

Creating Royalty: Modeling Temporal-Textual Emphasis in *Turandot*

Puccini's *Turandot* is notoriously demanding on its singers, for both the vocal and dramatic prowess it requires for convincing performances. How performers enact its characters is their mode of communicating an interpretation of its plot, and their presentations can elicit effusive praise or vociferous derision from audiences and critics alike. Interpretations are closely linked to performance psychology in how they inform behaviors onstage. Opera relies upon both musical and kinesthetic activity to convey drama from the stage to the audience. Performers rely upon the wealth of options in what I term the expressive palette—tempo, pitch, articulation, dynamics, phrasing, diction, timbre, and breathing—to help convey the nuances of their respective interpretations of a character. While all of these musical features do aid in singers' respective presentations of their roles, one heretofore under-considered aspect is the relative amount of time a performer takes to deliver the individual words and phrases of their role, what I term temporal-textual emphasis. Temporal-textual emphasis analysis is one manner for developing accurate hypotheses about a performer's dramatic interpretation, even without access to first hand evidence from that performer. In this paper, I examine these emphases in a 2005 Andréa Gruber performance of "In questa Reggia" and a 2009 performance by Marcello Giordani including Calaf's act I aria "Non piangere, Liù" and act III's famous "Nessun dorma," all at the Metropolitan Opera, to better understand how these singers each created their versions of Puccinian royalty.

My findings derive from a combination of digital and analog modes of inquiry. In short, I map the beat-to-beat tempo relationships of a given performance against the structure of the aria's text, adapting techniques from the Centre for the History and Analysis for Recorded Music's (or CHARM's) mazurka project. Tempo is, of course, just one of a performance's many elements. It is, however, a particularly important component in Puccini's operas, as Luigi Ricci recalled from working with him in the nineteen-teens as an accompanist and vocal coach. Ongoing research

developments for analyzing the various constituent parts of the expressive palette will enable the construction of a profile of a performance, enabling more comprehensive analysis of the communication of an opera's text and drama.

For recordings that are commercially available, like the DVD with Marcello Giordani's 2009 performance, one loads a digital audio file into Sonic Visualiser and taps to enter beat markers. One can then manually move these markers closer to the onset of a beat and refine the placement with a number of software plugins. In cases of discrepancy between singer and orchestral onset of beats, I honored the singer's beat placement. Sonic Visualiser then extracts the beat-to-beat tempo relationships into a data file. For recordings currently accessible only in archival format, such as Andréa Gruber's 2005 performance, copyrights prohibit any duplication of recordings not already commercially available, thus requiring alternative means of generating tempo data, for which I developed a multistep process. Step 1 is an initial hearing that involves marking up the score manually. Step 2 is creating a tempo-tap-track using the voice notes recorder on a cellular phone on a second listening. Step 3 is a comparison of the tap track and the aria recording, making further notes in the score of passages that were accurate and others that needed adjustment. Steps 2 and 3 repeat until the successful creation of a "most-accurate" tap track. While this process has certain limitations of accuracy, it does enable the generation of performance data from otherwise inaccessible sources. The final version of the tap track is the digital audio file for beat-to-beat tempo data calculation and extraction in Sonic Visualiser.

## SLIDE 2

CHARM's primary product describing a performance is a Time Scape, which reveals varying strengths of tempo relationships across a performance's surface—what one hears in listening. Time Scapes also provide a visualization of a performance's tempo hierarchy—how the various tempo modulations relate structurally, even as they are more difficult to discern in listening alone. Time

Scape analysis is a natural technique for performances of Puccini operas, especially since they rely upon musical and dramatic pacing to communicate its narrative. My analysis uses the same basic method that Nicholas Cook and Craig Sapp applied in the Mazurka Project, but with some additions for further clarification. Color coding reflects basic relationships to the overall average, or global, tempo of a performance. Yellow, orange, and red are progressively faster than average or global, which is green, while blue indigo and violet are progressively slower than it. I have added to each Time Scape a structural overlay indicating approximate divisions of surface (beat-to-beat tempo relationships), mid-ground (phrasal connections) and background (global tempo). Below each Time Scape is a textual underlay, which serves both to help listeners locate themselves in a recorded performance, and to reveal that performance's unique temporal-textual emphases. Finally, a tempo contour graph indicates precise tempo values of the surface level, while a linear trend line reflects the overall pacing tendencies within the performance.

