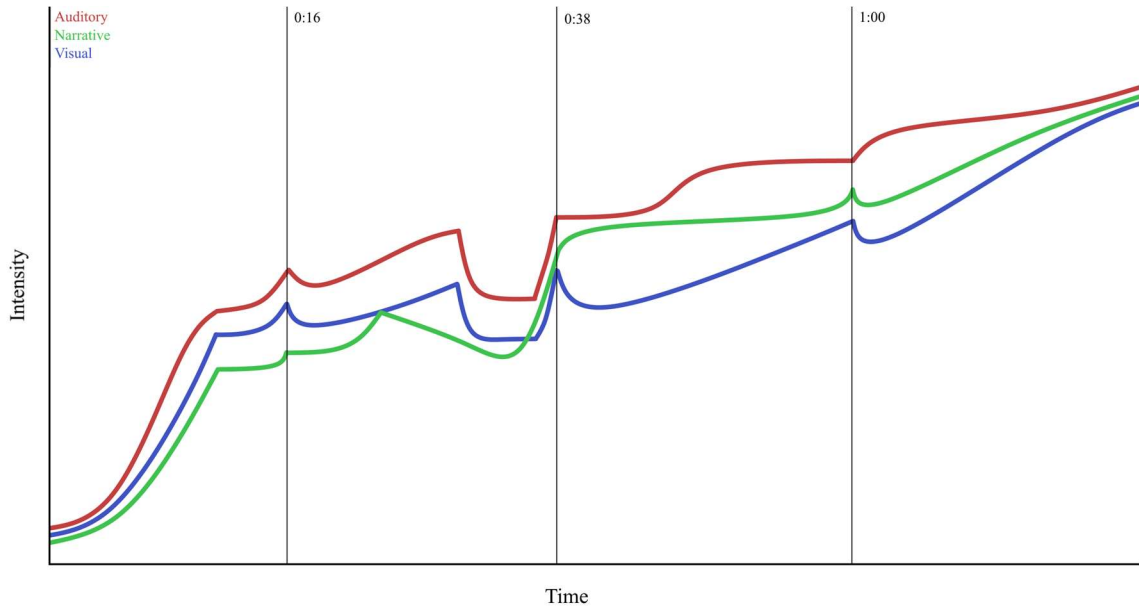
All of this serves to make two very different types of plunges out of the same

moment. In *FOTR*, Gandalf takes a *sacrificial* plunge by presumably giving his life to

fend off the threat, whereas in *TTT* he takes a *heroic* plunge by charging headlong into

danger. While it may seem like a minor alteration or perhaps even an editing oversight,

the shift of Frodo's exclamation allows the *TTT* scene to pivot directly into another

plunge. This narrative repurposing speaks directly to the affective power of the plunge,

namely its ability to subtly shift the dramatic impact of a scene.

The 'Call of the Ring' and the Deceptive Plunge

One of the central motifs in the *Lord of the Rings* trilogy is the call of the Ring:

the insidious allure to succumb to the Ring's evil power. The Ring is described as having

a will of its own, always seeking to manipulate its bearer and return to its creator, the Dark Lord Sauron. This is most evident when a character is tempted by the Ring in some way, whether that be to keep it, use it, or take it. Many of the times this occurs, it is accompanied by a deceptive plunge that starts but does not complete the schema. Both types of deceptive plunges (characters stopping themselves and characters being stopped by an outside force) occur in *LOTR* when characters are put up to the task of resisting the Ring.

The central protagonist, Frodo, often struggles with the temptation to put the Ring on, which would reveal his location to Sauron and the nefarious ringwraiths. Sometimes he can resist on his own and sometimes someone or something else stops him. Boromir is frequently tested throughout *FOTR* before he finally tries to steal the Ring, leading to the breaking of the fellowship. The creature Gollum attempts to take the Ring from Frodo on several occasions throughout the trilogy, resulting in the dramatic final confrontation in which Gollum falls into the fires of Mount Doom with the Ring in hand. However, perhaps the most emphatic use of the deceptive plunge for such scenes comes during the Fellowship's visit to Lothlórien in *FOTR*.

After escaping the Mines of Moria, the fellowship makes their way to a forest populated by elves. They are given shelter by their leaders—Lady Galadriel and Celeborn—and spend time resting before the next leg of their journey. Frodo is shown a vision of a possible future where Sauron triumphs and subjugates the world, leading him to offer the Ring to Galadriel. [139] She contemplates the power she could wield with it, launching into a monologue about how she would become a "queen, not dark, but

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[139] *Lord of the Rings: The Fellowship of the Ring*, Galadriel's Test
https://mediaspace.umn.edu/media/t/1_cq3zuv1b

beautiful and terrible as the dawn! Treacherous as the sea! Stronger than the foundations of the Earth! All shall love me, and despair!" As she does this, she glows with an ominous green light and speaks with her voice doubled at dissonant intervals below (generating a more stereotypically masculine sound, as if the voice is not her own) in a sinister display of her power and majesty. When she finally relents, the swelling music diminishes and the glow fades, indicating her quelling of the dark desire to take the Ring for herself.

Example 4.13: *Fellowship of the Ring*, **Galadriel resists (subverted deceptive)**
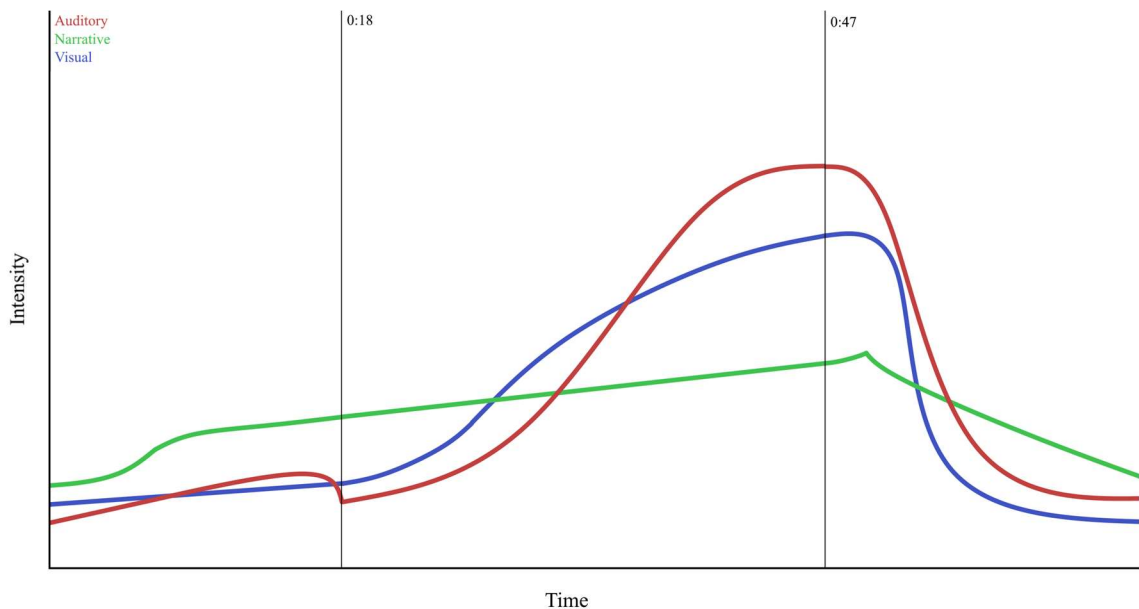
4.2. Staged Media

4.2.1. Analytic Issues

Temporality

As suggested previously, the plunge originated in staged media long before the advent of film. While filmic media may be the main point of reference for many twenty-first century consumers, the plunge occurs frequently in opera, ballet, and musical theatre as well. Works in these formats often adhere to genre-specific expectations regarding

overall duration, narrative pacing, and segmentation. Scenes in filmic media usually do not have strict stylistic requirements, while set numbers in ballet and arias in opera conform to standard formal designs (or, in the case of more recent compositions, are at least in dialogue with such forms). The pacing of narrative information is often slow— important and decisive plot-points are built-up for a long time before they occur, and their ramifications frequently pan out slowly. What may constitute a single narrative event may take several minutes to unfold on stage. There is a good reason for this—many theatergoers only get the chance to see a production live once, making it imperative that the story be easily understood by the audience.

Given these parameters, it is not uncommon for a plunge schema to be extended significantly, with the intensification and abatement phases being composed of entire scenes or numbers. Much of the storytelling occurs through *pas de action* (in ballet), recitative (in opera), or dialogue between songs (in musical theater), sometimes resulting in rapid-fire narrative highpoints coinciding with musical lulls. Conversely, the highpoint itself can be drawn out over a significant period of time. In such cases, the apex of the plunge can take place multiple times (or with multiple false articulations) or it can be extended through the dilation of narrative time (much like slow-motion scenes in film). While this plays out differently in each case, the extended nature of plunges in these media is worth articulating because of the challenge it poses for analysis. Given the sometimes-piecemeal presentation of narrative events, it is often best to conceive of scenes as extended regions of dramatic action that prolong a single plot point over several minutes. In such cases, auditory and visual climaxes may not temporally align with the respective decisive moment in the story, but they are no less significant in its articulation.

Directorial Discrepancies

Another facet of staged media that sets them apart from their filmic counterparts is their distinct lack of fixity. By the time they reach audiences, movies and television shows are often set in stone (barring director's cuts, remakes, and the like). While they might be viewed in different contexts and through different screens, the images and sounds that are played are the same from one iteration to the next. This is not the case for live performances. Multiple performances by the same company will inevitably have minor discrepancies, from slight tempo alterations to dropped lines, but can also differ more substantially in terms of alternate cast members and even eliminated scenes. Different companies interpret and perform the material differently as well, resulting in slight alterations to schemas like the plunge. More substantially, directors and choreographers will often construct entirely new versions of pieces to tell new stories, resulting in related, but fundamentally distinct, iterations of the same piece. It is not uncommon for operas or ballets to be set in a different time-period or for major characters to be totally rewritten.[140]

A related issue is the editorialization that inevitably takes place when staged media are filmed. The experience for a live audience is always going to be different than for those who view a ballet or opera through a screen due to acoustic discrepancies and different viewing angles; however, the additional mediation of video production also tends to add cinematographic techniques like close-ups and cuts that superimpose another communicative level onto the already semiotically rich assortment of visual, sonic, and corporeal expression. One way to counter these issues is to analyze multiple versions of

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[140] A remake of a film is the closest approximation of this phenomenon in filmic media.

the same piece, comparing their interpretive differences. Another approach is to embrace this added layer for what it is, acknowledging the role it plays in bringing a particular iteration of a text to life. In this dissertation, I focus on one version of each staged work and attempt to approximate the visual experience without the extra layer of mediation.

The Performative Dimension

While watching a staged performance, it is not uncommon for the narrative to become subordinated to sheer spectacle. Highly ornamented arias or technically impressive dance sequences have a way of drawing attention away from the story and directing it towards the performers' prowess. In such cases, the performance can take on another avenue of intensification that I call the *performative dimension*, which constitutes another channel that contributes to the communication and perception of synchronization schemas. Impressive feats like sustained high notes and rapid ornamentation (in opera and music theater) or exceedingly difficult dance moves such as *grands jetés* or multiple *fouettés* (in ballet)[141] highlight the performer's exceptional abilities. Such advanced displays of virtuosity do not often happen in isolation, they usually occur within the context of a particularly difficult-to-perform number, adding a sort of marathon element to the performance. As spectator-listeners, we experience sympathetic (or mirror neuron) responses to such spectacular displays—this contributes to our comprehension of moments like the plunge by making us embody the strain and effort we perceive within the performer.[142]

Paratexts

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[141] See this 2014 video from the Washington Post, in which several dancers discuss their most difficult moves: https://www.youtube.com/watch?v=n7AaZhEOJSY

[142] Zbikowski, 2017, 106–110.

Many staged performances rely on concert programs or supertitles to communicate key narrative information to the audience. These often serve to clarify characters' actions and ambiguous moments, either ahead of the performance or in real-time as the story unfolds. Ballet clearly benefits from such framing, but many opera and musical theater spectators benefit from assistance in this regard as well—it is notoriously difficult to hear and comprehend sung text, particularly when multiple voices are involved and especially in languages foreign to the listener.

4.2.2. The Plunge in Ballet

From the perspective of the plunge, ballet is by far the most complicated form of staged media to analyze. This is due, in large part, to the difficulties of communicating coherent narratives without the aid of language. Stories are told through the dancers' gestures and expressions, their costumes and props, and the set design and lighting, along with any paratextual information provided in the form of concert notes. It is also not uncommon for characters' actions to be extraordinarily exaggerated, drawn out in time as well as space. Beyond all of these problems, there is the issue of ballet's non-representational traditions and techniques. *Corps de ballet* sequences, extended *divertissements*, and the like exist primarily to demonstrate the company's talent rather than contribute to any unfolding narrative.[143] Stories are usually told through pantomime during *pas de action* in between such abstract dances, which can result in a discontinuous flow of narrative information.

Giselle's Death

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[143] Definitions for many of these terms can be found here: https://ballethub.com/ballet-terms-dictionary

Giselle (Adam, 1841) is widely considered to be a masterwork in the classical ballet canon, with many productions staged all over the world each year. The original score by Adolphe Adam remains largely unchanged, while the most popular choreography comes from Maurice Petipa's revivals in the early twentieth century. In this version, a young nobleman named Albrecht is smitten by the eponymous young peasant girl, Giselle, despite his betrothal to the Count's daughter. Albrecht disguises himself as a humble villager to hide his identity so that he might court Giselle. The two fall madly in love, but another of Giselle's suitors, Hilarion, seeks to expose Albrecht's secret. At the end of the first act of the ballet, Hilarion shows Giselle Albrecht's sword, his hunting horn, and eventually his fiancée. When she discovers her lover's deception, she is heartbroken and humiliated. She dances until her heart gives out and she dies in Albrecht's arms in front of the whole village.[144]

I read this scene as a two-fold plunge, in that Hilarion takes definitive actions in exposing Albrecht's deception and Giselle takes a definitive action that leads to her demise (dancing herself to death). Although Albrecht's selfish and shameless infidelity is ultimately to blame for Giselle's fate, it is Hilarion's actions that are framed musically and visually as plunges—perhaps to frame him as more of a villain or to diminish Giselle's autonomy. The staging in question features many of the challenges posed above: the scene takes anywhere from seven to ten minutes to unfold depending on the tempo, there are several points of musical and visual climax, and complex narrative devices are communicated without the aid of language.

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[144] It is worth noting that, in the original choreography by Jean Coralli and Jules Perrot, Giselle instead stabs herself with Albrecht's sword. Where did I get this?

The scene opens with Hilarion entering and interrupting a large company dance, forcibly separating Albrecht and Giselle. He gesticulates angrily, signaling that Albrecht is not who he says he is. Giselle is incredulous until Hilarion shows her Albrecht's sword, revealing the symbol on it that suggests he is a nobleman. This happens just before Reh. 67, where a large orchestral swell builds into a poignant half-cadence before ushering in a frantic theme (**Example 4.14**). Giselle is shocked and confronts Albrecht, who of course denies it. This theme reappears at Rehs. 71, 72, and part way through 79, always marking the ultimate outcome of some narrative turning point.

Example 4.14: *Giselle* **Act 1, No. 8, Reh. 67, theme**

The next plunge also belongs to Hilarion, building up to the moment he takes the hunting horn and uses it to call back the Count's hunting party (Reh. 71). This eventually leads to the arrival of Albrecht's betrothed and the revelation of their involvement (Reh. 72). Giselle again confronts Albrecht, who is no longer able to deny his nobility. She proceeds to oscillate between weeping and reliving moments they shared by miming their previous actions. At Reh. 75, an ominous tremolo melody begins in the violas, descending chromatically from G to D and returning. Giselle picks up Albrecht's sword and holds it aloft with the blade pointed towards her heart, suggesting that she is going to stab herself with it. After four iterations of the chromatic line, the whole orchestra plays two fortissimo G-A♭-G patterns in sync with Giselle's steps towards downstage right. This portion of the scene is set up as a prototypical suicidal plunge, but Giselle is

prevented from taking her own life by Hilarion.[145] As the orchestra lands on a half-cadence, he steps in to stop her and pulls the sword from her hands. Hilarion's intervention transforms the moment into a negated deceptive plunge.

Example 4.15: *Giselle* Act 1, No. 8, Reh. 75 (negated deceptive)
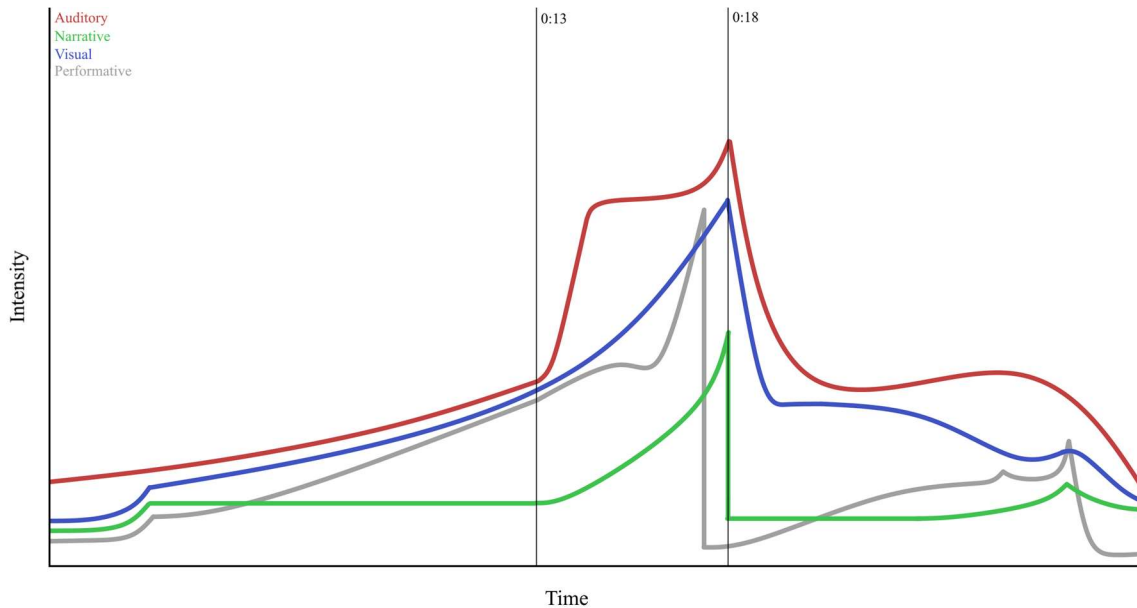
Although Giselle was prevented from going through with her contemplated suicide, her heart is broken beyond repair. She again fluctuates between lamenting and reminiscing up until the moment her heart starts to give out at Reh. 79.[146] She frantically rushes around the stage, the music building to yet another climax as she runs into her mother's arms and then Albrecht's. Just before they embrace, she falls dead and ushers in yet another instance of the theme presented above. Again, the moment is framed musically and choreographically as a plunge, but this time the schema is fulfilled (**Example 4.16**).

