The Puccini Code
Deborah Burton

[Note to the reader: this article is written in the style of author Dan Brown. Some liberties with actual fact have been taken to accomplish this.]

The wan winter’s light filtering through the hospital shades was fading fast. Giacomo Puccini, the composer of La bohème, Tosca, Madama Butterfly and many other operas had seven radium needles inserted into his throat [Girardi 2000, 438] and a food tube was laced down his nose. [Phillips-Matz, 2002, 301] As a patient of Professor Ledoux, one of only two specialists in 1924 claiming to have a radiation treatment for advanced throat cancer, his bed was in the clinic on Avenue de la Couronne in Brussels. [Phillips-Matz 2002, 299] Sketches for his still unfinished opera Turandot lay scattered to one side.

Puccini could not speak, although he had mouthed «Fosca, I’m going to pull through!» [Fosca, me la cavo] [ibid., 302] to his step-daughter just the other day, and he could write. He tried to keep his spirits up for his many visitors—even the Italian ambassador and the Papal nuncio Monsignor Micara had paid a call—but he was in excruciating pain. [ibid., 298] It feels like I have bayonets in my throat, [ibid,, 301] he thought.

He had premonitions of an untimely death and leaving his magnum opus Turandot almost, but not quite, done. The opera will be performed incomplete, and then someone will come on stage and tell the audience: ‘At this point Maestro Puccini died’, [Girardi 2000, 438] he imagined, and maybe Micara will even return to give me last rites!

The composer glanced to his left: the nurse, Sister Herman-Joseph, was turning on the lamp now that evening had descended. On his bedside table lay the Turandot sketches. The final love duet—the culmination of the work in which love conquers the Princess Turandot’s fears and melts her iciness—was still to be done. He must write to librettist Renato Simoni about the duet! It was still not what he wanted. I see darkness, he thought, we If I don’t live to finish this, then will someone else be able to do it? The poor soul who would take on such a thankless task would be able to see the 25 or so manuscript leaves he had with him now, plus an annotated libretto, and a few more fragments of musical sketches. And I played through parts of the ending for Toscanini... [Maechder 1985, 83-84] Perhaps someone would be able to complete the opera, and bring Turandot to life. But only if they truly understood my work. With that thought in mind, Puccini grabbed a pencil and made a few annotations on one of the sketches. Maybe that will help.

Ding! The professor’s Iphone signaled an incoming text message, but her attention was still focused on watching youtube: it showed the conclusion of Turandot, completed in 2001 by Luciano Berio for the Salzburg Festival. The three attempts at completing the opera that were known to her — Franco Alfano’s, performed just a few months after Puccini’s death, Janet Maguire’s written in the 1980s but never performed onstage, and the most recent one by Berio—were valiant efforts and all were based upon the autograph sketch material. But, she admitted, not one really sounded like Puccini had written it.

Turandot’s plot revolves around three riddles that the princess’s suitors must answer, or lose their heads. But the real mystery of the opera is how it should have ended. Puccini never expounded, as did other composers, on his aesthetics or compositional techniques. In
fact, he was very secretive about it all. *There must be a means of discovering how he composed*, the professor thought.

Professor Segugio had examined all 23 autograph manuscript leaves that Alfano had seen. They had been separated into four groups, and some had annotations on both sides, totaling 36 pages of sketches. [Fairtile 2004, 167] Although much of the writing would have been illegible to most musicologists, the professor was accustomed to Puccini’s scrawl. Her interest now lay not in deciphering the individual notes, rhythms, instrument indications and tempo markings, all of which would have been part of a finished score. But, rather, she searched for comments the composer had written for himself, something that would give a clue to how he was going to proceed. But, aside from a few that simply read «find a melody» [trovare melodia], there was only one such annotation.