Analysis of the surface level, which is in the bottom third of each Time Scape, reveals how deviations from the global tempo have the effect of accentuating or understating different elements of the text. A performance's temporal-textual emphases can link to indications within a score or result from performer decisions alone. Assessing a recorded corpus of performances in this manner can also uncover performance conventions particular to people, time, or place. On their own, each surface-level emphasis highlights individual words or phrases. Sometimes, extensions from surface level events intersect in a deeper hierarchical level, further evincing each performance's uniqueness.

Understandably, this hierarchical structure depends largely on the imposed ordering of text and music by composers and librettists—here Puccini and Giuseppe Adami and Renato Simoni. Even so, as the Mazurka Project and my analysis of 19 performances of *Turandot* at the Met have each shown, performer decisions and resulting hierarchical structures can vary greatly. Analysis of structural crossings can reveal the unique timing structure each performer imposes on the text and

what it communicates, thus providing nuanced insight into his or her interpretation of that text and mindset regarding an aria or character. For each of the performances in this paper, I first analyzed its temporal-textual emphases, from which I formed a hypothesis about its performer's interpretation and then interviewed each singer. The focus of each interview was to apprehend each performer's understanding of and motivations for their characters and the musical moments I analyze in this paper. Following each singer's explanation, I shared the conclusion I had drawn from my Time Scape and temporal-textual emphasis analyses. In each case, my hypothesis matched how Gruber and Giordani described their respective interpretations. Confirming such hypotheses via interview, as in the present study, or other secondary sources makes this approach useful for interrogating the creative process, potentially even in the absence of any supporting evidence beyond a recording.

#### SLIDE 3

New York Times music critic Anthony Tommasini opined of an Andréa Gruber performance of Turandot's entrance aria, "In questa Reggia," in 2005 that she offered a QUOTE "vocally fearless and impassioned performance." UNQUOTE On another occasion, Anne Midgette, also of the New York Times, wrote that Gruber had provided QUOTE "a fine piece of vocal acting" as she "gave a careful and delicate portrait." UNQUOTE Such effusive praise invites questions about the particular musical behaviors involving the expressive palette in a Gruber performance.

#### SLIDE 4

This Time Scape represents Andréa Gruber's performance on 29 January 2005. Here, tempo modifications reflect the musical structure of the aria: twenty measures of 2/4 marked *molto lento* with 46 crotchets per minute and covering beats 1-41 CIRCLE, sixty-eight measure of 4/8 interspersed with three measures of 2/8, with indications of *lento* and 66 quavers per minute for beats 41-111 CIRCLE, and finally twenty-two measures of 4/4 marked *largamente* with 56 crotchets

per minute over beats 113-199. CIRCLE One important note about this aria is that I analyzed the 2/8 and 4/8 measures based on quarter note equivalency in order to accommodate limitations of accounting for meter shifts in audio files in Sonic Visualiser.

Much of the tempo hierarchy in Gruber's performance is similar to the other eighteen recorded performances of this aria at the Metropolitan Opera, though some interesting differences are present. Unlike for Birgit Nilsson in 1961 or Maria Guleghina in 2009, the higher-level structure of Gruber's large-scale slower-than-global-tempo section, emanating from beats 41-113, does not extend to the left edge of the graph in a significant manner. This feature is the result of Gruber's comparatively quicker tempi through the aria's introductory text with respect to her performance's global tempo. The leftward extensions touching the edge of Nilsson's and Guleghina's Time Scapes result from beats 111-113—where their Turandots each emphasize Lo-u-Ling's scream and death. These emphases project a greater importance in communicating Lo-u-Ling's victimhood, suggesting to me a motivation solely of vengeance. The absence of this extension for Gruber's performance hints at more than retribution for her Turandot's impetus to issue the riddles. This subtle difference highlights a structural feature unique to Gruber's performances.