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[145] *Giselle*, deceptive plunge https://mediaspace.umn.edu/media/t/1_4ei3zj8g
[146] *Giselle*, Giselle's death https://mediaspace.umn.edu/media/t/1_tse2n4j4
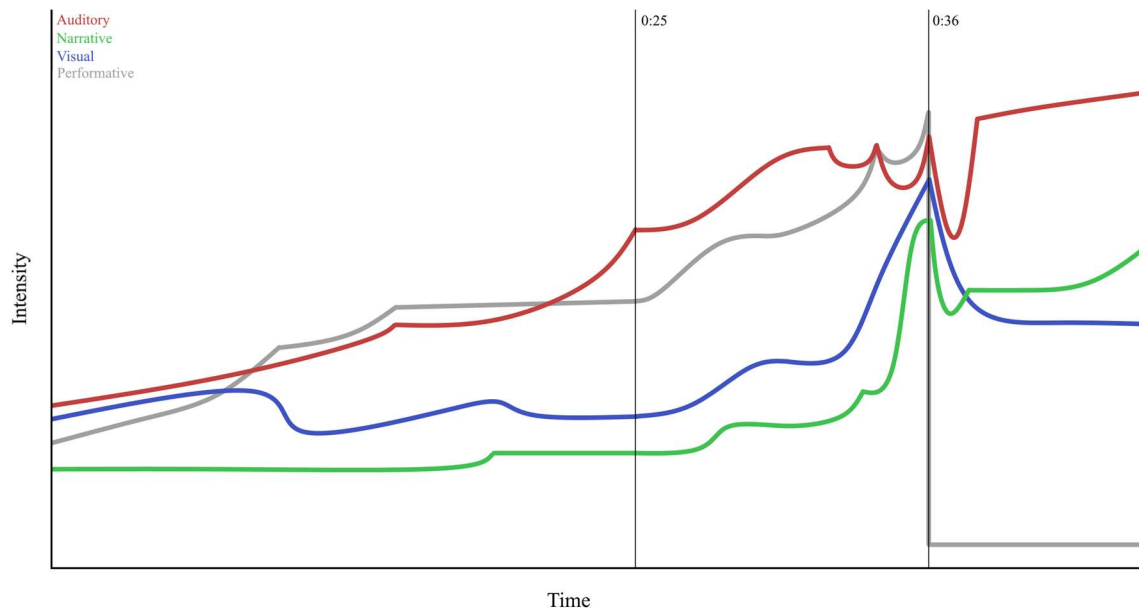
Odette's Apotheosis

Tchaikovsky's *Swan Lake* (1877) is yet another work in the ballet canon that incorporates a plunge that is central to the plot. Siegfried falls in love with Odette, but the evil wizard Rothbart curses her to be a swan until a man who has never loved before pledges his eternal love to her. Long story short, Siegfried is tricked into pledging his love to Odile, Rothbart's daughter, thereby betraying Odette. Different versions portray the ending differently, but the version most are familiar with depicts Odette throwing herself into the lake rather than face being cursed for all eternity, joined shortly thereafter by Siegfried who follows suit out of remorse. Their love proves to be stronger than death, ending the curse and causing Rothbart to die. In other versions, neither of the lovers die, instead staging the suicidal plunge as a heroic one where Siegfried attacks and kills Rothbart, freeing Odette and the other swans from their curse. Some versions are even more unique—one of my favorites involves Rothbart forcing Siegfried to follow through with marrying Odile while Odette remains a swan in perpetuity. Given the length of the

scene and the huge variability between one production and the next, I will discuss how the framing of the plungeable moments alter interpretations of the works rather than provide intensity graphs for each.[147]

There are two clear-cut musical moments in the finale that are used (to varying degrees of effectiveness) to convey plunges in the different endings. Each involves a lengthy build-up of tension and a substantial ritenuto before leading into the recurring "Swan" theme. The first plungeable moment occurs at "Alla Breve. Moderato e maestoso (Reh. 23)," with a lengthy build-up and a timpani roll contributing to a sense of arrival as the "Swan" theme returns in B-minor. Choreographers often use this as an opportunity to highlight some kind of tragic narrative moment, whether that be Odette and Siegfried parting ways temporarily (as in happy versions, where it is not necessarily a narrative plunge) or Odette throwing herself into the lake (as in tragic versions, where it is narratively a suicidal plunge). While this appearance of the theme is highly dramatic, it is not developed in a thematic sense, as it is during the second plungeable moment. Following a shorter build-up period, the "Swan" theme arrives in a triumphant B-major at "Meno mosso (Reh. 26)," creating an opportunity for an altogether different plunge. In many of the happy-ending versions, Siegfried attacks Rothbart and rips off his wing and thereby undoes the curse on Odette and the other swans (creating a heroic plunge). In productions where Odette dies, this moment is sometimes used to highlight Rothbart's anguish over Odette's death (making it not a plunge). In others where Rothbart maintains his control over Odette, it appears as a maniacal celebration of his victory (sometimes framed as a villainous plunge).

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[147] Clips of eleven different versions of the ending, ranging from romantic to tragic, can be found at https://www.youtube.com/watch?v=RuHI30slv6A.

Tybalt's Murder

One of the most performed and highly praised narrative ballets is *Romeo & Juliet* (*R&J*, 1938), with music by Sergei Prokofiev. In the tradition of Russian *dramballet*, *R&J* adheres to many of the requirements of the Soviet cultural project and strives for the direct expression of a verbal, vernacular text.[148] The moment that might be considered Shakespeare's most iconic plunge—the double suicide of two lovestruck teenagers—is rewritten in Prokofiev's version, offering a happy ending for the two instead.[149] While the merits of such an artistic choice have been widely debated, one key plunge from the original text was maintained: the scene where Romeo kills Tybalt in a fit of vengeful fury. Tybalt is framed as a primary antagonist in this balletic rendition of the story, acting as a provocateur throughout and challenging Romeo at every turn. Their rivalry comes to a head after Tybalt murders Mercutio, inciting Romeo to avenge his friend.

Romeo takes up a sword and engages in an extended fight scene with Tybalt. Such a scene requires an immense amount of coordination and physical exertion, contributing to an ever-growing sense of tension in the performative dimension.[150] The battle is accompanied by what Karen Bennet calls 'fight music,' given its recurring association with conflict throughout the ballet.[151] The fight is one of those immutable narrative moments that does not change significantly across productions, but when and how Romeo deals the mortal blow to his rival shifts. In most versions, the moment when

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[148] Christina Ezrahi, *Swans of the Kremlin: Ballet and Power in Soviet Russia* (Pittsburgh: U of Pittsburgh, 2012), 46–51.

[149] Simon Morrison, *The People's Artist: Prokofiev's Soviet Years* (New York: Oxford University Press, 2009), 31–40.

[150] See this 2019 video of Gary Avis (Tybalt) and Matthew Ball (Romeo) sharing their experience of rehearsing and performing their sword fighting scenes in Romeo and Juliet (Kenneth MacMillan choreography). https://www.youtube.com/watch?v=cGJZ0Txspfo

[151] Karen Bennett, "Star-cross'd Lovers: Shakespeare and Prokofiev's 'pas de deux' in Romeo and Juliet," *The Cambridge Quarterly* 32.4 (2003): 311–47.

Romeo stabs Tybalt through the stomach coincides with a registral highpoint in the auditory channel at Reh. 280 (as in the MacMillan version[152]) or with the B-C#-D-E-F (01346) cluster in the following measure (as in the Lavrovsky choreography[153]). After a rapid B-C tremolo figure, this leads to a series of lower, accented F-G-A-Bb (0135) clusters played fifteen times, usually accompanying Tybalt thrashing about in agony. Tybalt falls to the ground for the last time at the same moment a forte G minor-seventh chord swells and cadences into the C-minor dirge that comprises the next number (No. 36: Finale / Reh. 281). In these versions, the decisive action takes place at Reh. 280 (Romeo stabs Tybalt) and the tension is drawn out until Reh. 281 (Tybalt falls dead).

Example 4.17: Tybalt's murder (MacMillan version, villainous)
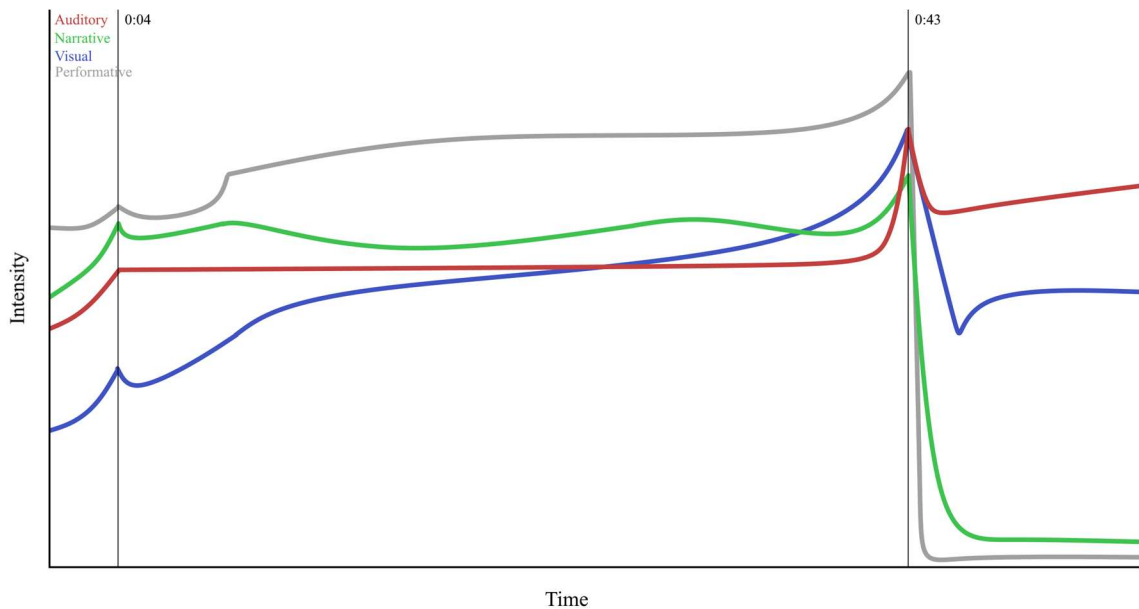
The version choreographed by Nureyev proves to be the outlier, shifting the moment of the fatal blow up to Reh. 281 so that it coincides with the dramatic musical

[152] *Romeo and Juliet* (MacMillan) https://mediaspace.umn.edu/media/t/1_arcqbjcj
[153] *Romeo and Juliet* (Lavrovsky) https://mediaspace.umn.edu/media/t/1_5u57i16i

climax.[154] This change frames Tybalt as a more relentless villain and Romeo as a more reluctant killer. Rather than the fatal blow being a reaction or accident, Romeo is forced to kill Tybalt out of self-defense. Romeo repeatedly attempts to disengage, but Tybalt persists in his provocations. The villainous plunge schema is delayed throughout Reh. 280 and, although there is action in the performative channel, the level of intensity remains in near stasis until the swell into the downbeat of the following number. While it does not make it better or worse, the change does put the scene's dramatic design more in line with the prototypical villainous plunge, perhaps contributing to the version's more cinematic feel.

Example 4.18: Tybalt's murder (Nureyev version, villainous)
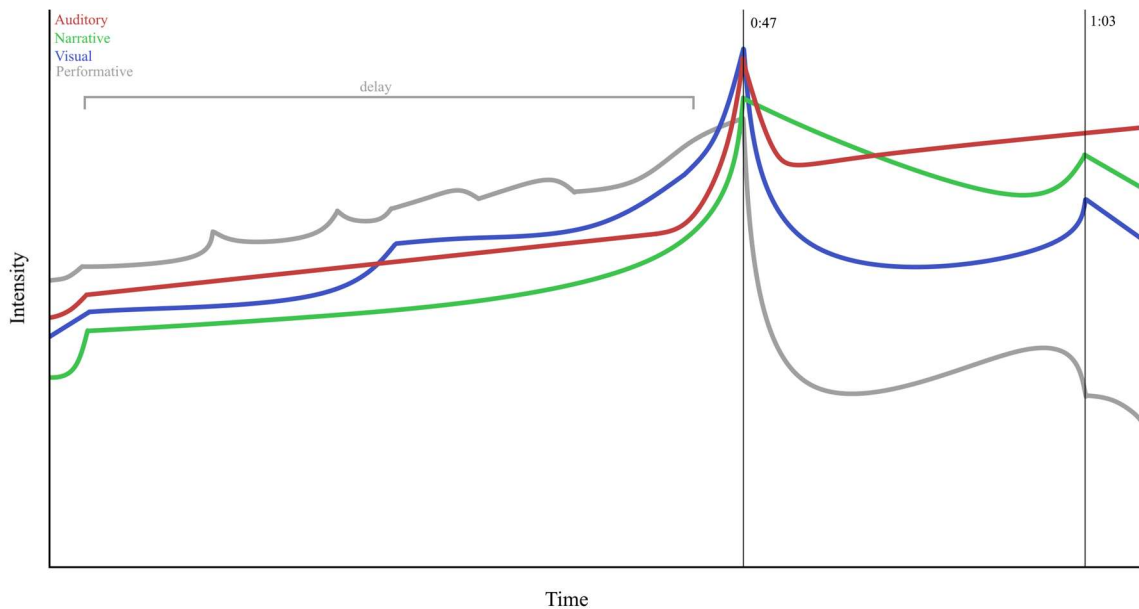
4.2.3. The Plunge in Opera

Operatic plunges function in much the same way as those found in ballet, but with the additional semiotic layer of words. Oftentimes this aids in clarifying characters'

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[154] *Romeo and Juliet* (Nureyev) https://mediaspace.umn.edu/media/t/1_vrecfqla

emotions and actions. For audiences that lack the skills needed to parse out the words through the music, this might not help at all; in such cases, consumers must rely on set design and body language, just as with ballet. The recent advent of coordinated superscripts helps audiences reckon with foreign languages or overlapping voices, making opera more accessible. Regardless of the intelligibility of the text, the more rigid formal conventions of opera dictate that highly dramatic narrative moments often coincide with powerful and passionate arias, sometimes going so far as to coordinate definitive actions to the climaxes within them. Various techniques employed by some operatic composers, such as the groundswell in verismo opera, generate musical intensity in predictable ways and frequently serve as potent synch points between the auditory, visual, narrative, and performative channels.[155]

Rosina's Letter

One fantastic example of an operatic plunge comes from Rossini's *Il Barbiere di Siviglia* (*The Barber of Seville*, 1816). This plunge centers around Rosina's aria "Una voce poco fa" at the beginning of the second scene of Act I and her decision to pursue her new suitor, Lindoro (who is Count Almaviva in disguise), instead of her guardian Bartolo who wants to marry her for her inheritance. In this scene, she resolves that she will do whatever it takes to marry Lindoro, vowing to play a hundred tricks to get her way. The definitive action that takes place is quite benign—she writes a note for her new suitor— but it is emblematic of her rebellion against her guardian's wishes and her determination to dictate her own future despite her societal position.

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[155] Lee, "Climax Building in Verismo Opera"

This aria is especially interesting in terms of the plunge because of its popularity and reputation as an impressive coloratura soprano piece. Singers will add gratuitous ornamentation to the passages leading up to the climaxes in the piece, serving to intensify the build-up even more and add an extra-musical parameter to the plunge through the performative dimension. It is a plunge not only for the character, but also for the singer displaying their virtuosity. A prime example can be seen in the version of the aria performed by Kathleen Battle during a recorded 1988 Metropolitan Opera production.[156]

As is frequently the case with plunges that occur within an aria, there are multiple highpoints within the auditory and performative channels which don't necessarily align with the narrative action. In Battle's performance, these occur during the two cadenzas at the end of the introduction (2:11–2:52) and at the end of the aria (6:15–6:45). The clear climaxes produced by these moments serve as double articulations of the plunge, even though neither coincides with the decisive action. Rosina writes the letter during an orchestral interlude (2:54–3:19) after the lengthy introduction. In the first cadenza, she sings, "sì, Lindoro mio sarà; lo giurai, sì." (yes, Lindoro shall be mine; I swear it.), culminating in a peak on a high D appoggiatura that resolves to ^5 above the cadential V chord.[157] In the build to the final cadence, she sings, "e cento trappole prima di cedere farò giocar, farò giocar." (and I will play one hundred tricks before I yield.).[158] Battle uses the same cadential figuration this time, but this second cadenza involves faster moving passages and more scalar motion than the previous one. The graph in **Example**

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[156] *Il Barbiere di Siviglia* https://mediaspace.umn.edu/media/t/1_2ivlvaza
[157] The aria is written in E major in the original score but is transposed to F major in this performance.
[158] Translation by Ryan O'Dell.

4.19 attempts to capture the dual auditory/performative articulation of the plunge in relation to the narrative/visual elements.[159]

Example 4.19: Rosina vows to pursue Lindoro (defiant)
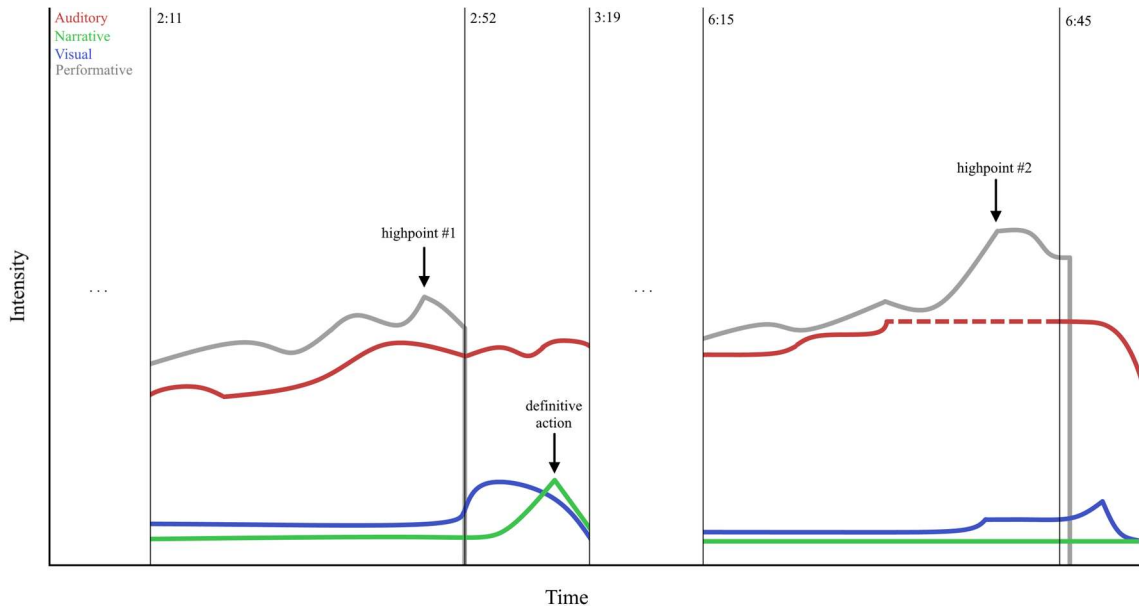
Gilda's Sacrifice

Verdi's *Rigoletto* (1851) is a tragedy that revolves around a curse that haunts the eponymous jester, eventually leading to his daughter Gilda's death. Gilda falls in love with the Duke of Mantua under false pretenses and is later kidnapped at his behest. Once she is released, Rigoletto swears he will seek vengeance, though Gilda still professes feelings for the duke. Rigoletto arranges to have the duke murdered by an assassin-for-hire and his sister, Sparafucile and Maddalena. The latter lures and seduces the count but falls for him in the process. Gilda overhears as Maddelena begs Sparafucile to spare her new-found lover, but he says he will only do so if another victim can be found before

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[159] N.B.: I treat the "performative" channel of this graph exclusively as a measure of perceived intensity of Battle's *vocal* performance. This is not to discount the choreography, but to highlight what I think to be the most evocative part of her performance.

midnight. Seeing a chance to save the man she still loves; Gilda resolves to sacrifice

herself in his stead. She knocks on the door and presents herself as a helpless beggar—the

perfect target for two murderers looking to cheat their contract.

Gilda's sacrificial plunge takes place during the trio "Se pria ch'abbia il mezzo"

and involves several highpoints that coincide with definitive actions. The first takes place

as Gilda knocks (six measures before Reh. 44). The musical backdrop suddenly shifts

from low pianissimo strings to fortissimo full orchestra trills via a massive glissando just

as she finishes the phrase "Ah, s'egli al mio amore divenne rubello, io vo' per la sua

gettar la mia vita." ("Ah, even if he betrayed my love, I shall save his life with my

own!").[160] The loud and texturally dense scoring is prolonged for a measure, dropping

back to a pianissimo just as Gilda raps on the door (0:24 in the clip). Sparafucile and

Maddalena debate whether it was the wind, leading Gilda to knock again with the same

musical anticipation. The next section of the trio involves the assassin agreeing to kill the

stranger and Gilda begging for her father's forgiveness. As all three vocalists align on the

word "salvar," yet another glissando culminates in a fortissimo E dominant-ninth chord

in first inversion ($E^{\flat 9}$/G♯, or $V^{\flat 7/6/5}$/V in the D major tonality) just before Reh. 46. Gilda

proceeds to knock once more (1:33), reiterating the narrative impulse of the previous

knocks. The assassins beckon her to enter and, as she does, Sparafucile stabs and

mortally wounds her.

The actual sacrificial plunge in this scene occurs with Gilda's first knock,

cementing the impact of the narrative action with auditory and visual intensification. The

second time she knocks, it is an echo of her previous intention and an invitation of her

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[160] Translation taken from http://www.murashev.com/opera/Rigoletto_libretto_Italian_English

fate. As evidenced by the very structure of the trio, there are two different strands of the narrative unfolding. While Gilda takes a plunge at the outset of the scene, its realization occurs simultaneously as Sparafucile realizes the impact of his own villainous plunge—agreeing to kill an innocent person to spare his sister's lover. Just as the singers' voices overlap, so too do their characters' stories.