On sketch number 17 for the finale Puccini had written «Poi Tristano» or «then Tristan». Clearly, he was planning to follow this music with a quote from Wagner’s *Tristan und Isolde*. But this was well known: years ago, Teodoro Celli had published one of two articles about the *Turandot* sketches, concluding that Puccini was going to use the unaccompanied Mariner’s theme («Frisch weht der Wind der Heimath zu») from Tristan’s first scene at this point. [Celli 1985, 57] Jürgen Maehder had also pointed out that the text that would have accompanied this reference to Tristan, was thematically related to the longing for death in the Wagner opus. [Maehder 1985, 105]

Even so, the professor thought that a more pressing dramatic theme at this final moment is that of Love, and that the «Tristano» to which Puccini refers is actually the *Liebesruhe* (Love’s Rest) leitmotiv from Tristan’s Act II, which had already been used in the opera’s opening, where it is shown with a resolution to F# minor. [Es. 1a, b] The motive is very adaptable to different pitch collections and could fit both the diatonicism of the Wagner setting, one by Richard Strauss in F major and a nearly whole-tone one by Dukas from *Ariane et Barbe-Bleu* (1907). [Celli 1985, 63] [Es. 1c, d]

*But this reference to Tristan doesn’t really help*, she thought. Puccini’s *wagnerismo* has been well known for a long time. In fact, almost every opera of his contains some quote from a Wagner work. [Burton 2012, 3-16] And Puccini was not alone in his admiration for Wagner: most of Puccini’s contemporaries (the giovane scuola composers) were also passionate about the German musical revolutionary, while still living in the country of his rival, the Italian hero Verdi. Mascagni had made clear in a letter to a friend the relative importance to him of both influences, and which had the more far-reaching influence: «Otello [is] by the father of maestros», he underlined, «I am speaking of Italian maestros since you know how much I admire Wagner as the father of all maestros past and future». [Otello [è] del Papà dei Maestri. Parlo sempre dei Maestri italiani, poichè tu sai quanto stimo il Vagner come Papà di tutti i maestri presenti e futuri.] [Mascagni, 1887] Besides, Puccini would never have composed the end of *Turandot* in a truly Wagnerian style: he had his own fully developed techniques. But no one—especially not the composer himself—had ever really defined it.

*There are many more riddles here too*, the professor realized. First of all, despite all sorts of strange chord constructions, dissonances (possibly even atonality) and abrupt interruptions, Puccini’s scores still seem to hang together aurally, as if they were traditional tonal pieces. More specifically, his music is full of parallel constructions without a clear bass line—what James Hepokoski called parallel “non-voice-leading.” [Hepokoski 2004, 241] Puccini frequently used parallel tritones, sevenths, ninths, and he was so well known for his empty
parallel fifths that one French critic described *La bohème* as «La Vide Bohème». [The empty Bohème] [Gauthier-Villars 1902]

And *Turandot* is full of parallels: in the first act alone, there are parallel octaves and fifths at I/9/9, chromatically descending parallel triads on the musical surface at I/18/13; parallel seventh chords at I/25/18, and parallel ninth at I/39/11. Later in the opera, we hear parallel 4/2 chords over a pedal at II/10/12, and at III/28/6 are found parallel quartal harmonies.

These parallels probably became known to Puccini in two ways: one was his early training in Italian solfeggio (where bass scales were played while elaborated soprano variations were improvised by voice) [Baragwanath 2011, 270-271] and the other was the Modernist rebellion against traditional norms. The prohibition against parallels in *La bohème* made even the critic Eduard Hanslick fly into a rage. Hanslick had exclaimed, «In the most diverse scenes arise columns of ascending and descending parallel fifths of such obtrusive ugliness—preferably blared ‘marcatissimo’ by trumpets—that one asks oneself in vain what the composer wanted to accomplish with these rude monstrosities?» [Da erheben sich in den verschiedensten Scenen Kolonnen auf- und niedersteigender Quinten von so aufdringlicher Hässlichkeit — am liebsten “marcatissimo”von Trompeten geblasen! — dass man sich vergebens fragt, was denn der Komponist mit diesen ungezogenen Scheusälchen bezwecken mochte?] [Groos-Parker 1986, 134-135] The critic wanted to hear more traditional voice-leading.