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The most striking higher level features in this performance's tempo hierarchy are the structural crossings resulting from the extension of Turandot naming Lo-u-Ling crossing two others, both involving Calaf. The first extension this one crosses emanates from the prince's first interjection in this aria, "No! No! Gli engimi sono tre, una è la vita!" (b. 173-180). The second extension originates at Calaf's and Turandot's dual ascent challenging each other (b. 181-188). These are the highest significant structural crossings in this tempo hierarchy, and the tempo-textual emphasis they highlight points to the crux of Gruber's interpretation of this role.<sup>i</sup>

While the libretto indicates that Turandot seeks revenge on all men for the rape and murder of her ancestress Lo-u-Ling, this alone does not reflect the complexity necessary for Gruber's preferred characterization. In her view, Turandot is a coming-of-age thirteen-year-old who is a pawn in her father's game of suitors, riddles, and beheadings. Believing that her ancestress is reborn in her or that she is her provides a two-fold escape for Turandot. One escape is from her father's domination of her will and actions (which explains part of Turandot's identifying with Lo-u-Ling), while the other is from her burgeoning sexuality, which she has no way or knowledge of how to control. Also for Gruber, Turandot knows from the moment she sees Calaf that he is different from all previous suitors, who Gruber imagines as motivated by the allure of the power coming from a royal marriage and the prospect of satiating their respective sexual appetites. Gruber highlights this recognition about Calaf as the precipitating factor in Turandot's Act III tearful confession, wherein she exclaims QUOTE "My first tears, yes stranger. When you arrived, I felt with anguish the fateful thrill of destiny, but I trembled for you! There was in your eyes the light of heroes!"<sup>iii</sup> UNQUOTE

Under these circumstances, the links extending from Calaf's outbursts indicate his awareness of Turandot's situation and his confidence that he will free her from her present bondage. Singers who approach Calaf in this way are the most dramatically convincing for Gruber, while those following a more stereotypical solely selfishly motivated archetype for Calaf present interesting challenges in onstage chemistry.<sup>iii</sup> In the subsequent parallel octaves with simultaneous and contradictory texts about three riddles equaling one death or one life, Calaf senses Turandot's trepidation about a life different from the one she knows, which her death threats mask. Gruber summarizes this moment thus QUOTE "Calaf knows he can break the spell of Turandot's release-by-obsession through outsmarting her father and arousing her erotic love."<sup>iv</sup> UNQUOTE

Unfortunately, a recording of this performance is not commercially or legally available. If I were able to play one, we would also hear Gruber manipulating the timbre of her voice throughout

this aria, imposing an artificial coldness that cannot prevent the occasional flicker of a burnished warmth, and which led to Anne Midgette's aforementioned praise of Gruber's QUOTE "fine piece of vocal acting." UNQUOTE Gruber's use of timbre in conjunction with temporal-textual emphasis highlight what she termed QUOTE "Turandot's charade of violent frigidity." UNQUOTE Further analysis of timbre and other non-tempo elements as expressive features in operatic performance is a future area for consideration as technology facilitating such inquiry continues to develop.

## SLIDE 6

In the autumn of 2009, Anthony Tommasini characterized Marcello Giordani's presentation of Calaf thus: QUOTE "He sang phrases with plush Puccini-tenor warmth and dispatched some ringing top notes, including the climactic high note of the hit-tune aria "Nessun dorma.""

UNQUOTE James Jordan of the New York Post heralded Giordani's QUOTE "passionate, Italianate singing. His red-blooded "Nessun dorma" won bravos even before the music finished."

UNQUOTE

## SLIDE 7

This Time Scape maps Marcello Giordani's "Non piangere, Liù" on 07 November 2009. On the surface, Giordani first emphasizes "non *piangere*, Liù" and "*dolce* mia fanciulla." He then expresses Calaf's explanation that Timur may be alone in the world at dawn with a mildly-to-moderately quicker than average tempo before slowing significantly to exhort Liù to "portalo via con te." Giordani attempts to help Liù focus, following interjections by her and Timur that they will die on the road of exile, with a significant slowing at "questo, questo." The greatest temporal emphasis in Giordani's performance builds on this, as Calaf re-addresses and re-characterizes the slave girl as "mia povera Liù" with the "piccolo cuore." This slowing is perhaps unsurprising, as Puccini indicated an *espressivo* here. Giordani then offered contrast by reminding Liù that her heart

does not falter as he surged toward the melodic climax, placing Liù's attention on Timur, before observing the fermata on the repetition of "che non sorride più."