Example 4.20: Gilda knocks on Sparafucile's door (sacrificial / villainous)
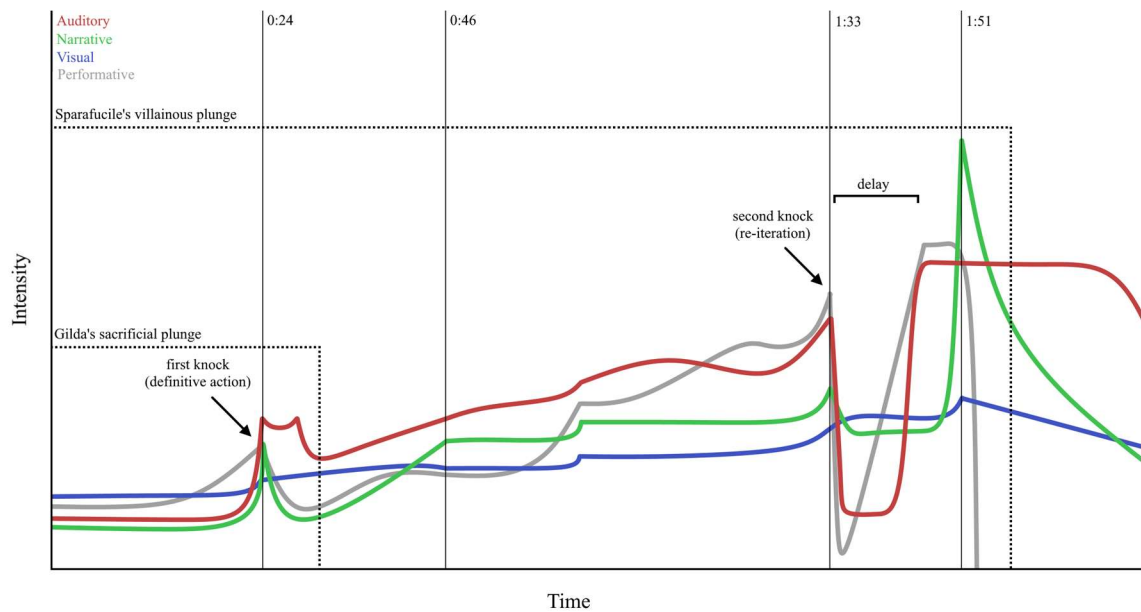
Alberich's Renunciation of Love

In the opening scene of *Das Rheingold* (1869), the first opera of Wagner's epic *Der Ring des Nibelungen* tetralogy, the dwarf Alberich takes a villainous plunge that launches the whole saga into motion by stealing the Rheingold. After being spurned and humiliated by the Rhinemaidens, he learns that one who can craft a ring from the magical metal will be granted measureless might over the world, but doing so is only possible if they are to renounce the power of love.[161] Struck by a lust for gold and power, Alberich

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[161] Karl Dietrich Gräwe, "Synopsis" trans. Mary Whittall, *Das Rheingold,* (New York: Metropolitan Opera Association Inc., 1990), DVD, 163 minutes.

clambers up to the shining lump of gold and curses love, exclaiming, "so verfluch' ich die Liebe!" (I hereby curse love!).[162] Immediately following this, a harmonic corruption of the "Gold" leitmotif occurs, shifting the arpeggiated C major triad of its first definitive statement into a darker A half-diminished seventh arpeggio (**Example 4.21**). In the 1990 Metropolitan Opera production, Alberich grabs the gold at the apex of this horn call (1:29) and prompts the Rhinemaidens' exasperated alarm.[163] He laughs diabolically as he disappears into the darkness during the transition to the following scene.

Example 4.21: harmonic corruption of "Gold" leitmotif
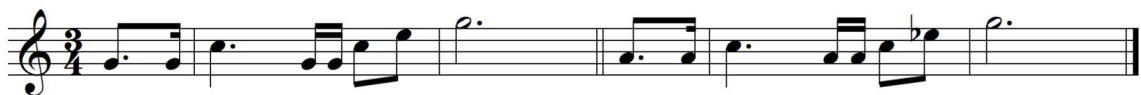
Example 4.22: Alberich steals the Rheingold (villainous)
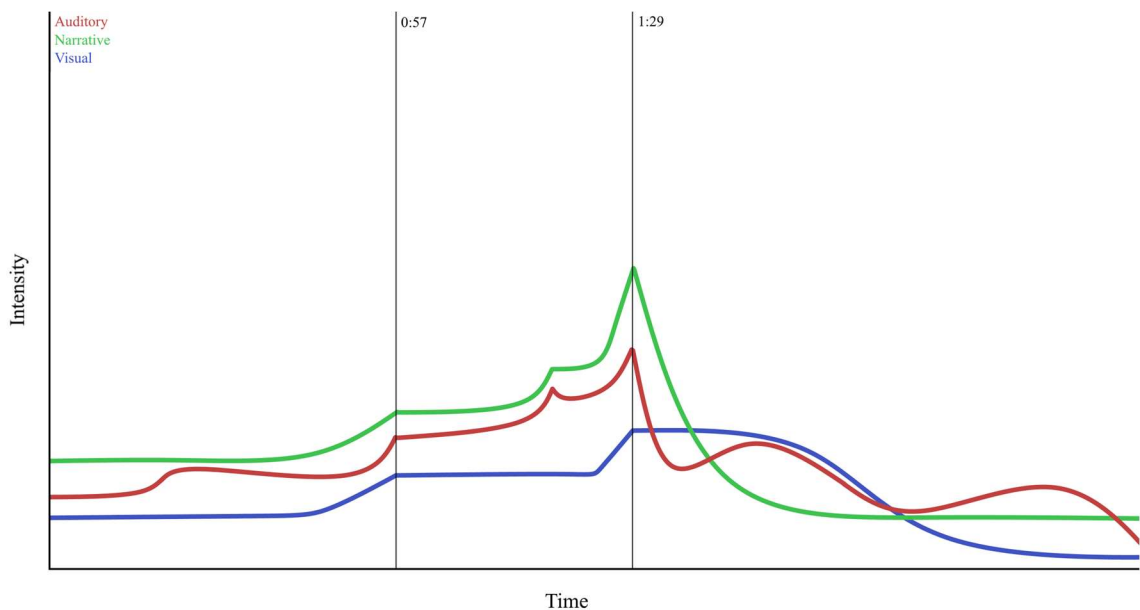
Of the operatic plunges reviewed in this section, the one from *Das Rheingold* is the only one that works in a prototypical fashion (that is, prototypical as I have presented

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[162] Translation courtesy of Matthew Bribitzer-Stull
[163] *Das Rheingold* https://mediaspace.umn.edu/media/t/1_pg7it8ri

the plunge synchronization schema in this dissertation). This should come as little surprise, given that Wagner's concept of the *Gesamtkunstwerk* and his leitmotivic practice led directly into the scoring practices of early film.[164] The whole idea that stage action and music should be legibly aligned in opera can be traced directly to Wagner— even if it did not originate with him, it is at least best exemplified by his work in the medium. Such a focus pulls the listener/viewer's attention away from individual performers and directs it towards the overall multimedia work instead; therefore, I did not include an intensity graph for the performative dimension of this scene.

Important to note is the concomitant villainous plunge that occurs later, in scene four of *Das Rheingold*, where Wotan steals the Ring (forged from the Rheingold) from Alberich. This action sets the rest of the cycle in motion, launching the tetralogy in the same way Alberich's theft launched the opera.

Werther's Suicide

The final act of Massenet's *Werther* (1892) involves the eponymous unrequited lover committing suicide. As with all suicidal plunges, the definitive action is simple to pinpoint, but the interesting part of Massenet's depiction is the extraordinarily long abatement phase in the narrative channel that follows this moment. After Werther deals himself the mortal blow, he proceeds to spend the entire fourth act—nearly twenty more minutes—singing as he dies, even participating in a duet with Charlotte (the rejector of his unrequited love) before he finally passes. In the original manuscript, the suicide takes place behind the curtain ("derrière le rideau") during the transition from the third to the fourth act, the final tableau opening with the already dying Werther. The intensity of the

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[164] Quote MBS somewhere here. – 256–269

musical interlude ebbs and flows, building up to several small climaxes throughout, but eventually leads to a definitive, full-orchestra, fortississimo highpoint at the beginning of "La nuit de Noël" right at the moment the curtain opens. This has interesting implications for how the plunge is communicated, given that the decisive action characteristic of the plunge takes place without the aid of the visual channel.

In the 2014 Metropolitan Opera production, the same interlude music is accompanied with on-stage action.[165] The scene opens with Werther (Jonas Kaufmann) in his apartment, languishing at his recent rejection and preparing to take his own life. After Albert's pistols are delivered to him, he examines and loads one of them. Moving to center stage, he puts the gun to his head as the music swells to an anticipated climax before not going through with it, creating a prototypical subverted deceptive plunge (0:16). He returns to pacing and gesticulating angrily as the music wanders through various key areas. As the music builds up again to the final climax, he points the pistol at his chest. He pulls the trigger at the moment of the fortississimo apex, accompanied by a gunshot sound effect and a bright flash of light (1:22). A gruesome splatter of blood paints the wall behind him as he falls backwards onto the bed. In the aftermath, the lights dim, and he rolls off the bed onto the floor.

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[165] *Werther* https://mediaspace.umn.edu/media/t/1_5d7q8igz

Example 4.23: Werther's Suicide (subverted deceptive / suicidal)
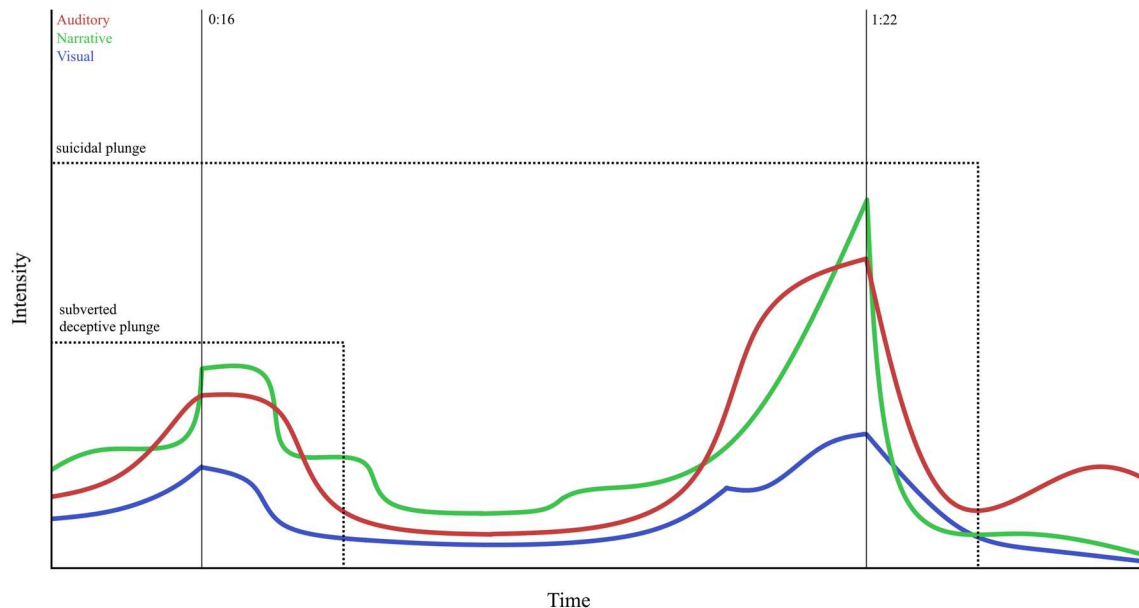
4.2.4. The Plunge in Musical Theater

The plunge in Musical Theater is functionally analogous to the plunge in opera, in the sense that it often coincides with climaxes within individual solo numbers. Style is the primary difference, both in terms of music and singing technique. Whereas operatic singing is often characterized by vibrato and resonance, musical theater singing technique is typically more straight-toned (otherwise known as belting). The effect this has on the performance of highly dramatic moments and climaxes is that performers often rely on sheer force to sing high and/or loud notes rather than careful technique. While this style of singing may not appeal to all, for fans of the genre it can be highly effective at communicating characters' emotional states. I interpret this as a blending of the performative and narrative channels, mapping the performer's physical exertion onto the character.

One of the most interesting aspects of musical theater, from an analytic standpoint, is its prevalence both on stage and on screen. Musicals have been adapted for

the screen since the advent of sound film; one of the earliest and best known examples being Victor Fleming's *The Wizard of Oz* (1939). The trend continued with MGM's popular musical films in the 1940s and 50s (e.g.: *Singing in the Rain*), such hits as *West Side Story* and *The Sound of Music* in the 60s, and eventually the slew of animated musicals that comprise the Disney Renaissance during the 90s.[166] Within the past twenty-or-so years, it has become somewhat of a rite of passage for long-running television series to feature a musical episode, wherein the characters either put on some kind of musical performance or their typical activities are augmented by the addition of singing and dancing.[167] Even beyond this occasional foray into musical theatre, there are several TV shows that feature musical numbers from the outset: *Glee*, *Galavant*, and *Crazy Ex-Girlfriend* are but three prominent examples of the genre.

Defying Gravity

Wicked (2003) has been one of the longest running and most beloved Broadway musicals since its premiere in 2003. The story focuses on the witches in the Land of Oz prior to and during the events of the classic 1900 novel *The Wonderful Wizard of Oz*. It recounts Elphaba's struggle with discrimination for the color of her skin (which is green), disillusionment with the eponymous Wizard, and transformation into the Wicked Witch of the West. One of the most popular songs from the show constitutes a plunge; it comes from the conclusion of Act I, after Elphaba has been deemed a 'wicked witch' due to her

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[166] This list does little more than scratch the surface of the immense popularity of such musical films from the 1920s to the present.

[167] Many examples exist, but one of my personal favorites comes from the *It's Always Sunny in Philadelphia* episode "The Nightman Cometh," which features the characters' risibly bad performances in a staged musical.

discovery that the Wizard is a fraud. In order to escape the Emerald City and the mob that is now after her, she casts a levitation spell on a broom and flies away to the West.

There are many associative musical passages and bits of expositional dialogue interspersed throughout the number, but the lyrics of the central song describe Elphaba rejecting the artificial limits placed upon her by others—defying gravity in both a figurative and literal sense. The song exists as something of a feminist anthem: it decries a society that refuses to listen to Elphaba because of her gender and the color of her skin.[168] As she casts her spell, she demonstrates her ability to break through the glass ceilings imposed upon her. The orchestra builds to a huge final cadence with a caesura that highlights Elphaba's exposed Eb and generates an immense amount of tension in the auditory channel (0:54). This tension is prolonged until the end of the song, gradually increasing with repetitions of the note. Simultaneously, the staging has Elphaba floating in the center of the stage, backlit and shrouded in relative darkness as clouds of mist billow out below her. After singing "bring me down" twice, the orchestra swells once more to another caesura moment before the final chord. All of this together serves to articulate a prototypical plunge for the stage. There are no professionally recorded versions of the musical with the original cast in circulation; however, there is a serviceable version of the number sung by Idina Menzel that aired on *The Late Show with David Letterman* on November 18, 2003 that features a close approximation of the original's staging and lighting.[169]

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[168] O'Malley, Allsun. *Wicked: A Visual Representation of Third-Wave Feminism*.
http://scripts.cac.psu.edu/users/a/c/aco5111/Essay1.htm
[169] *Wicked* https://mediaspace.umn.edu/media/t/1_kajz820n

Example 4.24: Elphaba defies gravity (defiant)
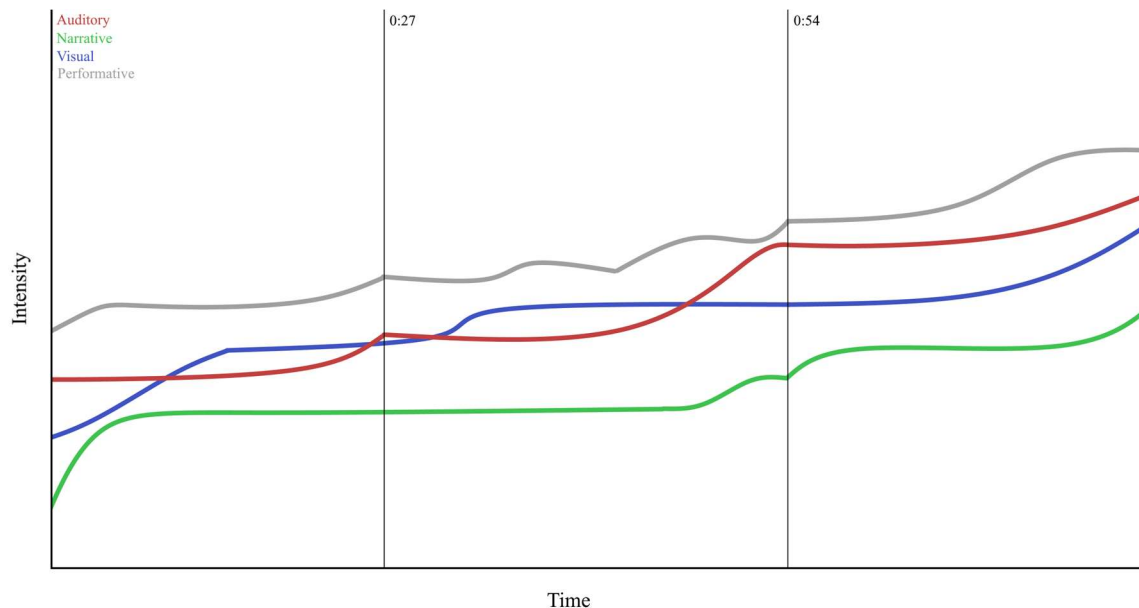
The song appears again in the episode "Wheels" from the television show *Glee* (S1:E9, 2009). The glee club is going to be performing the song, so they hold auditions for the solo. It comes down to Rachel and Kurt, who each get a chance to sing it for their classmates and teacher (although, the television audience is shown this process as a single, spliced together version of the piece that alternates between the singers). When the high note arrives, Kurt intentionally flubs the note so he won't get the part. This creates a moment that does double duty as a plunge for both Elphaba and Kurt, using the same musical material to depict both. He does this because he realizes his father will attend the show and—since Kurt's ability to sing high notes has been established as a symbol of his queerness within the show—read the performance as effeminate. In this regard, the decisive action is sacrificial rather than defiant, since Kurt is suppressing the expression of his identity so that his dad can save face in front of his less understanding (read: bigoted) friends. Thankfully, the show resolves this problematic plotline within the

episode by having Kurt and his father reconcile and allowing Kurt the freedom to be himself.[170]

Javert's Suicide

Les Misérables (*Les Mis*, 1980) stands as a monolith in the musical theater genre, maintaining its popularity today forty-one years after its premiere. As an adaptation of Victor Hugo's novel of the same name, the story revolves around the young idealist and parolee Jean Valjean who gets swept up into the events of the June 1832 Rebellion in Paris. The main antagonist of the show is Javert, a police inspector who refuses to let Valjean escape justice. In the second act, after being captured by the rebels, Javert is set to be executed but is instead released by Valjean. When they meet again later, Javert reluctantly returns the favor and lets Valjean take his injured friend to a doctor. He is unable to reconcile Valjean's mercy with his criminal past and, overcome by the internal conflict this ignites and unwilling to compromise his ideals, Javert decides to take his own life. He sings a brief solo number wherein he wrestles with the fact that the law is not an incontrovertible determinate of good and evil. In the end, he is unable to admit that his life's devotion might have been unjustified and he takes a final, fateful plunge into the River Seine.

As Javert's world comes crashing down around him his once lyrical and expansive melodies are compressed into a diminished third ("I am reaching, but I fall, and the stars are black and cold…"). Lingering on ^5 of D minor and its chromatic neighbors ^♯4 and ^♭6, Javert is holding onto an untenable position—he cannot stay here

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[170] I would like to thank Bill Heinze for drawing my attention to this example.

and he knows it.[171] His only recourse for escape (and a return to tonic) is to take a daring leap out of the orbit of ^5 and hope for change. On the final word of the line, "there is nowhere I can turn. There is no way to go on," he leaps up a major sixth to ^♯3 above an extremely dissonant version of a V chord (with ♭5, ♯6, and ♭9). Javert plummets from the bridge as he holds this final F♯, carrying over into the picardy-third resolution to a D major coda. All of this serves to articulate a prototypical suicidal plunge.

Like *Wicked*, *Les Mis* has enjoyed many performances and iterations over the years. Many of the more memorable performances stage Javert's plunge as a visually stunning moment, lending the action the gravitas it demands. The video version of the 10th Anniversary Gala Concert—a semi-staged production of the entire musical—serves as an excellent example of how the scene can be done effectively.[172] They use lighting, gestures, and superscript description in synchronization with the musical climax to depict Javert's leap from the bridge. Compare this to the recent theatrical version, where the moment of Javert's jump does not align in the same way.[173] Russel Crowe's Javert leaps from the ledge several seconds after the D major coda comes in, undermining the weight that the moment has when the synchronization is tighter.

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[171] The preceding section of the aria was in the relative key F major, but by this point I hear D minor as having been established already.

[172] *Les Misérables* (tenth anniversary version) https://mediaspace.umn.edu/media/t/1_mekgsbec

[173] *Les Misérables* (theatrical version) https://mediaspace.umn.edu/media/t/1_p2j1ti3w

Example 4.25: Javert's suicide (theatrical version, failed suicidal)
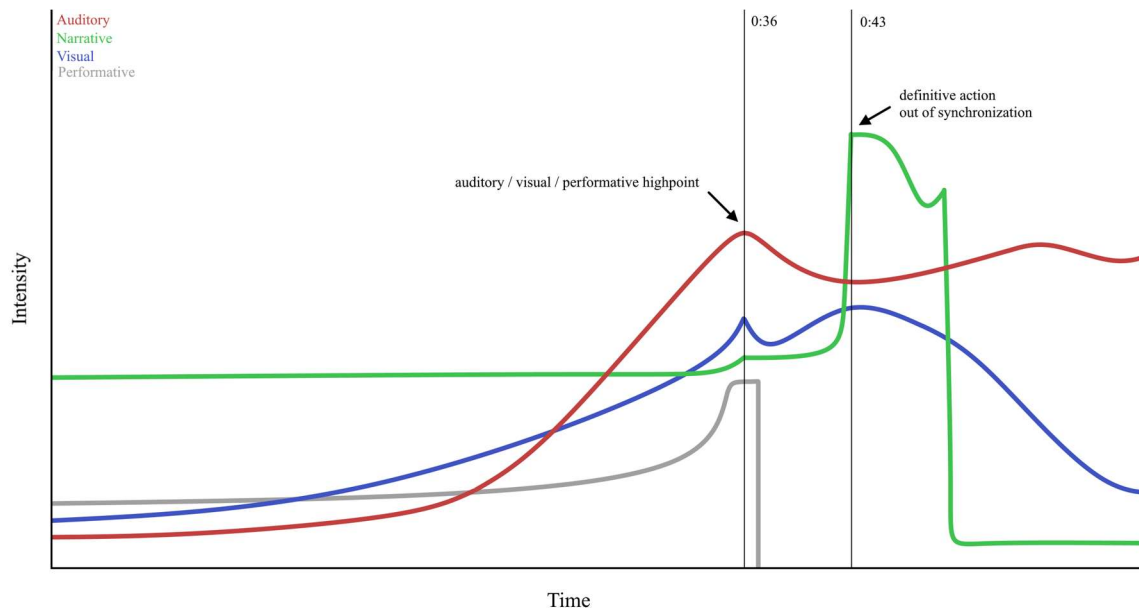
Leaving Hadestown

The musical *Hadestown* (2016) by Anaïs Mitchell is a retelling of the Greek myth

of Orpheus and Eurydice that unfolds parallel to the story or Hades and Persephone. The

broad strokes of the classic narrative are maintained, with Orpheus journeying to rescue

his love Eurydice from the underworld. Many of the trappings are altered to give the

story a fresh feel – the underworld is depicted as a railroad company town, what would

be the souls of the dead are instead indentured servants, Hades is a relentless business

tycoon, etc. – but the general shape remains intact. Hades is reticent to let Eurydice leave,

so he allows them to return to the overworld only under the condition that Orpheus not

look at her before they arrive. Mitchell's version retains the original tragic ending to the

tale, having him turn around at the last second and thereby condemn Eurydice to an

eternity in Hadestown. This moment is striking for several reasons, but chief among them

(for the purposes of this dissertation) is how what might have been a plunge is averted at

the last possible moment.

