Perception is crucial to understanding how spectators throughout time might have experienced a theatrical performance in an age past or in a more recent Hollywood blockbuster of today. For the spectator of today, it is difficult to fully comprehend how a spectator in Spain during its Golden Age might have experienced a play by such greats as Lope de Vega, Calderón de la Barca, or Quevedo. Nonetheless, temporal distance does offer some clarity of interpretation as it grants a level of objectivity.

This essay explores how the use of instruments and special effects enables a suspension of disbelief in which a spectator today would be able to ignore the changes brought on by time. By increasing our own understanding of the incorporated elements of the performance, we can more accurately interpret and illuminate our perception to achieve a parallel comprehension with our seventeenth-century counterparts. With artifact evidence, literary theories, and modern-day comparisons, one can more readily achieve this desired understanding. Although it may be impossible to recreate the viewing experience in its entirety, this brings us closer to the experience of the time.

Music, sound effects, special effects, lighting, camera angles, and staging angles all have a lasting mark on our perception when we view a performance. This is true of cinema and theater alike. These elements blur the line of reality and fiction and create what is perceived by the spectator. These are the factors that evolved and changed how a Golden Age theatrical performance went from being heard to being seen.

To illustrate, which instills more fear into the common spectator? Would it be the large great white shark in Jaws or the two unsettlingly slow musical notes composed by John Williams that puts us on the edge of our seats? Instinctively, one could easily argue that the shark is by far the more frightening of the two since it is a visual stimulus on screen. But suppose you were to take away the infamous music that accompanied the scene with the shark, or replace it with music of a different nature, for example the Beach Boys, would the visual image still have the same effect? Would the fear still be as palpable or would the change in music change the mood of the scene?

The type of music chosen to accompany the shark inspires the greater fear, and this was done on purpose. Alone both are daunting, but as a combination the two amplify one another. Together they achieve what they were designed to do: increase and manipulate the overall experience of the observer making it a multi-sensory experience.
In contrast, unsuitable music could have a negative effect, thereby taking away the intended meaning from a given scene.

One theorist that has done much in the way of increasing our parallel comprehension and assessment of literary works of the past has been Hans Robert Jauss. In his “Literary History as a Challenge to Literary Theory”, he explains his theory of horizon of expectations, which sheds new light on how one can achieve a more comprehensive understanding of time-pieces. Jauss unravels the greatest dilemma for us as spectators of today, as opposed to spectators in Lope’s era, by explaining that a “literary work contains an ever unfolding potentiality of meaning, which can be seen as actualized in reception at various historical moments” (163). Thus stated, the meaning and interpretation of a literary work, including theatrical works, changes as individual spectators each bring with them their own understanding or background knowledge (referred to by Jauss as expectations) to their viewing of the work.

This background knowledge could include historical context, genre familiarity, author recognition, as well as any other related information pertinent to the piece being observed. The piece becomes individualized, as it “is not an object that stands by itself and that offers the same view to each reader in each period” (Jauss 165). Each individual spectator brings to the viewing his or her own preconceived notions concerning the genre, the director’s style, and other elements of the play. This directly affects the manner in which the spectator views the performance. In this way it is individualized and unique to each observer.

Another literary theorist, Peter J. Rabinowitz, more succinctly defines the theories expressed by Jauss. Concisely stated, Rabinowitz argues that “[A reader’s horizon of expectations is] the set of expectations, both literary and cultural, with which a reader approaches a text. By examining the ways that the horizon changes over time, we can understand the consequent changes in the ways different audiences in different historical situations understand a text” (91). Putting this theory into practice with theater, we can trace back through time the use of music, machinery, and the many other facets of what was the theater experience of the time period and see how they influenced the perception of the performance. Many documents have been discovered and researched to aid in the understanding of the theatrical machinery of the time period. Among those are the machinery documents of Nicola Sabbattini.

Nicola Sabbattini was an Italian engineer and architect in the early sixteen hundreds whose work entitled Pratica di Fabricar Scene e Machine ne’Teatri was considered “a standard work on stage practice in the late sixteenth and early seventeenth-century Italian theatre” (McDowell 37). Although not an inventor himself, Sabbattini’s drawings and detailed instructions on the use of the theatrical machinery were, “important not because [they] introduced innovations but because [they] describe[d] in detail the practices of the Italian stage in the late sixteenth and early seventeenth centuries, practices which other architects borrowed and intro-
duced throughout Europe” (42). His diagrams covered a range of subjects, from the proper use of trap doors to audience arrangements, from how to make a ship appear to sail on stage to how marine monsters could spout water while swimming. These innovations are far greater in comparison to the limited wheelbarrow and deus ex machina machinery used in the time of the Greeks.