Dr. Segugio smirked: *these are just bass-less accusations!* Even Verdi had used parallel 4/2 chords in *Forza del Destino* and *Don Carlos* [Sanguinetti 2004, 235]—it was really nothing that new. But even if the bass line is missing, a standard prolongation can still be implied if not actually heard. Just look at the cases where Puccini repeats the melody but with a varied, non-parallel bass. At the beginning of the tenor aria *Ch’ella mi creda* from *La fanciulla*, for instance, the outer voices are parallel, with I, III and V filled in with root-position chords. If it were not for the parallel voice leading, this progression would be a standard diatonic one. But at the repetition, Puccini writes a non-parallel, traditional functional bass line (I-vi-ii-V-I), implying a prolongation of the tonic. [Es. 2a and b] *So perhaps*, she thought, *this is one reason Puccini’s music makes some sense as tonal music!*

[inserire circa qui Esempio 2]

*But parallels are only part of the picture*, the professor countered to herself: *a more fundamental issue is whether “Turandot” is tonal or not.* Critics have held differing opinions on the traditional tonal and modern atonal qualities of the opera. [Salvetti 1991, 275; Stoianova 1983, 202; Ashbrook-Powers 1991, 6-7, 13; Budden 2005, 446; Davis 2010, 171-172] Puccini himself had said, «Don’t think that I’m a traditionalist!» [Non penserai ch’io sia un passatista!] after hearing Schönberg’s *Pierrot Lunaire* while he was working on *Turandot*. [Marotti 1959, 56-57] Even so, he had also sounded like just a traditionalist when he complained to one of his *Turandot* librettists, Renato Simoni, «Nobody writes melody any more, or if they do it is vulgar. They believe that ‘symphonism’ should reign, whereas I think that would be the end of opera. In Italy they used to sing; now no more. Blows, discordant chords, false expression, transparency, opalescence, lymphaticism. All Celtic diseases, a real pox from across the seas». [La melodia non si fa più o, se si fa, è volgare. Si crede che il sinfonismo debba regnare e invece io credo che è la fine dell’opera di teatro. In Italia si cantava, ora non più. Colpi, accordi discordi, finta espressione, diafanismo, opalismo, linfatismo. Tutte le malattie celtiche, vera lue oltramontana.] [Gara 1958, 524] *But Puccini*
himself writes hundreds of discordant chords—this makes no sense!

At that moment, the professor heard a knock on the office door. “Dr. Segugio?” a muffled voice called out, and in came Christie Hunter, one of the professor’s graduate assistants. Christie had been helping with some Puccini research in the libraries and on the Internet. “I think I’ve found an unusual interview from the Turandot period,” she said, handing over a few printed sheets. “Thanks,” said Segugio, as she took the papers to quickly scan them. This is quite interesting, she thought. Edoardo Savino had interviewed Puccini just six months before his death. She kept reading:

Savino: Is the genre of music close to the preceding one?
Puccini: I believe that Turandot has its own physiognomy that has no comparison with my other musical creatures. The soul of the author, however, does not change, neither can style change, without becoming insincere. Therefore, it will still be Puccinian.

*What is Puccini saying here—that it is new, but not new?*

Savino: Did you want to write an opera of a popular character or did you want to bring about a new musical form?
Puccini: I told you: I am Puccini...I am, that is, what I sincerely am, even in my Turandot. [Savino 1924]

It would seem that Puccini was wanting to have it both ways: the opera would sound fresh, new and modern, but he would compose it the same way he had his earlier works. *How would that be possible? Could the music be old and new at the same time?*

Segugio turned to Christie: “I seem to remember something related to this in an article by Giorgio Sanguinetti. Do you remember which one?” “Oh, it must be his piece about the analyses of Puccini’s music by contemporary theorists. [Sanguinetti 2004, 221-248] I’ll go find it.” When Christie returned with the article, the professor knew her hunch was correct: Sanguinetti had surveyed early 20th-century theorists such as Luigi Parigi and Vito Frazzi about just this mixture or old and new, and wrote that this idea “provides a clue to understanding Puccini’s musical language, which should not be ignored by those who intend to study it today.” [Sanguinetti 2004, 241]

*Absolutely, thought Segugio, I’m going to take this clue and run with it!*

The professor turned back to her computer, and easily found the original 1921 Parigi essay on the Internet. It read:

The current Italian musical scene [...] is characterized by an anxiety to distance itself from the old in order to move ahead. [...] It is really a question of a complete renewal irreconcilable with the faded ideals of the same consecrated representatives of the old theatrical school: Puccini, Mascagni supposedly carried along with the current and becoming revolutionaries. Rather than resisting, [...] they have jumped on board, become followers and made themselves into modernists: in various directions and ways, externally [...] to honorably throw off clothing in which they felt they were by now suffocating. [...] They have vulgarized a form, an exteriority very close to real...
“new music.”