Although no professional video recording of the production exists as of this writing, I was fortunate enough to see the show on Broadway in 2020. In conjunction with an audio recording of the portion in question, my description of the visual channel will have to suffice.[174] During the number "Doubt Comes In," the pair marches through the darkness of the underworld with other rescued souls. The Fates taunt Orpheus with repeated intimations that Eurydice is not following him ("Where is she? Where is she now?"). Eurydice sings to reassure him, telling him that, "the coldest night of the coldest year comes right before the Spring." But it is already too late, Orpheus dwells on the possibility that he was tricked by Hades.

As they continue their journey, the scenery begins shifting—the railroad station from the first act starts slowing materializing around them as the lighting gradually increases. Eurydice again tries to console him, singing, "the darkest hour of the darkest night comes right before the [dawn]," but her last word never sounds. As her line comes to an end and the band moves towards a cadence in C mixolydian, Orpheus suddenly turns around. All the instruments drop out just before the downbeat save for cello and violin that play an E-F# dyad with harmonics, the lighting drops to a single spotlight on the pair, and all movement is completely stopped while the two simply stare at each other. "It's you…" says Orpheus in disbelief, to which Eurydice replies, "it's me…" In the cast recording, this stasis lasts for approximately thirty seconds, but in the theater, it felt like an eternity. The effect is poignant, like pulling the needle off a record just before the finale cadence of a symphony. What would have been the definitive action of a

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[174] Timings are taken from the 2019 original Broadway cast recording of the musical.

lengthy heroic plunge and, moreover, the resolution of the entire narrative to this point, is

negated.

Example 4.26: Orpheus looks at Eurydice (negated deceptive)
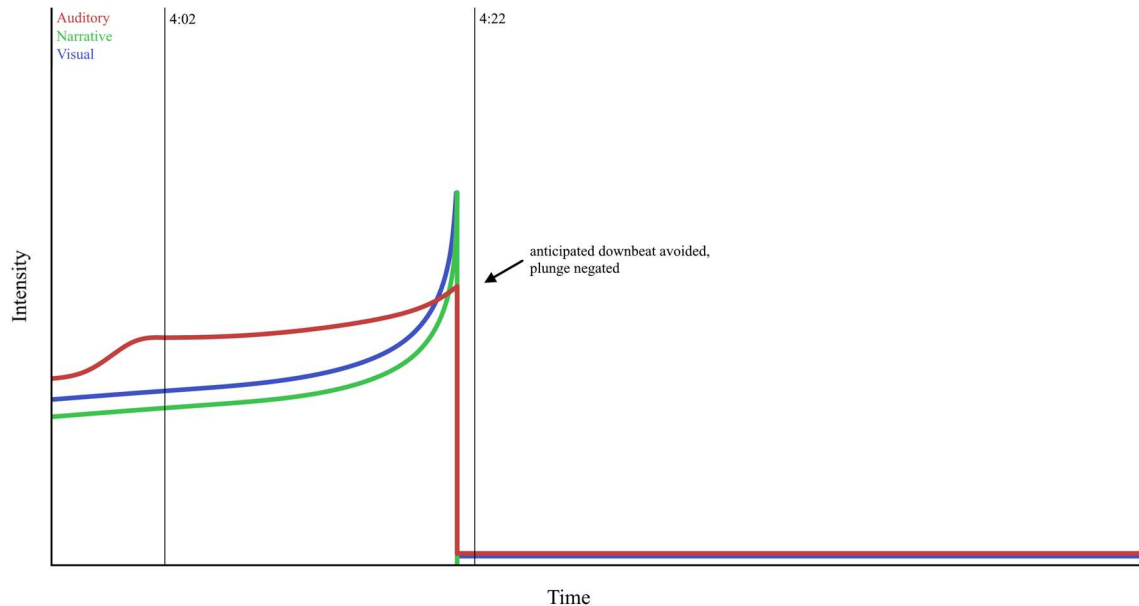
4.3. Ludic Media

4.3.1. Analytic Issues

The Ludic Dimension

The majority of the challenges that arise when evaluating synchronization

schemas in video games stems from the medium's inherent nonlinearity and interactivity.

The player is not only the audience, but they are also an active agent with the ability to

affect what takes place. This impacts every aspect of schemas like the plunge. The

timing—both their durations and when they occur in the larger context of an overarching

narrative—can differ radically depending on how the player approaches them. This

temporal indeterminacy affects everything from music, to level design, to narrative

pacing and beyond, which in turn affects the perception and efficacy of plunges. Nearly

all the measurable parameters of intensity in video games are *dynamic*, in the sense

forwarded by Karen Collins in *Game Sound*, meaning that they either react to the player's direct input (*interactive*) or react to other changes to the game state (*adaptive*).[175] No two play events are the same; therefore, no two players will experience plunges in video games in the same way.

The multidimensionality of game texts presents various challenges for analysis, but it also opens a new avenue for experiencing intensity that I refer to as the *ludic dimension*. Like the performative dimension that appears in staged media discussed in the previous section, this offers a separate channel for describing one's perception of intensity for a given event. The embodied experience of affecting the outcome of an event through input commands is a direct corollary to the sympathetic (or mirror-neuron) response experienced with plunges in other media.[176] Along with this comes the psychological investment players can feel—towards time spent or points/resources earned within the game, for example—that can weigh upon a moment like the plunge. Beyond simply witnessing a character taking a risk, the player may be taking a risk themselves as they proceed through plunge moments in games. A great non-narrative example of this feeling can be found in the classic game Minesweeper when a player is presented with a choice between two equally likely possibilities. If they choose incorrectly the game ends immediately and all the time and effort they invested goes to waste. Tension builds up to the moment of the decision and the decisive action is the click. This perfectly reflects the extra layer of intensity the ludic dimension can contribute to synchronization schemas.

Communicative Categories

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[175] Collins, *Game Sound*: 183–187.
[176] Zbikowski, 2017

There are three main avenues in which the plunge appears in video games: cutscenes, gameplay, and quick-time events (QTEs). Cutscenes are cinematic interludes that play out without input from the player. In many cases, they provide a different perspective of events or depict events that would be difficult or impossible to portray through gameplay. Plunges in cutscenes function almost identically to those found in filmic media. Gameplay plunges, on the other hand, require player input to take place. Sequences preceding boss fights are an excellent example of this—take Super Mario 64, where the player must proceed through a lengthy puzzle level before jumping into one of the game's signature green pipes. QTEs lie somewhere in between gameplay and cutscenes, presenting a more cinematic experience while still maintaining limited player interaction. These present perfect opportunities for plunges by incorporating both filmic and ludic intensification strategies, getting the best of both worlds, so to speak. Many modern games tend towards a more cinematic aesthetic, incorporating aspects of filmic *mise-en-scène*, scripted staging and framing, and expressive lighting within their virtual environments to make players feel as though they are in a movie themselves.[177]

Narrative Variability

Perhaps one of the most interesting aspects of video games as a narrative medium is the possibility for highly variable storytelling.[178] This is especially prominent in role-playing games (RPGs), where players are frequently confronted with choices that can have a lasting impact on how non-player characters (NPCs) interact with their avatar. The consequences of players' choices and actions can have effects ranging from minor

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[177] Girina, 2013.

[178] The argument about whether video games ought to be considered under the umbrella of narratology at all notwithstanding.

dialogue alterations down the line to totally different endings. Modern narrative-driven games often feature hundreds of such decisions, and so game designers usually resort to some sort of funneling (presenting an increasingly limited set of options to the player until their only recourse is to move forward) to direct players towards important areas, events, or cutscenes. Games that feature an open world design (where players can explore freely and engage in activities in an order of their choosing) bar access to some content until certain conditions are met or levels are reached. It is common for these funneled events to feature plunges since they present ample opportunity for moving the story forward through definitive actions and conflicts. Prominent characters dying, dramatic changes to the game world, and plot twists are all frequently found in these funnels. Such events often seem inevitable when they are done well but can sometimes feel forced—the *Telltale Games* series is somewhat notorious for presenting players with choices that seem meaningful but have very little effect on the story.

The Challenges of the Medium

Tim Summers provides an excellent breakdown of all the challenges faced by analysts of video game music and provides suggestions for how to collect and interpret data.[179] For the purposes of locating and analyzing schemas like the plunge, the situation is similarly complex. Because no two instances of play are the same, it is nearly impossible to identify what constitutes a definitive version of the video game text. Questions of textual fixity aside, it is immensely difficult to find or create recordings of given moments. Unlike television or filmed versions of staged productions, it is not as easy to skip forward to the desired section for analysis in a game (which often require

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[179] *Understanding Video Game Music*, chapters 1–2.

certain conditions to be met before the player can advance). While recorded playthroughs are available through services like YouTube, they often contain voice-overs or video overlays that are not representative of the original experience.[180] Besides, as I argued above, the embodied act of *playing* the game is an essential part of synchronization schemas in this medium. There is no definitive average length for video games, but many modern so-called AAA titles have main stories that last around ten to fifteen hours, with some games boasting durations of upwards of fifty. Combined with all the other variables, this creates a bewildering amount of content to sift through looking for plunges that can sometimes take place in a matter of seconds. As with all previously discussed formats, paratexts such as plot synopses can be extremely useful in pinpointing where to look for plunges—seeking out "plungeable" narrative moments within the context of played or recorded gameplay.

4.3.2. Video Game Examples

Straightforward Examples

Several prototypical examples of plunges in video games come from the 2014 reboot of the Wolfenstein series, titled *Wolfenstein: The New Order*. The game takes place in an alternate universe where the Axis powers discovered advanced technologies and won World War II, establishing a worldwide Nazi regime. The player controls the exploits of B.J. Blazkowics as he works to dismantle this empire through the generous application of bullets. The main antagonist is the evil scientist Wilhelm Strasse (a.k.a. "Deathshead"), who serves as the game's final boss. After helping the other resistance

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[180] This type of added commentary can be very informative. There is valuable sociological data that can be gleaned by observing how another player engages with and reacts to the game in question.

fighters escape, Blazkowicz finds himself stuck on a one-way elevator to his nemesis.[181]

Deathshead taunts him while he checks and loads his gun during the ascent. As the

elevator nears its destination, the musical intensity builds. When the door slides open, he

rushes out, guns blazing. All this action happens in a cutscene and is devoid of player

input (and thus the ludic channel). As such, the scene functions just like a filmic plunge

but within the larger context of a video game.

Example 4.27: Blazkowicz confronts Deathshead (heroic)
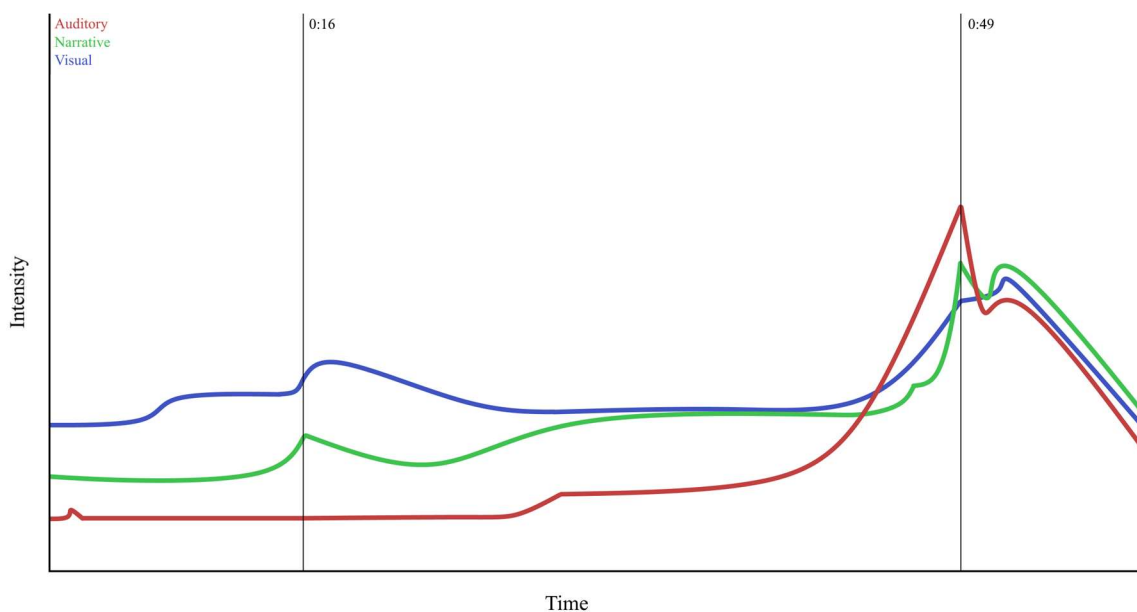
After battling through a multi-phase boss fight, Blazkowicz manages to destroy

Deathshead's mechanical suit of armor.[182] The villain crawls from the wreckage in a

cutscene, exclaiming, "I will never kneel to you!" Blazkowicz approaches with knife

drawn, saying, "fine, I will gut you standing." The game switches back to a first-person

perspective and prompts a response from the player to deal the killing blow. The player

can press the button as soon as it appears or wait while Deathshead stands helpless before

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[181] *Wolfenstein: The New Order* (leaving the elevator) https://mediaspace.umn.edu/media/t/1_m34uug9k
[182] *Wolfenstein: The New Order* (killing Deathshead) https://mediaspace.umn.edu/media/t/1_fco0b3lf

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them. In the clip used for analysis, the player waits nearly forty seconds (long enough for the animation to loop). When pressed, the avatar stabs the enemy in the chest multiple times, cementing the definitive action of this villainous (or, more accurately, anti-heroic) plunge. The intensity keeps building, however, leading to yet another villainous plunge on Deathshead's part: he reveals he is holding a grenade and triggers an explosion.

Example 4.28: Blazkowicz kills Deathshead (villainous)
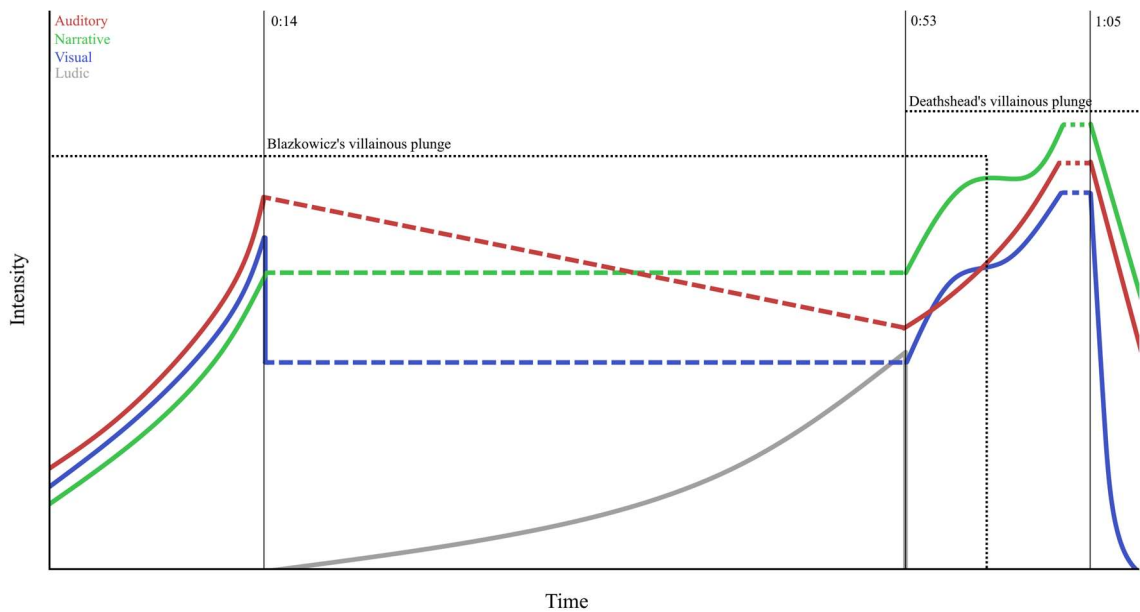
Funneling Towards Plunges

Although given the number 3, *Metal Gear Solid 3: Snake Eater* (*MGS3*, 2005) is the fifth installment in the series, and it serves as a prequel to the previously released games. The final boss fight in the game uses the funneling technique to force the player to take the final shot and kill their mentor-turned-enemy, The Boss (which is the character's actual name).[183] After a lengthy and difficult fight, she lies on the ground surrounded by a sea of white flowers as she orders Snake (the player's avatar) to kill her.

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[183] *Metal Gear Solid 3: Snake Eater* https://mediaspace.umn.edu/media/t/1_vo65im4c

The plunge takes place almost exclusively in the ludic channel—the music cuts out and there is nothing but the sound of a gentle breeze rustling the flowers and the camera slowly pans out to a static overhead shot with Snake standing over The Boss. These auditory and visual events create a delay in the schema, prolonging the heightened intensity built up throughout the fight and preceding cutscene. The length of this delay, however, is variable. Once the scene is established, nothing will happen until the player shoots (on the original PlayStation 2 console, literally pulling a trigger on the back of a controller). The game provides no prompt or indication that any input is necessary to proceed as it switches to a QTE, leaving players guessing about what to do to continue in the game. Once the trigger is pulled, a loud gunshot breaks the silence and the screen quickly fades to black.

Example 4.29: Snake kills The Boss (sacrificial)
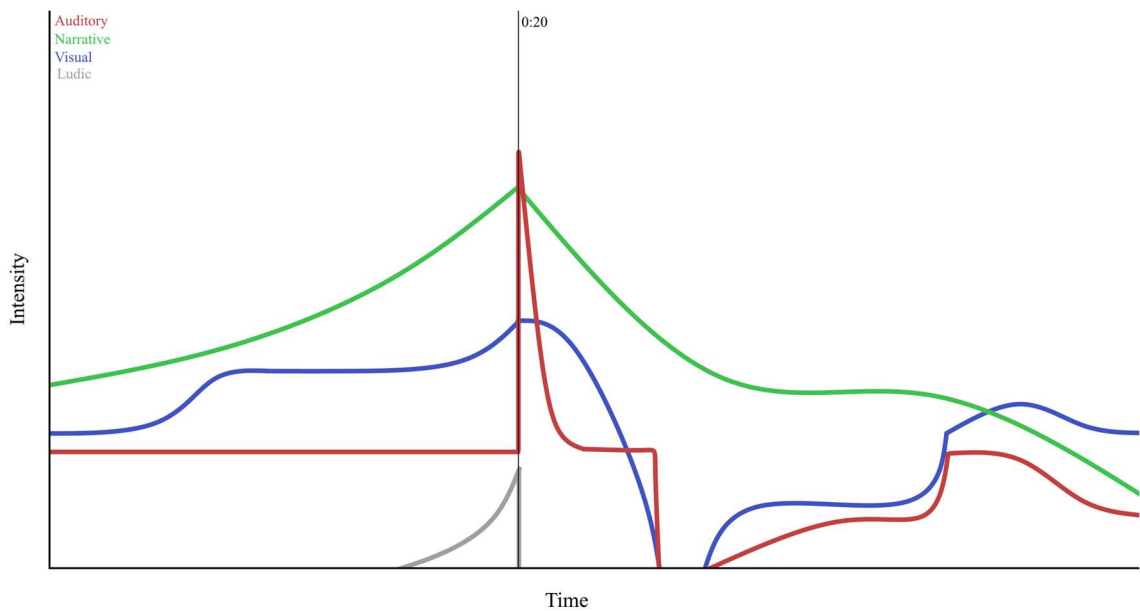
Another game that features a funneling effect directing the player towards a climactic plunge is Supergiant Games' *Transistor* (2014), a third-person action-adventure game. The story revolves around Red, the name given to the voiceless protagonist, and

her journey to stop Cloudbank city from being taken over by the Process, a legion of self-replicating robots that rewrite matter (much like the gray goo doomsday scenario). To combat these robots Red uses the Transistor, a technological sword that can absorb the traces/souls of the perished citizens of Cloudbank to grow more powerful. The primary antagonists of the game are the Camerata, the group of influential elites who unwittingly unleashed the Process on the city. The process overtakes nearly everything by the time the player reaches and confronts Royce, the final remaining member of the Camerata.[184]

At the beginning of the clip, the Red enters approaches a staircase that leads down into the darkness and, as she moves in, the heads-up display (HUD) fades from view and gameplay shifts to a QTE. She finds herself in a dark room with the only path forward signaled by a row of lights on the ground. Royce explains the situation, outlining how the only way to stop the process is to put the Transistor back in the cradle. With the ability to use actions other than moving removed, the player is forced to walk forward – if they delay, Royce urges them onwards at various intervals. Upon arriving at the Cradle, the player is prompted to approach and press "X" (on an Xbox gamepad). Doing so initiates a cutscene wherein the man whose voice speaks from inside the Transistor declares his love for Red before he is disassociated.