Several features of the tempo hierarchy in this performance are noteworthy. First, and most striking, are the heights to which extensions from the most significant stringendo and ritardando extend. More interestingly, they do not actually cross, but offer only a projected or implied intersection almost in the middle of the triangle. That they do not cross establishes the structurally significant independence of two specific points as the primary components of this performance's identity. The first comes as Giordani pushed through his initial explanation to Liù (which embodies his concern for Timur) and the second from his slowing at Calaf's re-focusing on Liù identity. Giordani indicated as much in my interview with him; his interpretation in this moment is Calaf's focus on everyone as individuals, and that his universal concern connects all characters.<sup>v</sup>

#### SLIDE 8

Furthermore, the blue and indigo shading along the right edge of the graph are increasingly higher structural projections from "O mia povera Liù," (LINE) Liù's "sulla strada dell'esilio," (LINE) and "portalo via con te," (LINE). All of these cross with the subtle upward projection from the fermata emphasizing Timur's inability to smile anymore (LINE). That the highest structural significance comes from the crossing with "portalo via con te" (CIRCLE) suggests to me that one possible underlying or subconscious focus in Giordani's performance was a greater concern for Timur than for Liù, which would correspond to his royal station in society. At the very least, at the conclusion of act 1 on this occasion Giordani's Calaf showed concern for the well-being of everyone surrounding him in ancient Peking, and, convinced by a glimpse of Turandot in her legendary beauty, that the means to creating a healthier society is to help the Princess understand that she can give in to love and preserve her identity. Listening to this performance with this analysis freshly in mind further illustrates the effectiveness of this approach.<sup>vi</sup>



## SLIDE 9

By the time Act 3 arrives, Giordani's Calaf has patiently listened to Turandot's defense of her man-hating, successfully answered each of her three riddles, asserted that he does not want her against her will, but aflame with love, and even offered an 'out' to Turandot: discover his name by dawn and he will surrender his life. Unlike stereotypes for *fin de siècle* tenors as being only sexually supercharged on their most innocuous days or otherwise being outright sexual predators, Giordani's Calaf appears to be a genuinely decent human being by modern standards. Analysis of his performance of "Nessun dorma!" supports such a characterization, which our interview confirmed.

## SLIDE 10

In this Time Scape for Giordani's "Nessun dorma!", also from 07 November 2009, various nested links of temporal-textual emphasis are clear. First, the extension from the slowing throughout the initial address to the Princess (LINE), which forms a link with the extension resulting from the slowing at the first syllable of "splenderà!" (LINE) This latter extension also forms an implied link with the stringendo Giordani and Nelsons employed between the first and second phrase of *Turandot's* most famous motive, between beats 43 and 48. (LINE) There are also links between the ritardando on "Splenderà!" and the ritardandos of Calaf's proclamation that Turandot's silence will make her his at "che ti fa mia!", as well as the chorus's apprehensive interjection about their anticipated collective fate.

Extensions from each of these moments form links of varying intensities with the first and third of the threefold climactic iterations of "Vincerò!" between beats 106 and 109, and at beat 120. The distinct nesting of temporal-textual emphases in Giordani's performance suggests that these moments, if considered in increasing hierarchical order, share a commonality of effect. The commonality of their effect—that Calaf will win Turandot's heart, and hand in marriage—suggests the possibility of a commonality of motivation. In other words, Giordani's performance evokes a