Music that is only new in its external appearance—like “clothing”? she thought. Perhaps there is something in this...

Frazzi, in a similar vein, had claimed that Puccini had only dressed up diatonic melodies with chains of unusual harmonies, [Frazzi 1948, 89] but Segugio knew this was an overstatement. The chorus melodies from Turandot at I/15/0, Il lavoro mai non langue, for example, were certainly not diatonic. Whole-tone melodies appeared in Tosca, such as at I/48/14, when Cavaradossi describes the hidden well to Angelotti. And, in that same opera, Puccini had set Io dei sospiri in the Lydian mode.

Sanguinetti wrote too about another theorist, Domenico Alaleona, a musicologist and composer, as well as a theorist, who had taught music history at the Conservatory of Santa Cecilia in Rome. [Busnelli 1985, 217-219] Alaleona had corresponded and worked with Puccini from about 1919, when he orchestrated Puccini’s Inno a Roma and they knew each other well enough then to use “carissimo” as a form of address. Before that, however, in 1910 and 1911, when Alaleona published his important theoretical articles, he was part of the Torinese circle of the journal Rivista Musicale Italiana, a publication quite unfriendly to Puccini.

Alaleona was interested in equal divisions of the octave. He stated that if the octave is divided equally into two tritones, it is “biphony” [bifonia]; if it is divided equally into three major thirds, it becomes “triphony” [trifonia]; into four minor thirds, “tetraphony” [tetrafonia]; into six whole tones, it is “hexaphony” [esafonia]; and Alaleona even continued on to “dodecaphony” [dodecafonia]. Although part of his articles described innovative divisions of the octave, such as “pentaphony” [pentafonia], Alaleona separated his new ideas from what he calls «material previously known». [Alaleona 1911, 382-420] [Es. 3]

[insere circa qui Esempio 3]

Alaleona also posited two different ways in which equal divisions of the octave can be used: tonally and atonally. If the symmetrical construction, say an augmented triad, resolves tonally, then it is the tonal form; if not, and if the chord is used structurally (such as in a major-third cycle), then it is the atonal form. And, in his one mention of Puccini (from La fanciulla del West), he criticizes the composer for using the equal division of the octave only ornamentally, and not «poetically», by which he means structurally, as Sanguinetti pointed out. [Sanguinetti, 2004, 240]

Again, the charge is one of superficial modernism, Segugio thought. But she knew that Puccini did, in fact, use equal divisions of the octave in structural ways, not just in Turandot, but throughout his oeuvre. An obvious example of a major-third cycle (“triphony”) from Turandot could be heard right at the opening: we hear a clear F-sharp minor at I/0/2, D minor in the bass at I/0/4 and B-flat minor at I/1/2. In the second act, there is another at II/47, which moves from Gb major to Bb major to D major. [Es. 4]

[insere circa qui Esempio 4]

A minor third cycle (“tetraphony”) in Turandot can also be found at I/15/0, and there are many sharp tritone shifts (“biphony”). This happens between E-flat minor and A minor at I/25/0, when Timur begs the Prince not to pursue Turandot’s challenge, and also at III/35/0 after Liù’s cortège. Another is found just before the confrontation between Calaf
and the Emperor, from A-flat major to D Dorian.