Ciri's unseen sacrifice: one plunge and three results

The Witcher 3: The Wild Hunt (2015) is the third and final installment of CD Projekt Red's series of games based on Andrzej Sapkowski's popular novels.[185] Each game in the trilogy presents the player with a dark and epic fantasy story that takes place

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[184] *Transistor* https://mediaspace.umn.edu/media/t/1_8298fuqq
[185] The events depicted in the games take place after the events of the five-book series of Witcher novels, continuing the story of Geralt of Rivia and his ward Cirilla

in a sprawling open world. A grizzled monster hunter named Geralt serves as the player's avatar and the main pursuit of the game is finding Geralt's ward, Ciri, who possesses extraordinary magical abilities that allow her to travel through time and space. Her abilities cause her to be pursued by the Wild Hunt, a cavalcade of spectral riders from another dimension who want to use her power to conquer the world. The player spends most of the main questline of the game chasing after leads and searching for Ciri.

At the end of the game, Geralt confronts and defeats the leader of the Wild Hunt before another 'conjunction of the spheres' starts, essentially opening a portal to a myriad of other dimensions. He goes to the tower from which the power seems to be emanating, where he finds Ciri ready to travel through to the realm of the White Frost and end it once and for all.[186] No matter the choices the player has made throughout the extensive game, Ciri enters the portal and prevents the conjunction from ending the world. While this sacrificial plunge is predetermined, its ultimate outcome varies depending on how players chose to interact with Ciri during key parts of the game's narrative. Before the moment of her actual plunge, a series of flashbacks depict these parts of the story, showing how the choices the player made affected Ciri and Geralt's relationship (excised from the clip at 0:49). Her reaction to this is the same in each case: she decides to press on and go through with her plan. The build to the Ciri's definitive confrontation with the White Frost occurs while the player is shown Geralt's reaction outside of the portal. The music builds and the magical emanation fades until the portal closes, marking the moment of Ciri's sacrifice off-screen.

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[186] *The Witcher 3: The Wild Hunt* https://mediaspace.umn.edu/media/t/1_pbkfy3id

Example 4.30: Ciri confronts the White Frost (sacrificial)
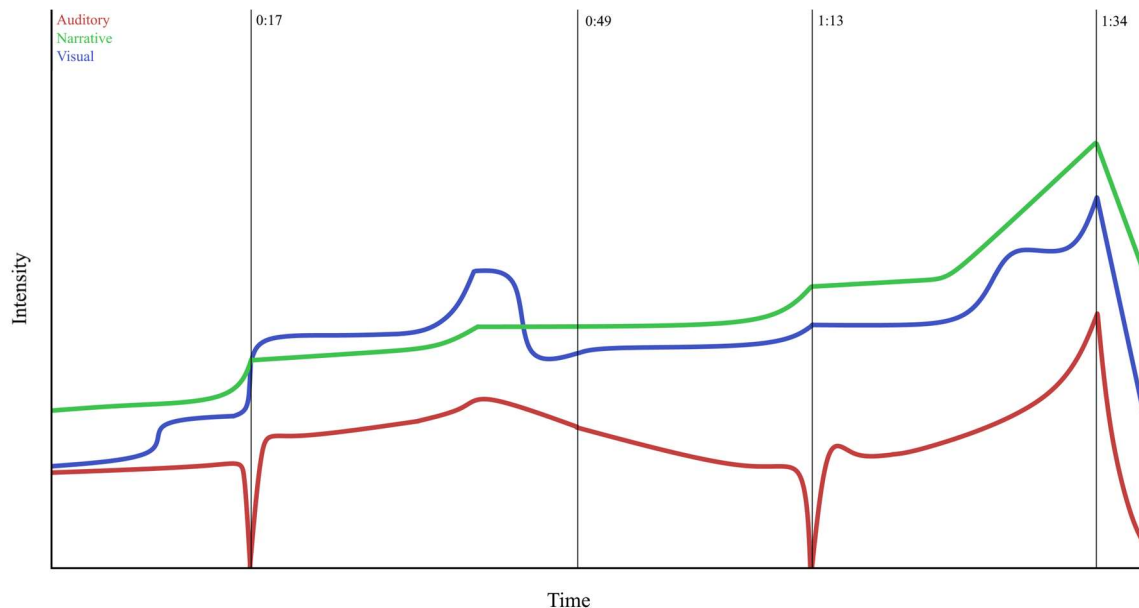
The abatement phase consists of a combination of lengthy cutscenes and gameplay events that show one of three possible endings. Each of these ending sequences lasts approximately fifteen to twenty minutes but, given the fact that it takes more than fifty hours to beat the main story without optional content, they feel commensurate in length to the time invested.[187] In one Ciri takes over as the empress of the Nilfgaardian Empire, hoping to help change the world for the better. In another, which is widely regarded as the best ending for the characters, Ciri joins Geralt as a monster slayer and their father-daughter relationship flourishes. In the final ending, which is seen as the most negative outcome, Ciri dies, and a guilt stricken Geralt seeks vengeance and ultimately perishes. There is no canonical ending to the story, meaning that there are three very different ways to experience Ciri's plunge. While no two people experience any media in the same way, it is rare to have such dramatically disparate outcomes to the same story.

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[187] User-reported playtime statistics can be found on HowLongToBeat™
https://howlongtobeat.com/game.php?id=10270

The Witcher 3 therefore serves as an exemplar of the narrative variability that can occur in video games as a storytelling medium.

Closing the Omega-4 relay

Another game whose outcome can vary drastically base on player choice is *Mass Effect 2* (2010). The *Mass Effect* series of games depicts the exploits of Commander Shepard, traveling throughout a sprawling space-opera galaxy and saving the day repeatedly. The second installment in the trilogy centers around the mysterious Collectors who have been abducting colonists on the outskirts of the galaxy for an unknown purpose. Eventually, it is revealed that they are harvesting sentient life in a bid to aid the Reapers, a race of monolithic robotic aliens whose sole purpose is to periodically cleanse the universe of life. The final mission of the game sees Shepard travelling through the Omega-4 relay to assault and disable the Collector's base of operations to save the galaxy from destruction at the hands of the Reapers. This mission can be selected once certain parameters have been met, but its outcome depends on what choices the player made throughout the game.

Once committed to the mission, the Normandy (Shepard's spaceship) gets into position and dramatically launches into unknown territory.[188] Before reaching the base, there are a series of cutscenes that put the ship to the test – if the player spent the time and resources to upgrade the ship, the entire crew can survive the approach, if not, several characters can die. Once they assault proper begins, the results depend on the preparations the player has made, how loyal their companions are, and how they assign these characters during the mission. If the player made all the necessary upgrades and did

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[188] *Mass Effect 2* https://mediaspace.umn.edu/media/t/1_dxo9oz0w

the relevant side quests to 'level up' their companions' loyalty, it is possible for everyone to survive. If not, some or all the characters can perish, including Shepard. This has led fans to create elaborate flowcharts that outline how to get the best possible outcome (**Example 4.31**). *Mass Effect 2* presents an excellent example of how a game can funnel players into the same final mission but make their previous interactions with the game impact what takes place in a substantial way. The plunges in the final mission do not necessarily involve ludic input synchronous with their presentation, but they are clearly defined by the player's choices.

Example 4.31: flowchart of possible endings to the suicide mission[189]
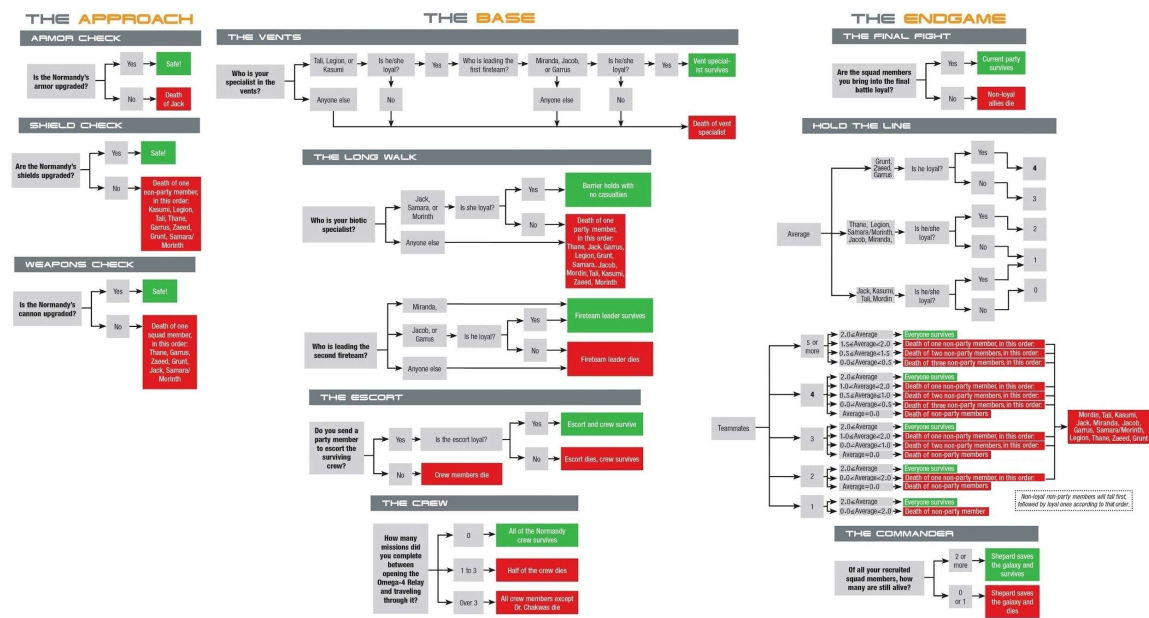
Murder, Torture, and War Crimes

      The funneling effect discussed above has been used in creative ways to force the player to engage in particularly heinous acts. This can be used to great effect to convey a sense of horror, especially when they are acts the character does not necessarily want to

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[189] Uncredited fan-made flowchart taken from the "BioWare Social Network" unofficial forum: https://biowaresocialnetwork.boards.net/thread/51/me2-mission-guide.

perform. *Grand Theft Auto V* (2013) places the player in a situation where they must torture another character for information, even going so far as to make them choose what tools to use. *Call of Duty: Modern Warfare 2* (2009) has one of the characters controlled by the player go undercover to infiltrate a terrorist organization. In a horrific sequence, the game forces the player to march through an airport mowing down innocent civilians with machine guns. *Spec Ops: The Line* (2012) has the group of soldiers deploy white phosphorus (a chemical weapon) as a last resort to get through a blockade of enemies. After taking out all the opposition, the characters must walk through the aftermath of the destruction they just wrought. They quickly discover, to their horror, that there were civilians that were sheltering in the area they bombed. In the first game of the *Bioshock* (2007) series, the player makes their way to the office of the main antagonist, Andrew Ryan, where they confront him. Here, they discover that their avatar has been under the influence of mind-control throughout the game, reacting to the phrase "would you kindly," as a kind of activation code. Ryan reveals the duplicity of Atlas (the de facto quest giver for the game) who has been using the player character to carry out his will. Using the phrase, Ryan forces the player to kill him with a golf club to prove his point that their actions are not their own. While clearly narrative plunges, not all these moments are framed as plunges in the auditory or visual channel; however, they amplify the ludic dimension substantially by making the player confront the outcome of their inputs.

Risk versus Reward

The genre of video games called "roguelikes" are so named based on their relationship to the classic dungeon-crawling game *Rogue* (1980). The main premise is

that, when the player's character dies in the game, they are forced to start over from scratch—the only way to win the game is to develop better reactions and/or strategies and finish it in one go. "Roguelites" feature similarly steep difficulty curves, but usually allow the player to retain some resources between each attempt, creating a sense of progression across playthroughs. The unforgiving challenge this type of game poses has grown increasingly popular in recent years, leading to many titles that incorporate similar mechanics. Although many of these games have loose narratives that can sometimes lead to plunge-like moments, it is far more common for the ludic dimension to take center stage. In such cases, the narrative intensity curve could be entirely replaced by a ludic one while auditory and visual channels convey familiar intensification strategies.

The game *Hades* (2020) by Supergiant Games has the player control the avatar of Zagreus as he attempts to fight his way through hordes of enemies and escape the mythological Greek underworld. The player will occasionally run into a randomly placed portal to the primordial void of Chaos. What this means, in terms of gameplay, is that the player has an opportunity to sacrifice a portion of their health to gain a powerful boon.[190] This exchange carries significant weight—the decision to enter a Chaos Gate is a powerful moment of ludic intensity. The auditory and visual channels respond to the decision in kind, with a short swelling musical number and a brief zoom-in effect accompanying Zagreus leaping into the portal.

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[190] *Hades* https://mediaspace.umn.edu/media/t/1_xqn4zmsl

Example 4.32: Zagreus enters a Chaos Gate (sacrificial)
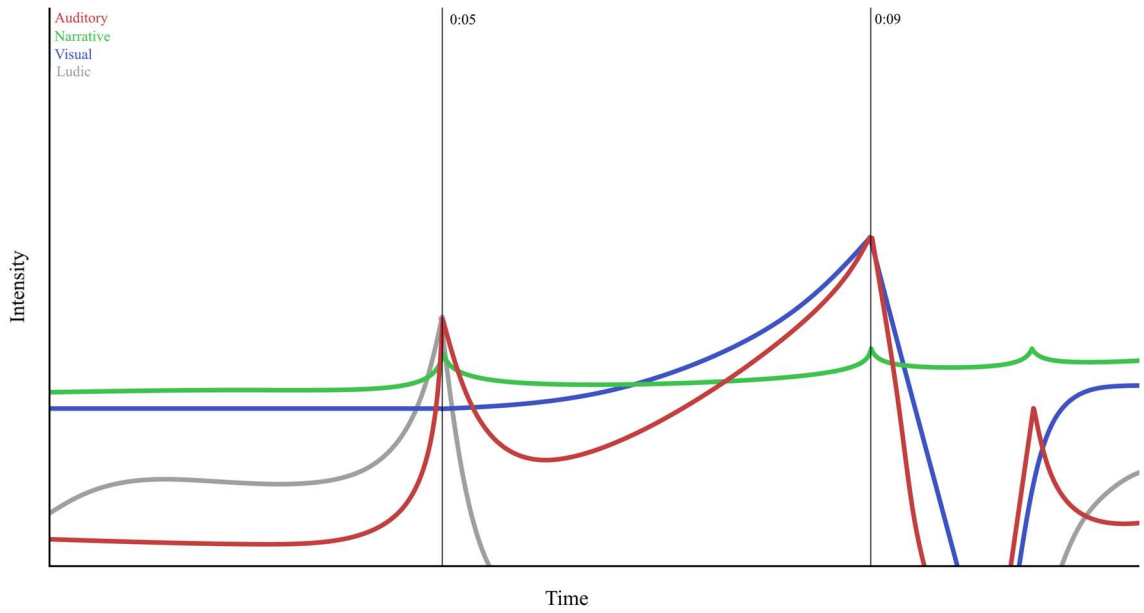
5. The Plunge as Motive in *Spider-Man: Into The Spider-Verse*

The superhero genre is rife with plunges, as evidenced by the myriad examples pulled from superhero television shows and films featured in the previous chapters. Superheroes take aspects of humanity and blow them up to extreme proportions: Wonder Woman's strength and valor, Batman's wealth and intelligence, The Flash's speed, etc. Likewise, supervillains amplify the darker parts of humanity: greed, lust for power, and wanton violence are all hallmarks of characters like Lex Luther, The Joker, Thanos, and so on. These extreme attributes lead to extreme stories where the forces of good and evil are pitted against one another, stakes are heightened, and characters are tested frequently. Such trials and tribulations create ample opportunities for plunges—the heightened drama and intensity of the schema matching the superhuman proportions of the narrative. Nowhere is this more pronounced than in superhero origin stories, which task characters with learning about their supernatural and/or superhuman abilities while dealing with life-or-death scenarios, all without the benefit of experience.

The critically acclaimed animated feature film *Spider-Man: Into The Spider-Verse* (2018) presents the origin story of Miles Morales, a mixed Black/Latinx teenager from Brooklyn who develops superpowers after being bitten by a radioactive spider.[191] At the heart of the film is Miles' struggle to live up to the expectations put on him by society, his family, his friends, and himself. He starts off the film as an insecure teenager struggling to fit in at his new school and ends the film as the new Spider-Man who saved the multiverse. As the product of a blended Black and Puerto Rican family, Miles is representative of BIPOC urban New York life. His racial identity is central to his journey

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[191] While the film won many awards, perhaps the most prestigious was the 2019 Academy Award (Oscar) for "Best Animated Feature Film."

throughout the film and its social resonances, raising the stakes of what would otherwise be a typical superhero origin narrative.

The music in the film heightens the story using a combination of stylistic juxtaposition, musical topics, leitmotivic development, and various plunges. What sets it apart (for the purpose of this thesis) is how the plunge schema is woven into the very fabric of the leitmotifs and serves to develop the themes throughout the movie. I argue that the central journey of the film (Miles becoming Spider-Man) is heightened through a clever deployment of musical themes and styles and that the plunge is the key narrative moment used to solidify the final transformation.

The goal of this chapter is to provide a thorough analysis of the film by exploring how the musical techniques listed above develop and build towards the "leap of faith" scene, wherein Miles finally overcomes his trepidation and becomes the hero he is destined to be. To do this, I will address the plunge schemas and musical themes chronologically. Although such an approach runs the risk of feeling overly pedantic and catalogic, progressing through the material as it is experienced in the film aids in establishing an argument for their teleological nature. Due to the sheer volume of excerpts referenced from the film, providing clips for all of them is untenable. Instead, I reference timestamps from the film directly and provide ample context for the appearances of said techniques. When plunges are involved, I do include links for direct comparison to their intensity graphs.

5.1. "Alright, let's do this one last time…" : Introducing Spider-Man

Each time a new spider-person is introduced to the audience, we are treated to a brief montage of their journey from radioactive spider bite to present. The film opens

with such a montage centered on the original Spider-Man of Miles's universe, Peter A. Parker. Shots of this Spider-Man looking in a mirror and a close-up of his feet while he's walking towards a ledge are interspersed with standard title-sequence callouts for the media companies that produced the film. The electronically infused orchestral soundtrack pulses on a low D through a series of "hits" while a record scratch sound-effect slowly rises over fifteen seconds. At the apex of this ascent, Peter nonchalantly jumps from the building and the music fades to silence as he plummets towards the city streets (**Example 5.1**). This plunge opens the film, not only establishing the initial tone and theme, but preparing the audience for the centrality of such narrative moments throughout the film.

Example 5.1: Peter A. Parker's introduction plunge (heroic)[192]
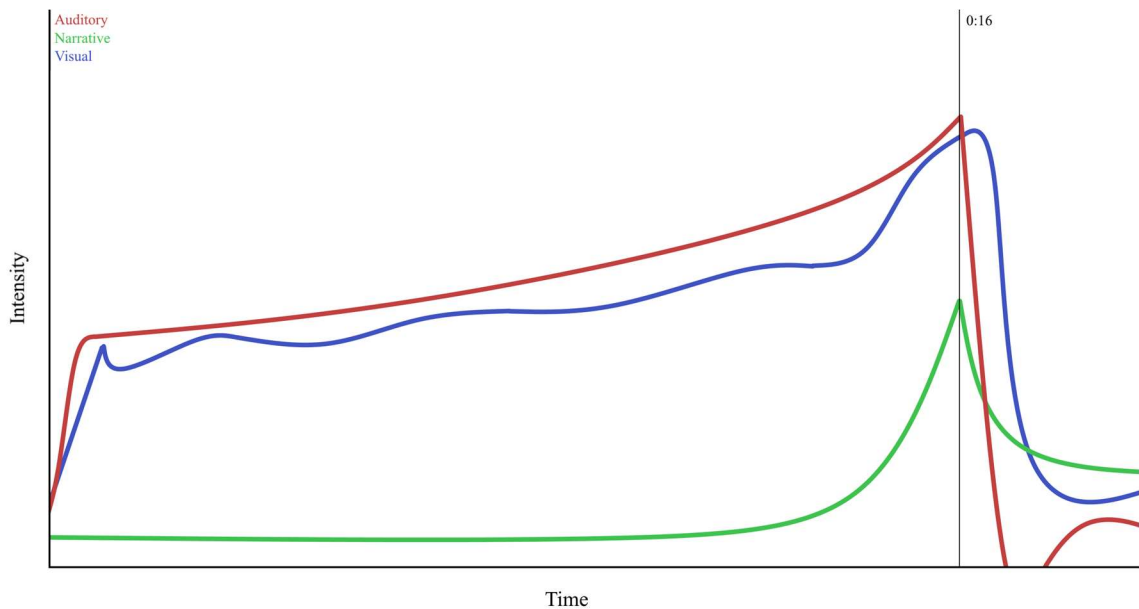
The shot cuts to a depiction of a comic book rapidly flipping closed, metaphorically taking us out of the story and into the meta-narrative exposition that follows. Several key elements are introduced in this voiced-over montage that reappear in

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[192] *Spider-Verse*, Peter A. Parker intro (1:00–1:19) https://mediaspace.umn.edu/media/t/1_vynjoxn3

future character introductions: Peter pulling his mask down over his face, a generic

"Hello, my name is… Peter Parker" nametag, a shot of his hand being bitten by a

radioactive spider, and a series of shots that show him in action as "the one and only

Spider-Man." At the exact moment he says this, a musical motive pops out of the texture

(**Example 5.2**), establishing an abundantly clear connection between this three-note

melodic turn and the hero. The montage continues to show elements of the Spider-Man

origin story that are familiar to fans, from his Uncle Ben's death to his romance with

Mary Jane, alongside scenes of him saving the day on seemingly innumerable occasions.