![Figure 2. Ship with annotations (Sabbattini 136)](image)

This utilization of Italian craft in the Spanish theater was common. In 1574, an Italian acting troupe, headed by Alberto Ganassa, arrived in Spain and left its mark on the Spanish theater of the time. Their temporary theater, the Corral de Pachea, brought “a style that was new to both Spain and Europe, and served as a prototype for Spanish theatres for centuries to follow” (Freund 373). This Italian tradition of influence carried on for some time with “Tuscan engineers...Spanish dramatis, [and] the skill of the Madrid painters... jointly conspired to produce ephemeral creations” at the Buen Retiro stage (Damiani 142). The Tuscan engineering and Sabbattini’s Pratica have been, in part, the source of modern recreations done by two researchers who in their own way have tried to reconstruct the Golden Age Spanish theater experience. Miguel Ángel Coso Marín and Juan Sanz Ballesteros have spent twenty years in the “descubrimiento, la restauración y la difusión” of the Corral de Comedias in Alcalá de Henares (Coso Marín 5). Their book El escenario de la ilusión is a compendium of those twenty three years restoring and recreating theatrical artifacts from Golden Age Spain. Drawing from their own studies of documents and drawings, which included those of Sabbattini, these two pioneers have effectively recreated what they consider to be “la punta de un iceberg” (6). With a scarcity of full documentation from that time, they had to turn to Italian sources in order to craft a full size operational sound effects machine of the period as well as visual engineering designed to awe and inspire the Golden Age spectator.

![Figure 3. Metal sheet suspended to create thunder (Moynet, Trucs 264)](image)

The machines created by Coso Marín and Sanz Ballesteros can help us better perceive the experience of the time. Their work serves as a “forma de sentir el teatro” (8) as well as “como un sencillo intento de acercarnos a los rumores del pasado” (12). Understanding how these devices functioned and the sound they would have produced enables us to envision their uses during the plays. Knowing that wheeled planks and pebble-filled barrels spun on a support system...
simulate the sound of thunder, and that sheets of metal of various materials and sizes mounted and shaken could be used to replicate the sound of storms, it becomes simple to see how such stage directions as, “Fingiránse truenos y torbellino al bajar” (Mallén de Soto 2) would have influenced a play. The metal sheets as storm producing sound agents worked so well that they endured on in Hollywood and radio up until the digital age, when sound effects became primarily the domain of computers.

Wind machines constructed of a knitted canvas stretched over a hollowed wooden drum were incorporated into the storms. As the drum is turned, the friction of the canvas over the drum produces the sound of wind. The pitch of the wind could change depending on the size of the drum, the material used for the canvas, as well as the speed and rhythm one used in turning the drum.

Other known machines that Coso Marín and Sanz Ballesteros have recreated include large rotating wooden beams filled with pellets. When rotated the pellets fall inside the hollow cavity of the beams creating the distinct sound of rain. These varied in form and size, including a wheel version that in addition could produce the sound of a swelling ocean. The rain machine enjoyed an evolving state as time progressed.

A final machine worth mentioning created the voice of thunder after the lightning crash. This particular sound enjoyed many shapes and forms in the theatrical setting, but they each shared a common element. The basic component of the machine was set up of one or more planks of wood or metal suspended over the ground. When released, they would achieve the desired effect as they crashed to the ground on top of each other. The different materials, either wood or metal, and the height of the drop undoubtedly affected the final result.

All of these machines, and the ones yet to be discovered and explored, were designed to augment the perception of the play. Referring to one of his own plays Calderon says, “el teatro creció a susto con el ruido de truenos que le siguió, imitados tan al natural, que parecía se desplomaba no solo aquella material arquitectura sino toda la máquina celeste” (Coso Marín 17). With such an impressive display of sound that seemed incredibly natural, the audience would have felt the shared feeling of what Samuel Taylor Coleridge described as a suspension of disbelief. They would have distanced themselves from the spectator’s view and in effect become part of the play. They no longer would have had to use their imagination to construct some of the theatrical elements of the play, since the production itself supplied them, thereby requiring less imagination on the spectator’s part.