*Interesting!* thought Segugio, *all of these instances are preceded by pauses*. They seem to delineate, not only key areas and structural units, but new events in the dramatic narrative. Musical transitions, which usually sound so fluidly natural in much of Puccini’s works (usually helped along by common tones or pedal points), are missing here: the formal seams seem perceptible by design. *This is part of the Puccinian mystery of abrupt interruptions. And what could be more abrupt than a tritone shift?* Segugio thought, remembering the entrance of the dying Mimi in the last act of *La bohème*, where Bb major shifts suddenly to E minor. [Es. 5]

[Inserire circa qui Esempio 5]

*All of these contemporary writers seemed to be hinting at more or less the same thing*, the professor concluded: that Puccini’s deeper structure was a traditional one, ornamented by so-called modernisms. She would have to do more research. *Perhaps a trip to Yale, and its collection of Puccini manuscripts, would be a good idea...*

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The ride on Amtrak’s Acela Express train to New Haven took only two hours. These newer trains had conference tables and electric outlets for recharging phones or computers, Wi-Fi. And they looked modern, even if they couldn’t compare to the wonderfully elegant European trains. And of course Amtrak service was always riddled with delays.

But today, things were running smoothly. Prof. Segugio glanced up from her Puccini scores and glanced out the sealed window at glimpses of the Connecticut coastline and Long Island Sound. The sunlight reflecting on the water brought to mind sunny summer days at Viareggio, not far from Puccini’s long-time home at Torre del Lago. *Back to “Turandot”!* On her lap was the *Turandot* piano-vocal score—the Ricordi edition with the standard Alfano completion of the final duet and finale. She was looking at I/10/1, an F# minor tune with a lowered second scale degree: it almost sounded primitive. Yet when this melody returns at II/25/6, it has an added pedal tone at the tritone, which makes it sound much more modern. *Perhaps this layering is what Parigi and Frazzi thought of as external*, thought Segugio. [Es. 6a and b]

[Inserire circa qui Esempio 6]

That was a simple example, though. But what about the mysterious, dissonance “phantom chord” that appears at I/38/0? It was comprised of the following pitches:

\[ \text{C-Eb-E-F-F#-G#-A} \]

While some of this sequence was an octatonic fragment (F-F#-G#-A), the voicing of the chord did not seem to suggest this partial solution. Rather, the uppermost and lowermost extremes notes of chord—\( F#-C \) and \( C-E-G# \)—were all whole-tone. The remainder (F-A-Eb) implied a F7 chord, which would also share a C with the whole-tone collection. [Es. 7]

[Inserire circa qui Esempio 7]
This combining, or layering, of sonorities was something like others had noticed in Puccini’s work before, Segugio remembered. Leukel had identified what he called Schichten [Leukel 1983, 65 sgg.] and Conati found “synchronic planes” [piani sincronici], in Il trittico [Conati 2003, 146-160], no doubt inspired by Wagner’s layers of Leitmotivs. Those instances from the Trittico, though, represented multifocal moments when more than one event is happening onstage at the same time, such as sailors singing offstage behind other onstage dialogue. Just like Act II of La bohème, when Musetta’s waltz in E major clashes with the arriving band in Bb major, these situations also carried implications of bitonality/polytonality. The professor pondered, although the idea of layering or conflating different sonorities is what Leukel and Conati describe, these modernistic, individual sonorities are something different.

She then turned to the end of Liu’s beautiful aria, Signore, ascolta, at I/42/15. [Es. 8] There is a chromatically rising line in the tenor: A-flat/B-double flat/C-flat/C/D-flat. Supporting that line is a strange, polytonal third layer of chords: A-flat minor, E-double flat major, B-flat augmented, F-flat major, and E-double flat half-diminished seventh. But, the tonic Gb is prolonged with a pedal over four bars, as if it were a traditional diatonic coda. The effect is magical, particularly coming between pentatonic passages, and with the vocal line ascending to high B-flat.

[inserire circa qui Esempio 8]

Again, Puccini has used a layering or conflation of modern sounds over a traditional element! But how is this different than the dissonant pedal points that Puccini had used from his early days? Dissonant pedal points were some of the most traditional musical features, popular from the Baroque period on. Puccini’s, though, like the one from the original version of Edgar, actually implied a kind of modern bitonality. Puccini must have liked this sonority, she thought, since he practically reproduced it years later in “Il tabarro”! [Es. 9a and b]. Of course, it is also not too different from Tristan’s Act II, scene 1...

[inserire circa qui Esempio 9]

But Turandot is full of true bitonality, front and center in the opening pages of each act. It certainly is a kind of layering, though...