All the while, the theme plays in the background and travels through several key areas (D

minor, F# major, A major) before returning to tonic D minor. After a few brief detours

through his merchandise and public silliness, a series of shots of Spider-Man fighting

some of the villains which will be introduced later in the movie (Doc-Ock, Kingpin,

Green Goblin) brings back the motivic musical material. The orchestral hits return and

build again, reaching a highpoint as Peter says, "there's only one Spider-Man, and you're

looking at him," and winks at the camera.[193]

Example 5.2: Hero – Peter A.'s Introduction (1:30–1:48)

After Peter's intro, we cut to Miles Morales coloring in a stylized version of his

name on a nametag, with several others populating the drawing easel behind it.

"Sunflower" by Post Malone plays, establishing a drastically different soundscape than

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[193] I am using the word camera to refer to the perspective of the audience, although there is no actual
camera involved in this style of animation (hand-drawn and computer compiled).

the orchestral music heard up to this point. The soundtrack shifts diegetic layers as the shot switches to a portrait of Miles from behind, which reveals he is listening to the music through a pair of headphones.[194] The shot pans in a circle around Miles as he dances and sings along to the song, messing up the words as he goes. Through the music, we hear his parents shouting to get his attention. When they finally do, he pulls the headphones off (which alters the music) and his father asks, "are you finished packing for school?" Miles sheepishly replies, "yeah," as the camera focuses on an empty suitcase, which leads to a quick sequence of him hurriedly throwing his stuff in bags.

The direct juxtaposition of Peter's comic-book introduction and this scene is as striking as it is informative. It demonstrates that Peter is wrong about being the only Spider-Man, but clearly Miles is nowhere near where he is in terms of confidence or ability—in fact, his journey has yet to begin. Miles' artistic expressions project a much more intimate and individual character than Peter's very public heroism and goofiness. The difference in musical accompaniment likewise sets the two apart. Orchestral textures and thematic material characterize Spider-Man's superhuman nature, but the mundane world Miles still exists in is composed of assembled hip-hop tracks. In fact, this type of soundscape persists for nearly ten minutes, right up until the moment Miles is bitten by a radioactive spider and thrust into the realm of the fantastic. The shift in scoring technique likewise racializes popular music as Black (despite Post Malone being a white artist) and orchestral underscoring as White, adding yet another layer to the differences between the two. These two types of soundtracks—compiled (assembled popular music) and composed (newly-written cinematic underscoring)—are employed throughout the film to

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[194] This shift from non-diegetic to diegetic is discussed by Claudia Gorbman and Robynn J. Stillwell.

highlight Miles' transformation into Spider-Man as he faces trials that test his ability to live up to Peter's legacy.[195]

5.2. "There can't be two Spider-Men. Can there?" : Destiny Calls

After his fateful spider bite, Miles struggles to reconcile the changes he's going through as he begins to gain his superpowers. First there's a sensation that the voice in his head is too loud, then he starts sticking to things uncontrollably. After a very public and embarrassing incident where his hand gets stuck in "Gwanda's" hair (Gwen Stacy under a pseudonym), Miles is confronted by the school security officer for having snuck out the previous evening. Miles runs, eventually ending up in the security office where he starts sticking to everything ("stop sticking!"). When he falls out of the window, he is forced to use his new power to avoid plummeting to the street below ("keep sticking Miles!"). He finds his way around the outside of the building to his room, where he finds his roommate's copy of "True Life Tales of Spider-Man." The very situation he's experiencing is mirrored in the pages of the comic book and realizes that he too is a Spider-Man.

The scene cuts to a shot of him running down the street attempting to reach his Uncle Aaron by phone. Frenetic strings play A-minor scales and arpeggios in the background, rising in both pitch and volume. His inner monologue grows increasingly frantic ("It's just puberty. It was a normal spider and I'm a normal kid!") as the music builds further and the camera zooms in on his face. Brass joins the instrumentation with syncopated hits on $\hat{5}$ and $\hat{7}$, swelling alongside the strings to a full orchestra $\hat{1}$ at the exact moment a taxi pulls out in front of Miles (**Example 5.3**). He instinctively leaps into

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[195] Anahid Kassabian, *Hearing Film: Tracking Identifications in Contemporary Hollywood Film Music* (New York: Routledge, 2001).

the air and performs a front flip, landing in the iconic three-point superhero pose.[196] All of the auditory and visual cues that communicate the plunge are present, but the action occurs reflexively rather than intentionally (establishing a dichotomy between Miles' bourgeoning abilities and his agency to use them). This scene is certainly a heroic plunge (albeit unintentional), but it also establishes an associative musical resonance between Miles and Spider-Man. In Peter Parker's introduction, a natural-minor-mode build up to a high tonic pitch also occurred, but that number ended with the three-note Hero motive whereas the present scene does not. Although Miles did something fantastic—even garnering applause from onlookers—he is not yet a hero. I interpret this as a promissory note: a suggestion that Miles will earn the right to the Hero motive later in the film.[197]

Example 5.3: Hero – first suggestion of link to Miles (18:40–18:48)

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[196] https://tvtropes.org/pmwiki/pmwiki.php/Main/ThreePointLanding
[197] Edward T. Cone, "Schubert's Promissory Note: An Exercise in Musical Hermeneutics," *19th-Century Music* 5/3 (University of California Press, 1982), 233–241.

Example 5.4: Miles' first plunge (heroic)[198]
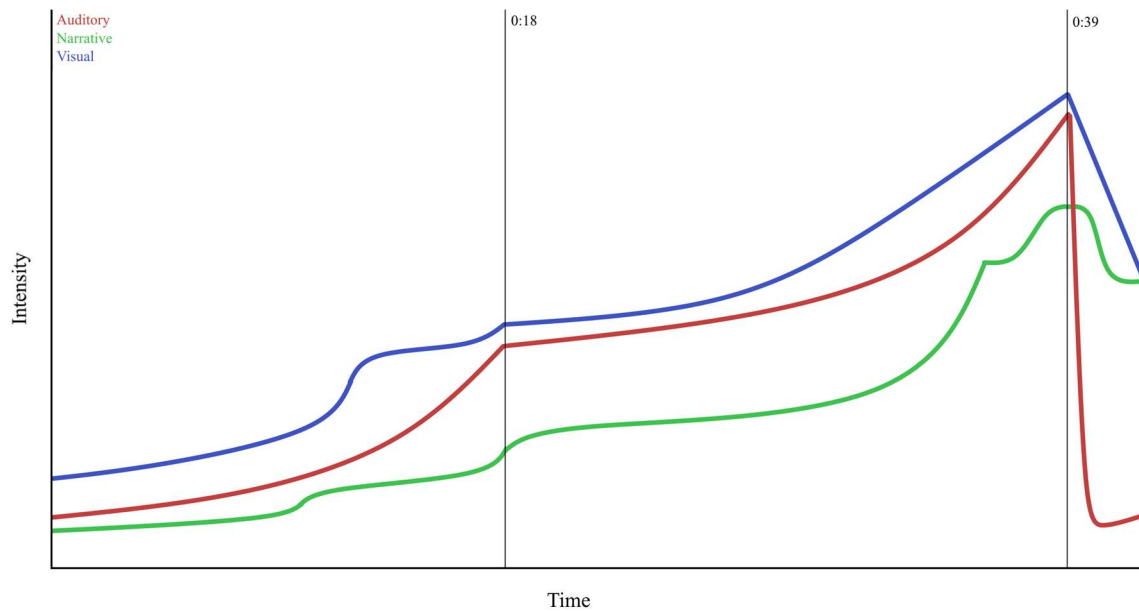
Miles travels back to the place where he was bitten to investigate, wandering

through the darkness, and follows his newly enhanced spider senses towards more clues.

He stumbles into a battle between Spider-Man and Green Goblin taking place in an

underground facility. Narrowly avoiding being crushed by flying debris, he winds up

hanging on for dear life on the edge of a giant machine. Rising string glissandi build

tension up to the moment he can't hold on anymore and he falls. Peter hears his yell for

help and swings to the rescue (with a heroic plunge, **Example 5.5**) while the music shifts

to a triumphant, brass driven melody that proves to be a consequent phrase to the Hero

motive (**Example 5.6**). Once they land in a safe location, the motive is heard in the horns,

then again as they realize they are the same ("I thought I was the only one. You're like

me."). Peter offers to show Miles the ropes after he destroys the super collider and then

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[198] *Spider-Verse*, Miles' first plunge https://mediaspace.umn.edu/media/t/1_r7mhttxh

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leaps back into action, accompanied by a full statement of the Hero theme (**Example 5.7**).

Example 5.5: Peter A. saves Miles (heroic)[199]

Example 5.6: Hero – Peter A. saves Miles (21:45–21:53)

Example 5.7: Hero – Peter A. swings up to the control panel (22:38–22:48)

    The ensuing battle does not go according to plan. Before Peter can destroy the machine, Prowler rushes in and pulls him away from the control panel. The fight continues while Miles watches from the sidelines. Green Goblin pins Peter down, and

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[199] *Spider-Verse*, Peter A saves Miles https://mediaspace.umn.edu/media/t/1_7na4iv6w

Kingpin enters the scene, taunting Spider-Man with his own theme song and commanding the scientists to start the machine. A probe slowly lowers from the ceiling and then the super collider activates in a dazzling display of colors and lights, opening a portal to multiple different dimensions. Peter tries to swing away to the panel again, but Goblin grabs him and thrusts him into the swirling vortex of light. Peter sees the expanse of the multiverse spread before him, briefly catching glimpses of other Spider-Persons. This causes the experiment to become unstable, leading to a huge explosion that destroys part of the facility and abruptly collapses the portal (which launches several of the other Spider-People featured in the film into Miles' dimension).

Miles searches the rubble, finding Peter under a large piece of debris and rushing to his side. Peter feigns being alright, but quickly realizes he actually might not get up this time. He hurriedly explains to Miles what to do with the override key, what will happen if Kingpin starts the machine again, and how important it is to keep his identity a secret. Throughout this scene, a new musical theme emerges as Peter implores Miles to destroy the collider, saying, "promise me you'll do this!" (**Example 5.8**). The theme begins with a leap up and back down and octave, interspersed with a mid-register snippet of a natural minor scale. Miles resolves to do it and says, "I promise," just before the melody reaches its apex. At this peak, the orchestration cuts back dramatically, leaving an exposed French horn playing a quiet iteration of the Hero motive. This creates a direct and inextricable connection between the just-heard theme (which I will refer to as the Destiny theme) and the Hero theme. It's a promise to the audience that, in fulfilling his promise, Miles will become Spider-Man.

Example 5.8: Destiny – Miles' promise (26:29–26:55)
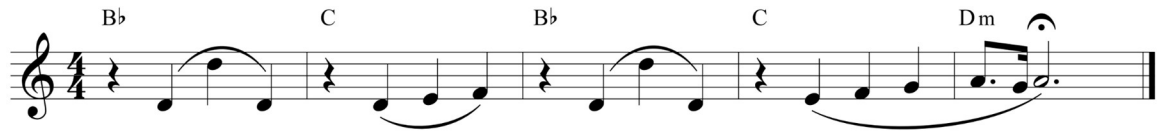
5.3. "…There's only one way Billy. You just gotta do it." : A Failed Attempt

After escaping the facility, Miles goes home to his parents' house to ask if he can stay there for the night even though he's supposed to be at his boarding school. His mother can tell he's upset and attempts to console him. He asks, "Mom, do you ever think of moving out of Brooklyn?" to which she replies, "Our family doesn't run from things, Miles." As this conversation takes place, the Destiny theme plays again, featuring the familiar octave leaps and some new minor-mode melodic activity in between (**Example 5.9**). As Miles rolls over in bed and looks at the override key, the melody reaches up to scale-degree seven fades to silence, never resolving to either ^5 or ^1. I read this half-cadential ending as a suppression of the Hero motive fragment heard at the end of the first iteration of the Destiny theme. Miles is wrestling with how to escape his fate, but the music is signaling that not only can he not run from this fight, but he also has a long way to go before he can succeed.

**Example 5.9: Destiny – Family (30:41–31:04)**
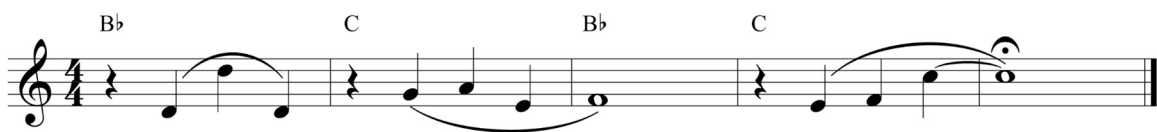
Hearing the news about Peter's death on the television, Miles again runs away. A montage depicts news reels and images of people across the city reacting to the news that Spider-Man is dead. Miles goes to a costume store and purchases an ill-fitted Spider-Man suit, putting it on under his normal clothes. He eventually finds himself standing in a

crowd of people sporting Spider-Man memorabilia and listening to Mary Jane (Peter's widow) give a speech about how, "we all have powers of one kind or another, but, in our own way, we are all Spider-Man, and we're all counting on you." Miles takes this to heart, knowing that if anyone is going to be able to stop Kingpin, it's him.

Cut to an alleyway, where Miles throws down issues of the Spider-Man comic book. A driving musical number reminiscent of the previously heard hero theme (rhythmically and tonally) plays while Miles flips through the pages, seeking out how Billy Barker (Peter Parker's comic book alias) learned how to be a hero. He finds a page featuring the character standing on the edge of a building, telling himself that the only way to do it is to jump, no matter the risk. Miles looks up at the very same building and the shot quickly cuts to one in which he is running up the stairs. He bursts through the doors to the roof, swelling chords pulsing in the music along with rapidly articulated scalar patterns in a sharp synth. He approaches the edge, looking down at the bustling street below. All the hallmarks of an imminent plunge are present: growing musical intensity, zooming in on his face, shots of the distance to the ground, and the growing anticipation of what might happen when he does step off the ledge. All this tension is suddenly left hanging when the music cuts out abruptly and Miles runs back down the stairs with only the sound of his squeaking sneakers accompanying his cowardly retreat. This is a classic example of a negated deceptive plunge: establishing the expectation of a big payoff and then leaving it hanging (**Example 5.10**).

Example 5.10: Miles attempts the leap (negated/subverted deceptive)[200]
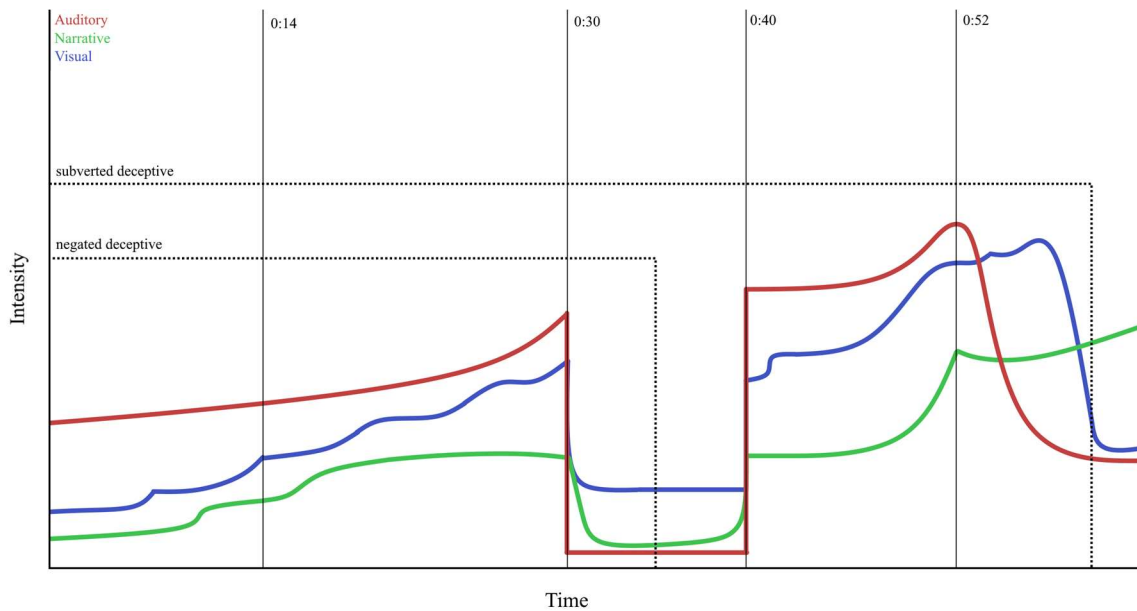
Example 5.11: Destiny – Miles tries to jump (33:37–33:52)
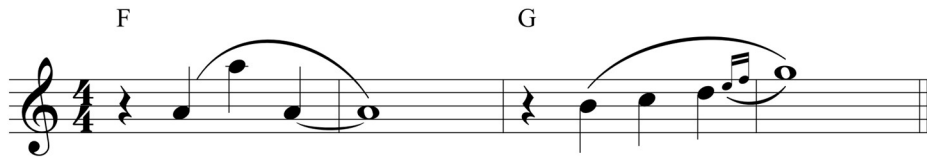
Miles looks up at the building again, turning his attention to a much shorter building next door to it. The music returns with the same driving rhythm as he runs up another flight of stairs. On the roof, the Destiny theme returns fuller and more decisive than in previous statements, promising not only a real plunge but also a fulfillment of Miles' becoming (**Example 5.11**). He starts sprinting toward the ledge, but he trips on his shoelace just before he reaches it, sending him haphazardly plummeting over the side of the building. The Destiny theme reaches ^7 without resolving, again rejecting the heroic cadential motive promised earlier before fading into musical silence. Miles screams and

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[200] *Spider-Verse*, Miles attempts the leap of faith https://mediaspace.umn.edu/media/t/1_dbzcgba1

falls through the air uncontrollably, comedically bouncing around off of flagpoles and

telephone wires before hitting the ground. He rolls over and sighs and then realizes that

he still has the override key in his pocket and that the fall damaged it. As he pulls the

broken key out and examines it, a fragment of the Hero theme plays quietly and

mournfully on a solo trumpet. The path towards saving the city just became much harder.

This elegiac iteration of the Hero theme continues as the scene cuts to Miles

visiting Peter's grave in a cemetery, where he expresses his doubts. A shadowy figure,

who turns out to be Peter B. Parker from a different dimension, approaches from behind

and frightens Miles. Thinking the stranger is Prowler, Miles turns and electrocutes him

with a new-found power, rendering Peter B. unconscious. Miles realizes this is another

Spider-Person as the camera zooms out to reveal the pages of a comic book flipping

closed for another introductory sequence ("Alright people, let's do this one last time").

5.4. "Thwip and release…" : Learning How to Swing

After meeting the new Peter, things move quickly. Miles is forced to run from the

PDNY (his universe's version of the NYPD) with Peter's unconscious body, resulting in

a high-speed chase scene. After escaping the police, Miles goes to his uncle Aaron's

apartment, where he ties Peter to a punching bag to interrogate him. The two don't get

along right away ("I'm not looking for a side-gig as a Spider-Man coach"), but Miles

convinces Peter to let him help. They figure out that the original Peter got the "goober"

(the override key) from Alchemax, so they take a bus to the facility in order to steal the

plans again.

In brief, they retrieve the plans but also get caught by Doc Ock and are forced to

flee through the forest with a veritable army of Alchemax employees chasing them with

laser guns. Peter throws Miles a web-shooter and they leap from the balcony. Frantic music that hearkens back to the previous chase scene with the security guard dominates the soundscape as Peter deftly swings away. Miles, on the other hand, hasn't learned how to swing yet and instead opts to run. It becomes clear that Doc Ock will catch him unless he quickly masters the technique. Peter shouts out an overwhelming series of instructions as Miles sprints up a tree, Doc Ock climbing up just behind, as the music rises in pitch and volume. He reaches the top and leaps off, the strings reaching an apex on G with a rapid brass fanfare (F-G-Ab, G-Ab-B) that highlights the dominant. The depiction of time slows down drastically as Miles lines up his shot. The web lands and he begins swinging just as the Hero motive sounds triumphantly in the brass on tonic C **(Example 5.12)**, creating, aptly enough, a heroic plunge (**Example 5.13**).