structure in which Calaf addresses everyone's concerns through his love for all, thereby embodying Giordani's interpretation of Calaf's state of being at the aria's point in the opera's dramatic arc. For him, QUOTE "Lui ama tutti, perché a questo punto, lui è amor." UNQUOTE "Calaf loves everyone, because at viithis point, he is love."<sup>1</sup> Love in its truest, self-sacrificial sense is the motivation Giordani attempts to project in his performances as Calaf. This is also what makes Liù's death all the more moving for him as a singer who then embodies a character, and as that character. In Giordani's view, this also makes Liù's death a genuine turning point for Turandot, as the princess sees someone die for no personal benefit.<sup>1</sup> In our interview, Giordani frequently characterized his view of Calaf's embodiment of love as QUOTE "simile a Dio," UNQUOTE which challenges longstanding assertions that Calaf at this point is a sexually motivated, autobiographical projection of Puccini's younger self. Listening to Giordani's performance of "Nessun dorma" with the foregoing understanding of his temporal-textual emphases both on the surface and in the temporal hierarchy further clarifies his unique approach to Calaf's character.

Each of the foregoing examples documents its respective performance, exhibiting the identity of each with regard to tempo modulation, tempo hierarchy, and the resulting temporal-textual emphasis. Through her temporal textual emphases, and with her manipulation of timbre, Andréa Gruber created a Turandot who is not merciless by her nature, but rather as a coping mechanism because she is a victim of her father's attempts to maintain power and control over her as his age and infirmity increasingly inhibit his ability to do so to the people of Peking. For her, Calaf's arrival is a rescue, albeit one fraught with trepidation over the dual unknowns of a life outside her father's dominion and of being able to satisfy her latent and suppressed, yet still burgeoning sexuality. Similarly, Marcello Giordani created a Calaf who breaks the stereotype of a *fin de siècle* tenor as sexual predator. Instead, Giordani's temporal-textual emphases and resulting connections convey

a hero who exudes an idealistic love marked by concern for all characters in *Turandot*'s Peking, rather than one who is serving himself, or an autobiographical projection of Puccini's own womanizing.

By comparing textual-temporal emphases evident in Time Scapes against the music and text, the possibility of working backwards from the sounded event to a performer's initial dramatic impulse is now tantalizingly close. As I hope to have shown in this paper, modeling temporal-textual emphasis is especially effective in combination with interviews of performers and promising for future insights into performance psychology.

This process will, in turn, aid in the identification and study of the tools and means that individual performers use in a single instantiation or as they develop their musical interpretations and behaviors over the course of a career. Additionally, technological developments enabling a more comprehensive understanding of the expressive palette will allow a multivalent mode of evaluation of any performance's unique identity. The methodologies for these modes of investigation will also require continual adjustment of parameters to consider individual moments and phrases in relationship to larger-scale formal divisions. Future work based on the methods and structure of this project will provide the means to fill knowledge gaps and heighten precision of current modes of analysis of the creative process. In closing, the methodologies supporting the findings in this paper stand to open new avenues of inquiry into operatic performance analysis, the creative process, and **how**, in the words of Friederich Hölderlin "poetically dwells man upon this earth."

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<sup>i</sup> Andréa Gruber, interview with the author, 29 January 2015.

<sup>ii</sup> Puccini, *Turandot*, 429-36. "Del primo pianto, sì, straniero, quando sei giunto, con angoscia ho sentito il brivido fatale di questo mal supremo...ma ho temuto te! C'era negli occhi tuoi la luce degli eroi!" (My first tears, yes stranger. When you arrived, I felt with anguish the fateful thrill of destiny, but I trembled for you! There was in your eyes the light of heroes!")

<sup>iii</sup> Gruber, interview.

<sup>iv</sup> Ibid. Such a detail emerging in the tempo hierarchy and temporal-textual emphasis of Gruber's performance demonstrates, as it did with Marcello Giordani's performances, the

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applicability of this methodology to better understanding the creative process. Being able to connect singers' dramatic interpretations to their onstage musical behaviors in this manner represents perhaps the most significant contribution to this vein of inquiry.

<sup>v</sup> Marcello Giordani, interview with the author, 11 July 2013.

<sup>vi</sup> Puccini, Giacomo, et al. *Turandot*. Metropolitan Opera. 07 November 2009. Digital versatile disc. This performance is commercially available at: <https://www.amazon.com/Puccini-Turandot-Maria-Guleghina/dp/B00507ZQNO>

<sup>vii</sup> Marcello Giordani, interview, 2013.

**NB** - Full bibliography available upon request