I’m sure I could find more of this type of layered structure—but where? Segugio wondered. She turned to the third act, and there, at III/26/15, was a very dissonant, descending passage. There were parallel tritones in the bass, below various complex chords (diminished and half-diminished sevenths, whole-tone sonorities, etc.), and above it all even the «Sehnsucht» motive from Tristan appears, before the resolution to Bb major. Some of these chords could be labeled as set class (026), modern terminology for a sonority Puccini used frequently—so frequently that Dr. Segugio had called it his “signature”! If one were to remove these added layers and chromatic passing tones, she thought, what remains is a simple linear intervallic pattern of parallel tenths! [Es. 10a and b]

[inserire circa qui Esempio 10]

Confusion again. And it reminds me of another passage—at III/36/0.

She turned to that section. It seemed like the bass downbeats of each measure formed a standard linear intervallic pattern of descending fifths (F-Bb-Eb). But two legs of the underlying schema alternated in the bass with their tritones (F+B, Bb+E), and the whole
passage was adorned with diminished sevenths. [Es. 11a and b]

[Inserire circa qui Esempio 11]

More conflation. This all seems interconnected in some way—but how?

The train was pulling into the New Haven station. Dr. Segugio descended and decided to walk over to Yale’s Beinecke Rare Book and Manuscript Library. She remembered it well from her earlier days as a student here. It always held surprises and treasures. Perhaps today she’ll find something important, and she knew where to start looking.

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The exterior of Yale’s Beinecke Library looks oddly out of place in the mostly neo-gothic architecture of the university. Its shell of thin, white, gray-veined marble panes filter the sunlight, protecting the rare books inside. It is a huge depository of rare materials and books, now holding about half a million volumes and several million manuscripts.

As Segugio approached the ghostly white building, she knew she would request to see the Puccini manuscripts in the Frederick R. Koch collection: a vast group of materials that is fundamental resource for research on many composers, authors and historical figures. Some of the composers whose papers are part of this collection are Berlioz, Boccherini, Brahms, Debussy, Gounod, Handel, Leoncavallo, the Mendelssohns, Mozart, Poulenc, Schubert, Stravinsky and Wagner. Although some of their images are posted on the Internet—including a sketch of the bell scene from Tosca’s Act III—these are just a handful compared to their full collection.

The professor went downstairs on thickly carpeted steps to the main desk. And, after submitting the request forms, she waited, pencil and notebook in hand, for the arrival of the packet. The Puccini file of the Koch collection, she knew, included sketches for Tosca, Madama Butterfly, and La fanciulla del West, plus some correspondence with family and friends.

When it arrived she immediately started searching for notes Puccini might have left himself in the sketches—verbal phrases that were not related to tempo indications or instrumentation. One caught her eye in a sketch for Fanciulla, depicting the moment in Act II when Johnson re-enters Minnie’s cabin after being shot, lurching and stumbling: as normal, the composer had written the stage directions and tempi. But he had also added: «irregular movement» [movimento irregolare] /«staggering from the wound» [traballamento del ferito]. Just a hint of how Puccini’s rhythm was directly related to the onstage action. But this is not really going to help much with “Turandot”, she thought.

Finally, she saw, in a section labeled Notes and Ephemera, number 734, a five-page document that seemed to be a letter, but there was no addressee or signature. It appeared to be scribbled with words crossed out, as if it were a draft to be perfected later. Perhaps these are notes for a speech or interview?

The phrases «As to the question you asked me» and «Italian melody» jumped out at her. It must be a response to an interviewer’s inquiry, probably written around the time of La rondine—that is, in the middle of World War I, when Italy and Germany were on opposite sides. Patriotic feelings ran high then, and Puccini had recently been accused of being an “international” composer by Fausto Torrefranca, and he had had to defend his own italianità. The whole page read:
As to the question you asked me about the new musical *indossi* that come to us from other countries, I have nothing to say - it is necessary and proper to accept them because when music is good it can be written in any country - however, I state, hold and insist that these new *indossi*, especially the cerebral ones, must not in any way pollute or mar the essence and the traditions of Italian melody, which arise only from the heart and flourish under our skies - Let us indeed be aware of all the harmonic and technical progresses that arrive from beyond the mountains and the seas, but let us keep the clarity, the spontaneity and the simplicity that characterize our music.