Example 5.12: Hero – Learning to Swing (53:30–54:02)

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Example 5.13: Miles learns how to swing (heroic)[201]
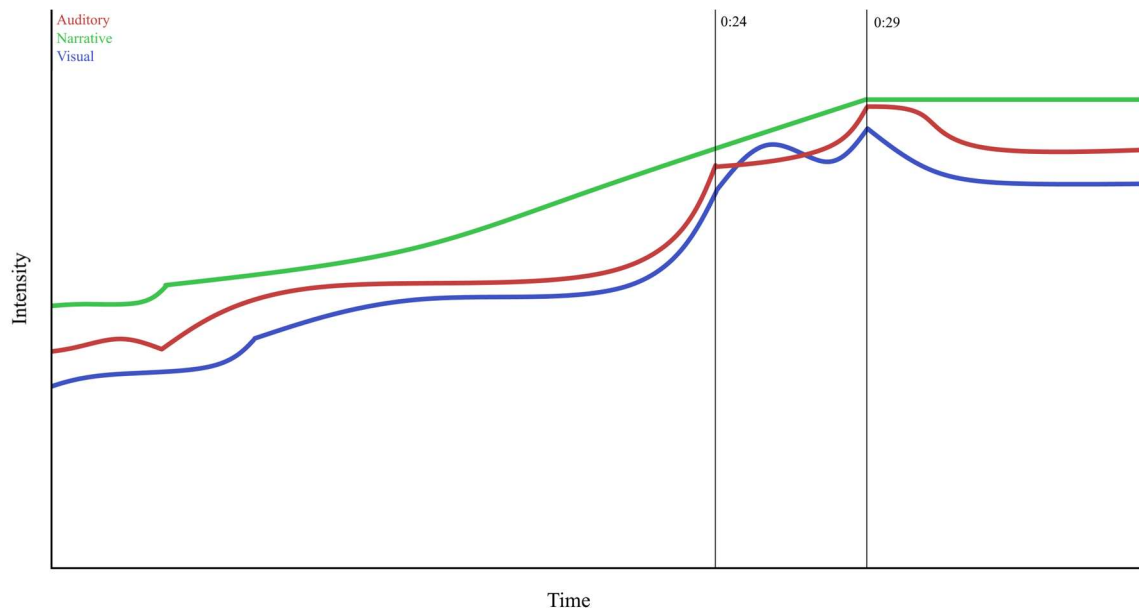
Infused with the driving drums of the chase music, a full statement of the theme sounds as Peter tells Miles how to "Twhip" and release his web-shooter. Both the chord progression (i-III-IV) and the key (C minor) echo the heroic theme that accompanied the original Peter at the collider. Once the statement is complete, Peter B. glitches (a result of being in a different dimension) and they both fall. Luckily, Spider-Gwen has been following them and swings in to save the day by stringing the two up with webs and kicking Doc Ock in the face. After revealing her face to Peter and Miles, Gwen gets the same type of comic book introduction as the two previous Spider-Persons.

5.5. "This is Miles! And he's gonna save the Multiverse" : Greater Expectations

All three of the Spider-People head to Aunt May's, figuring she will know where the original Peter Parker had his secret base. She takes them to a massive underground facility hidden beneath her shed where there are all kinds of spider-suits, vehicles,

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[201] *Spider-Verse*, Miles learns how to swing https://mediaspace.umn.edu/media/t/1_07hcamva

gadgets, and computers. As the elevator descends, three statements of the Hero motive in Dm are sounded triumphantly in the orchestra, stepping up through Bb, C, and Dm chords (VI-VII-i) and subtly nodding to the chord progression of the Destiny theme (**Example 5.14**). This theme fades as the elevator comes to a stop and everyone starts looking around, giving way to a solemn synth effect as Peter looks at a picture of this universe's MJ. The attention turns back to Miles as he distracts Peter with a joke. The Destiny theme begins as he admires the suits (**Example 5.15**). Looking up at the classic red and blue Spider-Man suit, the camera cuts to a shot of Miles' reflection in the glass with the suit behind. Through this image and the musical backdrop, it is demonstrated that he understands his destiny is to become Spider-Man, but it is also clear that he is not there yet. They all turn to discuss how they are going to defeat Kingpin and May introduces them to three more Spider-People (Spider-Man Noir, Peni Parker, and Spider-Ham), who are treated to a combined comic-book introduction.

Example 5.14: Hero – Descent into the Base (1:00:19–1:00:38)
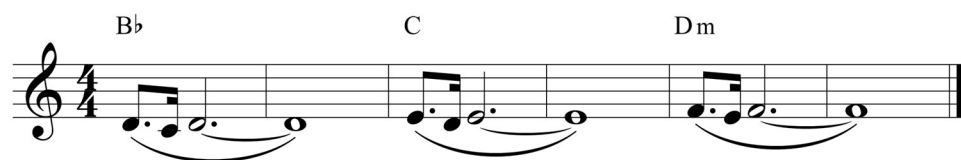
Example 5.15: Destiny – Miles in the Base (1:01:03–1:01:30)
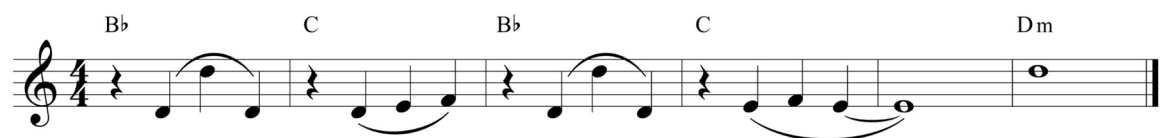
After they meet one another, they discuss the fact that one of them will need to stay behind to send everyone else home. Miles reminds them that if any of them stay in this dimension they will surely die, and so he volunteers to be the person to turn off the

collider. The other Spider-People look up at him approvingly before Noir says, "Who are you again?" and stops the hopeful melodic ascent in the strings. Peter interjects and stands up for Miles, telling him to show off his new powers. Miles discovers that he can't do them on command and the other Spiders grow skeptical. They test him, throwing surprise attacks and questions his way until they are all convinced that he's not ready.

5.6. "You're the best of all of us, Miles." : Destiny Beckons Again

Miles feels rejected and leaves, wandering the streets as "Hide" by Juice WRLD and Seezyn plays—the return to a compiled soundtrack symbolizing a return to Miles' pre-spider-bite (and pre-orchestral) social position. He heads to his Uncle Aaron's apartment to write him a note about the challenges he's facing. Whilst there, Prowler shows up and scares him. Miles manages to turn invisible to avoid detection briefly, but when he sees Prowler take off his mask—revealing Uncle Aaron as the villain—he runs. A chase ensues, the music taking up the filtered elephant trumpet sound effect associated with Prowler and forging it into a theme. Miles barely manages to escape and returns to Aunt May's house to tell the rest of the Spider-gang about his horrific discovery.

Unfortunately for Miles, he was followed by Prowler and his villainous friends to the house. An all-out battle breaks out, eventually leading to Prowler holding Miles off the roof by his neck, ready to strike. Miles pulls off his mask, revealing his identity to Aaron. Kingpin calls over the radio instructing him to, "finish it already." Unable to kill his own nephew, he pulls Miles' mask back down and puts his hands up in surrender, creating a subverted villainous plunge (**Example 5.16**).

Example 5.16: Prowler doesn't kill Miles (subverted deceptive villainous)[202]
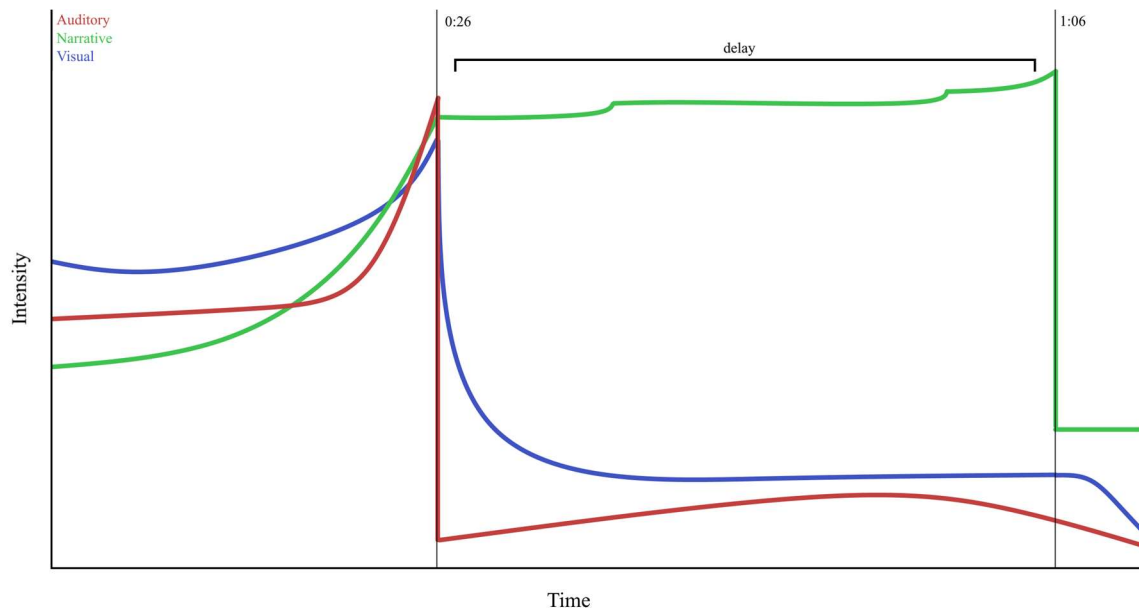
A gunshot rings out as Kingpin shoots Prowler in the back for not following his orders and he falls with a thud onto the rooftop. Peter distracts Kingpin while Miles grabs Aaron's body and swings away. He makes it to an alley where he sets Aaron down and exchanges heartfelt last words. Although he turned out to be working for the villains, Miles still loves and respects his uncle. Aaron apologizes for letting Miles down and for not being a person he could look up to. The Destiny theme returns as Aaron says, "you're the best of all of us, Miles. You're on your way. Just keep going." (**Example 5.17**). Miles sobs as Aaron draws his last breaths, the weight of his responsibility heavier than ever. His father Jefferson (a PDNY officer responding to reports of the ongoing fight) enters the alley, gun drawn and demanding answers. Miles turns invisible and flees before his dad can see him, but he can't hide Aaron's body. Thinking that a new Spider-Man killed his brother, Jefferson quietly rages and redoubles his hatred of the masked vigilante.

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[202] *Spider-Verse*, Prowler doesn't kill Miles https://mediaspace.umn.edu/media/t/1_amtgxorf

Example 5.17: Destiny – Uncle Aaron (1:14:58–1:15:23)
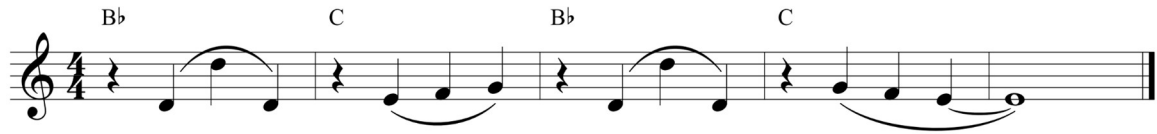
5.7. "That's all it is, Miles, a leap of faith." : Becoming Spider-Man

Miles returns to his room at his boarding school and angrily thrashes about, knocking over books and breaking things. His sketchbook tumbles to the floor, falling open to the page with a draft of the art he graffitied with Aaron at the beginning of the film. He grabs the book and flings it out the window. A few seconds later, the book comes flying back through the window into his arms, followed by Peter and the rest of the Spider-gang. They try to comfort Miles, offering up their stories of loved ones they lost. This heartfelt intervention is comedically interrupted when Miles' roommate enters, sees all the Spider-People clinging to the ceiling, and passes out.

After putting his roommate in bed, Miles turns to see the rest of the gang leaving. Gwen says goodbye and Peter tells Miles he can't go to the collider. When Miles objects, Peter trips him and holds him aloft from the ceiling. He tells Miles to prove that he's ready by getting past him using his powers. Miles tries to do it, tensing his body as the music swells, but he can't manage it and the VI-VII-i Destiny progression in A-minor is left unresolved as it fades out (negated deceptive heroic plunge). The progression starts once again—this time with the hero motive—as Peter ties Miles to a chair with his web shooter. Miles asks, "when will I know I'm ready?" to which Peter replies, "you won't. It's a leap of faith." and swings away. Miles is left sitting in his room, unable to move or speak while his new friends go risk their lives to save his city.

Time passes until Miles' dad knocks on his door and asks to talk. Miles can't reply, so Jefferson simply talks to him through the door. He explains that something bad has happened and that he is worried that they might drift apart (like Jefferson and Aaron did). He says that he sees a spark in Miles, which is why he pushes him so hard, but ultimately it is Miles' choice what he does with it. A soft, string version of the Destiny motive comes in as Jefferson is saying his goodbyes and continues as he walks away (**Example 5.18**). Miles, stuck on the other side, resolves to break free and save his friends. The theme gives way to a powerful defiant plunge, where Miles charges up electricity and escapes in an explosion of web, finally able to use his powers on command (**Example 5.19**).

Example 5.18: Destiny – Jefferson at the Door (1:21:42–1:22:05)

Example 5.19: Miles escapes the webbing (defiant)[203]
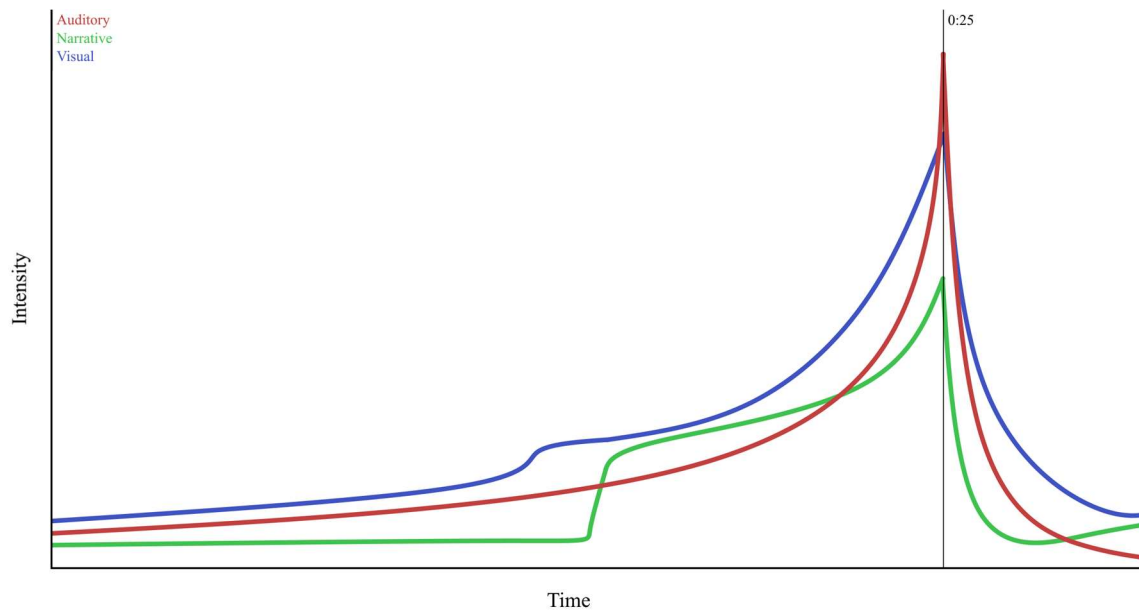
His roommate awakens, but Miles turns invisible to avoid detection. He walks

confidently towards the window as "What's Up Danger?" by Blackway & Black Caviar

begins playing. A montage that depicts Miles going to Aunt May's house, getting his own

web shooters, customizing his own Spider-Man suit with black and red spray paint, and

travelling to the top of a skyscraper to perform a leap of faith follows. The entire scene

functions as the realization of a heroic plunge (**Example 5.20**). The drums and bass of the

hip-hop song are overdubbed with orchestral strings playing the Destiny theme, all while

snippets of previous dialogue play in a series of auditory flashbacks ("I see this spark in

you…" "Our family doesn't run from things…" You're the best of all of us…" "That's

all it is Miles, a leap of faith…").

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[203] *Spider-Verse*, Miles escapes the webbing https://mediaspace.umn.edu/media/t/1_as2skmlx

Example 5.20: Miles takes the leap of faith (heroic)[204]
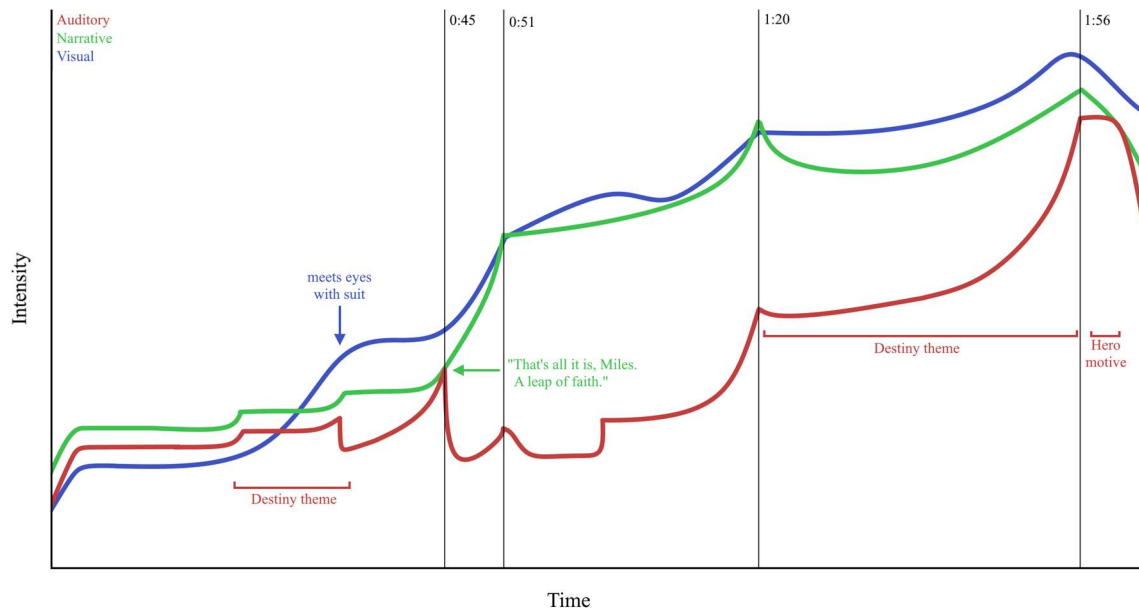
Miles positions himself on the side of a building and, after a moment of hesitation, jumps (0:51). The definitive moment so characteristic of the plunge occurs as he leaps, but it is drawn out through a remarkably long delay until the moment his web connects to the top of the building. Throughout this fall, intimations of the fall synchronization schema (see Chapter 6, section 6.2) join this extended delay phase of the plunge, building tension up until the moment Miles *doesn't* hit the ground.[205] The music comes back in full force with the shouted line, "can't stop me now!" He swings around the city in celebration, eventually landing on the very same lion-headed statue that the original Peter stood on in his introductory sequence. Just as this occurs, the music builds in the Destiny theme's VI-VII-i progression and finally resolves to tonic with the Hero motive fully intact, swelling powerfully as the final chord sounds. After nearly 90 minutes of film, Miles has become Spider-Man.

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[204] *Spider-Verse*, Miles takes the leap of faith https://mediaspace.umn.edu/media/t/1_4aqlrvrq
[205] See chapter 6 for a more detailed account of this schema.

Miles' leap of faith scene is the crux of his heroic transformation, but it is also a celebration of his Blackness in several ways. The two competing soundscapes that have so far defined Miles—compiled (for his pre-superhero life and emotions, as well as his racial identity) and composed (for his growth as a superhero) soundtracks—are now fully interwoven, musically integrating the complex mosaic of affiliations that define him. This demonstrates that that Miles' strength is in his individuality, but it also suggests an overcoming of social boundaries. Miles is not simply taking up the mantle for the recently deceased white superhero, he is redefining what Spider-Man looks and feels like as a person of color. He can't just wear the mask, he has to make it his own.

5.8. "Hey Kingpin, push the green button for me!" : Destiny Fulfilled

The rest of the Spider-gang infiltrates a bogus charity event held by Kingpin at Fisk Tower to gain access to the collider. They get all the way into the heart of the machine before the assorted villains spring their trap and attack. Peter struggles with Doc Ock as he tries to use the override key. She pins him and asks if he has any last words, but then one of her mechanical arms turns and hits her. A record scratch sound effect (serving as an aural signifier of the hip-hop genre and as a literal interjection of Miles' newfound heroism) initiates a change in musical texture that features the blend of orchestra, electronics, and a drum kit that defined Miles' becoming. She starts taking hits out of thin air until Miles reveals himself flying towards her, fist raised. Booming brass sound an VI-VII-i progression in Am, with a cadential extension prolonging the resolution from G to Am for two measures. During this timeframe, Miles is highlighted by a colorful splash screen and the strings play quickly ascending scalar patterns while a low-pass filter sweeps the bass—in effect, creating another plunge as he lands the punch

and sends Doc Ock flying (**Example 5.21**). He grabs Peter and they exchange dialogue, all while a full statement of the Hero theme plays for Miles' heroism (**Example 5.22**). Significantly, this iteration of the theme is not only complete for the first time in relation to Miles, but it is also tinged with the hip-hop affectations of Miles' personal life—demonstrating that Miles could only fully become a hero if he was true to himself.