Ironically, it is the rise of these mechanics...
that frustrated the likes of Lope de Vega and his contemporary Miguel de Cervantes. In Lope’s opinion the “vulgo now went to see the play, not to hear it; the comedia had become a spectacle for the eyes” (Rennert 97). Cervantes, through his timeless piece Don Quixote, expressed similar sentiments, “allí estará bien el tal milagro y aparición como ellos llaman, para que gente ignora nante se admire y venga á la comedia” (98). In direct correlation, the increased use of machinery called for an increase of explicit stage directions referring to their proper use.

In Philips Freund’s Dramatis Personae, an additional Italian import is introduced in the form of the influential Italian music that saturated Spain during the Golden Age. Those with the interest and money to afford the cost of studies would send their children to Italy to “study and absorb its more advanced cultural atmosphere” (419). Better equipped with the experience gained, these youths, upon returning to Spain, were more readily prepared to “accept what Italy sent to Madrid” (419). Yet Freund presents an interesting argument in that the Italians also found interest in what the Spanish had to offer. While Spain drew from the music and dramatic machinery that filled its theaters, Italy took pleasure in the work of Lope de Vega and Calderón. Their works were “admired and deemed superior to what the Italians were writing” and as their superiority became increasingly recognized, opera composers from Italy “began to look to them for advice on how best to construct plots and handle passages of recitative” (420). In this way, there existed a mutual progression in the arts that was felt throughout Europe.

Music, a sustained integral part of festivals, autos sacramentales, and religious ceremonies, found its place in the comedias of the time. In Los teatros comerciales del siglo XVII music tanto cantada como instrumentada, desempeñaba un papel importantísimo en el fenómeno teatral del siglo XVII. Los músicos eran no sólo los primeros en aparecer sobre el tablado en una típica función sino que también ponían punto final a la representación, además de actuar en muchas de [las] otras piezas cortas que se interpretaban en los entreactos de la comedia. (Ruano de la Haza 342)

That is to say that the music used in the theater of the time was incorporated in a similar manner as in today’s mainstream entertainment. They introduced the play and would end it in the same way music is employed at the beginning of a film where the director and key actors are named, and at the end of the film when the entire credits are shown. One could imagine the actors of the time presenting themselves on stage one last time to receive, with any luck, favorable recognition from the spectators.

Often the musicians were used for other employment as well. When required, a musician was contracted “no sólo para tocar un instrumento sino también para representar” (Ruano de la Haza 343). Frequently, musicians were needed within a comedia to sing to the window of a loved one, as in El Marión by Quevedo. In a more serious play, such as Fuente Ovejuna,
musicians would be needed for the scene containing the rural country wedding of Laurencia and Frondoso. Here the lyrics to be sung are expressively offered by Lope de Vega. The author of a play expressed at times even the desired instruments, but this was not always the case. In Mira de Amescua's *La rueda de la fortuna*, the author makes a request for “flautas o la música que hubiere” (347), leaving room for interpretation of the adequate music in the hands of the director. What the acceptable music may be would depend on the historical moment in which it would be performed, as each director in different ages brings different expectations.

Further parallels can be extracted from the multiple uses of music then and today. Just as John Williams used his compositions to underlie the action of a movie, “la música teatral era utilizada para subrayar la acción de la comedia” (Ruano de la Haza 343). Entrances of characters as well as exits could be enhanced with the sound of blaring trumpets or other music deliberately placed in the right moments and with the correct tones. Changes in action could be more forceful and easily recognized with music.

String instruments, such as the violins with their ethereal sound, could send eerie tingles down the spine of the spectator. This effect could be used for the arrival of other worldly apparitions, either friendly or hostile. It would aid in suspending the disbelief of the audience, as in the case of introducing Don Gonzalo in *El Burlador de Sevilla*, making his appearance more wraithlike. For the more compassionate visitor, the sound of the *chirimías* offers a more suitable sound. The *chirimía* was an “especie de clarinete, […] utilizado para apariciones sobrenaturales de carácter religioso” (Ruano de la Haza 345). Such an instrument could be aptly used in a play such as *La creación del mundo* by Lope, where an angel descends during the play in order to deliver its otherworldly message.