Example 5.21: Miles saves Peter B. (heroic)[206]
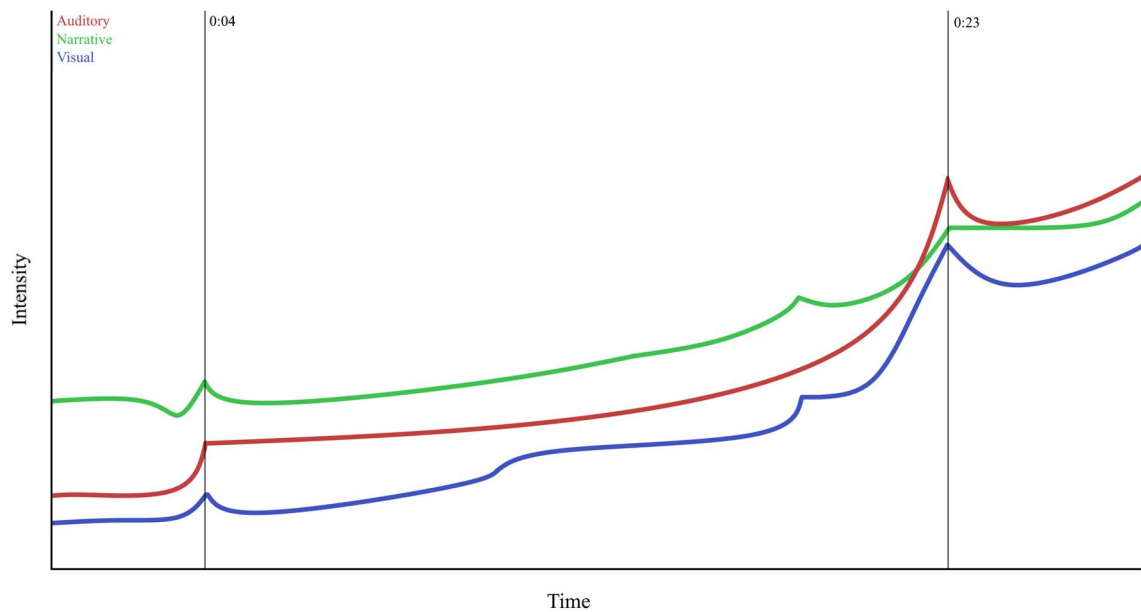
Example 5.22: Hero – Miles at the collider (1:29:16–1:29:41)
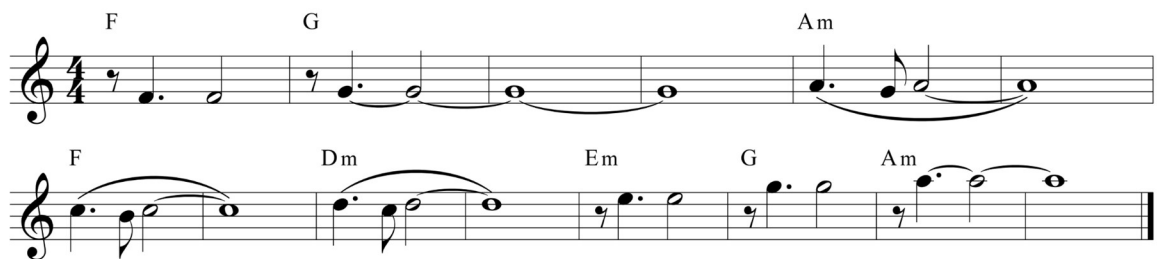
The battle continues as the effects of the collider grow more extreme, with full vehicles and even buildings from the colliding dimensions break through the portal and

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[206] *Spider-Verse*, Miles saves Peter B. https://mediaspace.umn.edu/media/t/1_iln9mjb6

fly about the room. Gwen takes a hit and falls towards the portal, but Miles swings after her and extends his hand, grabbing her at the last second before she is thrust into a dimensional rift. Once Doc Ock is taken out of the picture by a flying box truck, Miles takes the override key and swings towards the control panel. He falls through the air between colliding buildings before swinging around in a flashy display of his abilities, mimicking the way the original Peter swung up to the panel when he and Miles first met. The music imitates the original version of the Hero theme heard during that scene as well, solidifying that not only has Miles become Spider-Man, but he has fully taken over where the original Peter left off.

One-by-one, he says goodbye as the other Spider-people jump through the portal to their respective dimensions. Peter is the last to go, but they are interrupted by Kingpin before he can leave. He tries to stay and help Miles fight, but Miles refuses. Mirroring the earlier scene where Peter forbade Miles from helping, Miles trips Peter and holds him over the swirling vortex. Yet another iteration of the Hero theme plays and builds to a peak of intensity on the subtonic, fading as Peter falls. I read this moment as a plunge not for Peter, but for Miles—he has finally proven himself capable and convinced Peter that he can take care of himself. He no longer needs to lean on Peter's expertise to be Spider-Man.

With his friends safely sent home, Miles turns to fight Kingpin. A loud, electronic version of the Destiny motive plays as the two square up and then the battle begins. As they trade blows as they fly through a rapidly deteriorating inter-dimensional space, as indicated by the color palette shifting from turquoises and yellows towards blacks and reds. Eventually, the two land on top of a version of the Brooklyn Bridge (marked

because it stands out among all the other landmarks depicted from this universe and others—significant because of its relation to Miles' home borough). While Miles struggles to stand, Kingpin appears undeterred and goes in for another attack, beating Miles down again and again. He says, "You took my family. Now, I'm gonna make sure you never see yours again." The ominous low brass and string tremolos swell and he slams Miles with his fists, just like he did the original Peter.[207]

Miles struggles to his feet as the Destiny theme plays once again and he says, "I'll always have my family. Ever heard of the shoulder touch?" (referencing the pick-up move Uncle Aaron taught him, **Example 5.23**). The theme reaches ^4 and swells into the most decisive plunge yet, where Miles says, "Hey," in a faux-sexy voice and electrocutes Kingpin, sending him flying (**Example 5.24**). Miles leashes him with his webs and swings him around, launching him into the green button that deactivates the collider. As all of this is happening, statements of the Hero motive steadily rise in pitch and pervade the texture up until the moment Kingpin hits the button. Everything stops as the portal begins to implode: the color palette returns to whites and blues, buildings start falling back into the rift, and the music cuts to a number that blends the Destiny and Hero themes into one by combining the Destiny motive with the VI-VII-i chord progression characteristic of the Hero theme. The soundtrack is likewise infused with electronic drums and synths, once again combining compiled and composed scoring techniques and the established topical resonances that go along with them. Objects fly back in through the rift until a critical mass is reached and the collider explodes.

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[207] This moment, along with the original blow dealt to Peter A. Parker a framed as prototypical villainous plunges. Given their regularity, I have not included intensity graphs for them here.

Example 5.23: Destiny/Hero – Shoulder Touch (1:39:35–1:40:15)

Bb   C   Bb   C

Dm   Gm   F   Am   Dm

Example 5.24: Miles does the shoulder touch (heroic)[208]

Auditory
Narrative
Visual

0:35   0:49 0:51

Intensity

"hey"

Time
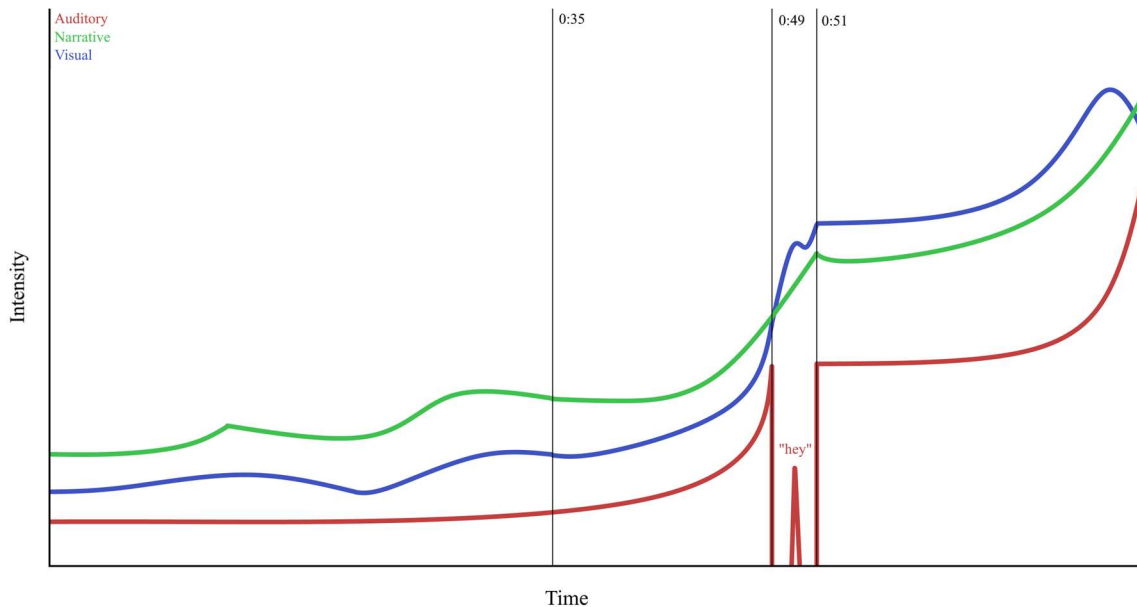
    In the aftermath, Miles turns Kingpin over to the authorities. He talks to his dad briefly, breaking the silence that's persisted between them for most of the film, then celebrates his role as the new Spider-Man. At long last, Miles' version of Spider-Man gets his own introductory sequence, not only providing a montage of his activities over the next few days but continuing the combined version of the two principle musical themes suffused with hip-hop markers.

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[208] *Spider-verse*, Miles does the shoulder touch https://mediaspace.umn.edu/media/t/1_l7dtreyj

5.9. Final Thoughts

Spider-Man: Into the Spider-Verse is exceptional in its use of the plunge as the central premise of the film. Rather than using the plunge as a pivotal moment that ushers in a new direction for the story, it instead positions it as a recurring thematic element that develops over time. From the outset, the plunge is treated as a given—it's a thing that Spider-Man does all the time because he is a superhero. Miles' journey sees him continually trying to live up to this standard and falling short, right up until the "leap of faith" sequence in the final act of the film. Once Miles finally achieves the status of Spider-Man, he takes several more plunges including his ultimate confrontation with Kingpin. The progression from insecure teenager trying to fit in at school to superhuman web-slinger responsible for saving the multiverse is told through the development of plunge schemas (in all multimedia channels) throughout the film. So, in addition to thematizing the plunge, *Spider-Verse* also infuses the moment with leitmotivic and associative elements to build upon itself and develop over time.

Superhero narratives are ripe locations for plunges already, but it seems that there is something about Spider-Man that makes stories about him a prime site for plunge-as-motive treatments. The centrality of the "leap of faith" moment, wherein Spider-Man tests his will and powers in a life-or-death situation is certainly one. There is a directly mimetic association as well—the way Spider-Man traverses space is always in competition with gravity, using web-slingers to turn what would be fatal plummets into forward momentum. The Spider-sense ability also creates a degree of premonition that lends itself to heroic moments—because Spider-Man can sense impending danger, he is always compelled to intervene, regardless of the risk.

I find the use of the plunge synchronization schema in *Spider-Verse* to be immensely powerful and resonant. It is a combination of culturally generic (the plunge) and piece specific associations (the plunge's development throughout the film) that sets it apart. While almost every superhero narrative features at least some kind of plunge, *Spider-Verse* makes it a central part of the film. Furthermore, the plunge is framed as more than just a one-and-done event for heroes; it is something they choose to do repeatedly in order to save people. Peter B. Parker gives his life trying to save everyone and, when he fails, passes that responsibility on to Miles. Through many hardships and failed attempts, Miles discovers his heroism, his confidence, and his identity.

6. Conclusion

In this dissertation, I have introduced synchronization schemas as a conceptual framework and analytic tool through the lens of the plunge. I demonstrated the ubiquity and malleability of the plunge through a wide array of examples drawn from filmic, staged, and ludic media. I laid out a typology of different narrative contexts in which plunges take place and generated prototypes of each. Through careful analysis and comparison of diverse samples, I have drawn connections between fields of artistic expression that are often treated as distinct.

6.1. An Alternative to Text

It takes a lot of prose to describe the complex interactions that arise between the various channels of multimedia works. One solution to this is to use the format of the video essay, which allows for real-time description and editorialization of video-recorded works within the same frame. Superimposing musical notation, intensity graphs, or related images on top of the work in question can ease the process of communicating one's analyses immensely. While such methods are common in conference presentations and lectures, it is rare to see video as a primary format of distribution for analyses, especially in the field of music theory. Online journals—such as the Society for Music Theory's *Music Theory Online*, SMT-V, and popular press multimedia—provide the opportunity to supplement text with moving images and sound, opening the door for inclusion of such videos within the body of the work. Indeed, shouldn't a phenomenon that occurs exclusively as a product of multiple media channels be presented in kind? It is my intention to pursue this as an avenue for presenting synchronization schemas in the

future, when making use of other methods of distribution and the restraints of dissertation formatting rules are lifted.

6.2. Future Research Prospects

Synchronization between coexistent elements of multimedia works is a powerful tool for storytelling, enabling creators to communicate complex narrative ideas across multiple channels of perception not only simultaneously, but cumulatively. The plunge is not the only synchronization schema, nor is it necessarily the most common. I chose it as the exemplar of the synchronization schema because of its eminent legibility and visceral impact. The intensification and abatement strategies evaluated in this dissertation are used to great effect in other narrative situations as well. I provide a brief synopsis of several potential schemas below.

The Fall

The fall occurs when a character plummets uncontrollably and their fate is uncertain. The intensity curves look almost identical to those from the plunge, often using the same general techniques of intensification while adhering to a different narrative event. Falls often feature rising glissandi and increasingly loud volume, shots from above and below and that show the whole span of the fall, depictions of time slowing down, and so on. When a character takes a plunge (or a leap) and their fate is indeterminate, the fall often follows shortly thereafter to further heighten the tension and keep the consumer in suspense.

A great example of this can be seen in a cutscene from the video game *Marvel's Spider-Man*.[209] Mary Jane has just acquired information from Silver Sable and needs to

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[209] *Marvel's Spider-Man* https://www.youtube.com/watch?v=AqLIidfra3c

escape. After being spotted and cornered, her only recourse is to jump from the building and hope Pete (Spider-Man) will be able to swing in and save her in time. The build up to her jump is presented as a plunge and then, as she descends through the air a new impetus portrays the fall right up until the moment Pete swoops in and saves her.

The Hunt (Predation)

In the heyday of cable broadcasting, one could tune into PBS, the Discovery Channel, or National Geographic and reliably run into a dramatized depiction of a lioness stalking an antelope on the Serengeti or a pack of wolves hunting a herd of caribou in the Canadian Rockies. This genre of filmic media stands out for its editorialization of natural phenomena—the fox catches the rabbit whether or not it is captured on film, subjected to cinematic enhancement, and scored with epic music. Such dramatization also occurs in hunting and fishing shows, where humans are the predatory animal. In all of these cases, the action taking place has narrative potential on its own but does not constitute a narrative. Marie-Laure Ryan suggests that the difference between "having narrativity" and actually "being a narrative" is predicated on the intentional evocation of meaning.[210] In this sense, predation always has narrativity but only becomes a narrative proper once a script is placed onto it.

Humans have been using music to heighten drama in artistic media since at least ancient Greece, where certain modes were employed to have specific emotional resonances. With the advent of opera, this impulse to enhance storytelling with music took on an even more prominent role. Fast-forward to the twenty-first century and it is exceedingly rare to encounter any kind of narrative media that *lacks* musical

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[210] Marie-Laure Ryan, *Narrative Across Media*, 9

accompaniment/enhancement. Nature shows of the sort described above are prime examples of this impulse and the evocation of synchronization schemas in them serves to further heighten the natural drama of life-or-death encounters in the wild.

Other Possible Schemas

The fall and the hunt both conform to intensity curves that are like those encountered with the plunge, this is the reason I encountered them in my research for this project. Other narrative moments might use totally different strategies to communicate their meaning. Tropes like grief, transcendence, inspiration, discovery, or disappointment could all be potential synchronization schemas. Further investigation will be required before any definitive determination can be made, but I am hopeful that my investigation of synchronization schemas will continue fruitfully.

Monetizing Synchronization Schemas

Synchronization schemas can be powerful storytelling tools, serving as templates for creators and familiar points of reference for consumers. As marked narrative moments, they can also play a significant role in advertising. For instance, plunges are pervasive in action-oriented film genres and thus almost expected by consumers—therefore, advertisements might feature plunges extracted from the broader work to elicit an emotional response. They could also be used to create anticipation because of their formulaic design by providing the initiation/intensification portion of the schema and withholding the climactic high point, for instance. More research will be necessary to make any claims about the efficacy and practical uses of synchronization schemas in marketing contexts.

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Appendix A: Plunges Sorted by Type, then Genre

Deceptive (negated)
Filmic
Indiana Jones: Raiders of the Lost Ark - Jones doesn't blow up the Ark
Staged
Giselle - Giselle doesn't stab herself
Hadestown - Orpheus looks at Eurydice

Deceptive (subverted)
Filmic
The Lord of the Rings: The Fellowship of the Ring - Galadriel's test
Point Break - Utah doesn't shoot Bodhi

Defiant
Filmic
The Expanse - Holden decides to log the distress call
Hot Fuzz - Sergeant Angel decides to return to Sandford
Staged
Il Barbiere di Siviglia - Rosina writes a letter
Wicked - Elphaba defies gravity

Fantastic
Filmic
Alice in Wonderland - Alice goes down the rabbit hole
Jurassic Park - the protagonists see a dinosaur for the first time
Legends of Tomorrow - Rip kidnaps each hero
Legends of Tomorrow - the Waverider travels through time
The Wizard of Oz - Dorothy opens the door to reveal the Technicolor world of Oz
Ludic
Bioshock - the avatar enters Rapture
Fallout 3 - the avatar leaves Vault 101

Faustian
Filmic
Faust - Faust signs the contract
Faust - Faust accepts the offer of youth
Faust - Faust agrees to let the contract stand forever
Futurama - Fry makes a deal with the Robot Devil

Heroic
Filmic
Arrow - Oliver sets up his base of operations
Black Panther - T'Challa drops from the jet
The Lord of the Rings: The Fellowship of the Ring - Frodo volunteers to take the Ring
The Lord of the Rings: The Fellowship of the Ring - Gandalf chases after the Balrog
Supergirl - Kara saves the damaged plane
Staged
Swan Lake (happy ending) - Siegfried attacks/kills Rothbart
Ludic
Wolfenstein: The New Order - B.J. Blazkowicz confronts Deathshead

Sacrificial
Filmic
The Black Cauldron - Gurgi jumps into the cauldron to save his master
Inside Out - Bing Bong jumps from the Wagon Rocket to save Joy
The Iron Giant - the Giant stops the approaching missile to save the town
The Lord of the Rings: The Two Towers - Gandalf falls from the bridge
Star Wars: Rogue One - basically every protagonists' death
Staged
Glee - Kurt gives up the "Defying Gravity" solo
Rigoletto - Gilda knocks on Sparafucile's door
Ludic
Hades - Zagreus trades vitality for power
Halo: Reach - Noble 6's final mission
Mass Effect 2 - the crew of the Normandy goes through the Omega-4 Relay
Metal Gear Solid 3: Snake Eater - Snake kills The Boss
Red Dead Redemption - John Marston's last stand
Transistor - Red destroys the Transistor
The Witcher 3: The Wild Hunt - Ciri confronts the White Frost

Suicidal
Filmic
Alien 3 - Ripley jumps into the molten lead
Independence Day - Casse flies into the alien mothership
Les Misérables (theatrical) - Javert jumps from the bridge
Predator - the Predator self-destructs
Staged
Giselle - Giselle dances herself to death
Les Misérables (tenth anniversary) - Javert jumps from the bridge

Madama Butterfly - Cio-Cio-san commits suicide
Swan Lake (tragic ending) - Odette/Siegfried throws her/himself into the lake
Werther - Werther commits suicide

Villainous
Filmic
Avengers: Infinity War - Thanos kills Vision
Gladiator - Commodus kills his father
The Lion King - Scar kills Mufasa
Staged
Das Rheingold - Alberich renounces love and steals the Rheingold
Rigoletto - Sparafucile murders Gilda
Romeo and Juliet (Prokofiev) - Romeo kills Tybalt
Ludic
Bioshock - player avatar kills Andrew Ryan
Call of Duty: Modern Warfare 2 - player avatar commits an act of terrorism
Grand Theft Auto V - player avatar tortures someone
Spec Ops: The Line - player avatar commits a war crime
Wolfenstein: The New Order - B.J. Blazkowicz kills Deathshead