Certain authors knew well the many functions of music and how to integrate them in order to manipulate the audience. Calderón was a “maestro en el empleo dramático de la música teatral” (Ruano de la Haza 348). In his *Darlo todo y no dar nada*, he used music in order to “dar énfasis a las palabras de los personajes” (348). During the course of the play, music sung off stage is used to give emphasis to the thoughts and feelings of the character on stage. The off-stage voice “completa sus frases o las repite para subrayar su significación” (348). This repetition technique would serve to reinforce the dialogue in a more efficient way as the discourse would not simply be restated but sung and accentuated by the musical instruments that accompanied the message.

The interest in music continued for Calderón as he attempted twice to introduce original operas to the Spanish courts. His two operas, *La púrpura de la rosa* and *Celos aún del aire matan* were the first works “sung wholly in Spanish” (Freund 421). The courts, “whose temperament inclined them to be impatient,” did not receive the operas well and did not care to endure their “vocal monotony” (421). Calderón decidedly put operas aside and instead began writing zarzuelas, which enjoyed a good deal of success.

Apart from the documented use of musicians in plays, there are documents that cata-
logue the many different types of instruments that were available to Golden Age musicians. Several late sixteenth-century estate inventories, including an itemized list and worth of each instrument, serve as modern day resources of instrumental assortment. One such inventory is that of Don Juan Luis de la Cerda’s, drawn up in 1594. Don Juan was “the fifth Duque de Medinaceli and would have had a number of musicians in his employ for ceremonial purposes, entertainment and perhaps for music in a private chapel” (Pascual 198).

A second inventory lists the belongings of Andrés de Ecija, a Madrid banker. This list, drawn up in 1588, includes a valuation of the instruments as well. Mr. Ecija, being a banker, “did not belong to the great nobility and was unlikely to have had in his permanent employ instrumentalists for processions, balls or other grand occasions” (Pascual 200-1). Pascual asserts that “the fact that he owned more than a dozen string and keyboard instruments suitable for solo music and accompaniment [suggests] that he was a music lover and probably an amateur musician” (201).

Both inventories display a variety of string instruments as well as wind instruments that were used in various public and private functions. They ranged from sacabuches to flautas, from violines to vihuelas, and many more to choose from. The musical possibilities were numerous and “casi imposible generalizar” (Ruano de la Haza 347). Playwrights could pick and choose from a plentiful amount of instruments to find which worked best for whatever the situation was in their plays.

Las tarascas de Madrid provides further visual evidence of musical instruments and the importance of music used in the autos sacramentales that preceded the comedias. Las tarascas de Madrid, by José María Bernáldez Montalvo, contains documents and illustrations depicting the use of a number of musical instruments as well as costumes. The most frequent instruments included are the guitar, violin, tambourine, castanets, and other small handheld percussion devices. Some of the more rather unusual instruments that are also shown include a man playing a style of xylophone (Bernáldez Montalvo 74) with shoulder straps that would allow mobility to the musician, and a woman playing the tromba marina (56).

The abundance of pictorial evidence displays the instruments that were already in common use prior to the comedias. The transition to, and use of, the instruments in the comedias is unmistakable. These serve to illustrate the vast quantity of instruments at the disposal of the playwrights of the time.

What is clear is that there is still more to be learned. There are more machines yet to be researched, more instruments to be studied. Little is known about the actual Golden Age music due to the scarcity of written music from the time. Despite what is not known, there is plenty that enables a suspension of disbelief in which a spectator today would be able to ignore the changes brought on by time. We cannot recreate the Golden Age experience in its entirety, but
by understanding its many facets, like music, machines, and other similar aspects, our experience of the theatrical piece becomes closer to what it would have been for a seventeenth century spectator. It can be perceived differently because the background knowledge is incorporated into the experience.

Notas

1 According to Rennart’s The Spanish Stage in The Time of Lope de Vega, apariencia was the term used during the time period for machine (97-8).

2 These two operas were written consecutively. The first was written in 1659 and the second in 1660.

3 A zarzuela is a type of Spanish operetta which was “half-spoken and half-sung” (Freund 421).

4 A sacabuche, or sackbut was a medieval instrument that resembles the modern trombone.

5 A bowed musical instrument that was similar to the violin but with deeper ribs and a greater number of strings.

6 A large single stringed instrument that rests on the ground and is supported on the shoulder of a musician. It is played with a bow and hand positions on the single string.

Works Cited