[Alla domanda che mi fa circa i nuovi indossi musicali che ci vengono da altri paesi non ho niente da dire - bisogna ed è doveroso accettarli perché la musica quando è buona può esser scritta in qualunque paese - ma però dico sostengo e insisto che questi nuovi *indossi*, specialmente cerebralì, non debbono in veruna maniera inquinare nè guastare l'essenza e le tradizioni della melodia italiana che dal cuore solo nasce e germoglia sotto il nostro cielo - Facciamo pur tesoro di tutti i progressi armonici e tecnici che ci arrivano d’oltre monte e d’oltre mare ma conserviamo la chiarezza la spontaneità e la semplicità che caratterizzano la nostra musica.]

There it was! Puccini’s explanation of his aesthetic combining the old Italian traditions and new ideas. His term «indosso» was problematic, though. Although it related to the verb “indossare” to wear or put on as clothing, it was not a real Italian word. But it was clear from the context what Puccini meant by “indosso”: «the harmonic and technical progresses that arrive from beyond the mountains and the seas». That is, the modernistic, “international” trends. And—Dr. Segugio was beaming—they were to be added to, or conflated with, simple, traditional frameworks. This was exactly what she had been observing in the music!

*Would this idea work with one of the “Turandot” sketches?* She dug out a photocopy of sketch 22 for the finale. This passage was so dissonant that Janet Maguire (who had studied the sketches for almost a decade in order to compose her version of the ending) had said it was 12-tone! [Maguire 1990, 339] But as Segugio examined the sketch, she saw that it could also be interpreted as a series of non-resolving (i.e., “modern”) diminished seventh chords, within a larger pattern of three-chord groups that is itself rising chromatically. Further, the bass notes of each chord spell out traditional arpeggiated major triads on C, C-sharp and D. This was a *multiple conflation*: a simple chromatic line supporting triads supporting diminished sevenths. Some elements were diatonic and some were not: a true mixture of old and new. [Es. 12]

[inserte circa qui Esempio 12]

Returning the archival material to the desk, she thought that perhaps she was onto something. This idea of conflation does help solve the first two riddles—Puccini’s strange chord construction and his extreme dissonances. *But what about the third, the abrupt interruptions?* she wondered, as she left the library and stepped out onto the sunlit pavement.

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Two of the most influential music critics and thinkers of the late 19th century were Eduard Hanslick and Heinrich Schenker. Both of them commented on Puccini’s habit of
swiftly breaking off one musical idea and jumping to another—and both of them hated it. In an 1897 review of *La bohème*, Schenker had written: «The count in Mozart’s *Marriage of Figaro* or Mozart’s *Don Giovanni*, despite their less than honorable intentions, are at least men of more steady sentiments, and more steady desires than Marcellos, Rodolfos, etc.» [der Graf in Mozart’s *Hochzeit des Figaro* oder Mozart’s *Don Juan*, trotz ihrer unehrenwerthen Absichten zumindest Männer von fixerer Gesinnung und fixerem Wollen als die Marcells und Rudolfs etc.] [Schenker 1897] And Hanslick agreed, writing about *La bohème*, «The basic feeling of the whole, continually broken up, is thus dissipated in noisy, nervous details». [Die Grundempfindung des Ganzen, unaufhörlich zerrissen, zerflattert dergestalt in lauter nervösen Details.] [Hanslick 1899, 81-83]

Christie Hunter was showing Dr. Segugio these quotes she had located, both of which the professor had known previously. The professor explained to Christie that, in Puccini’s operas, the clearest juxtapositions of diverse and contrasting musical elements occur at the level of the scene, which had been discussed in recent books by Andrew Davis [Davis 2010] and Alexandra Wilson. [Wilson 2007] Davis examined Puccini’s last four operas in light of this juxtaposition of styles—he called it *stylistic plurality*. She found a good quote in the first chapter: «Much of Puccini’s late music [...] proceeds according to a series of discrete episodes, each articulated with a discrete style and each contrasting with neighboring episodes in such a way to produce obvious musical seams». [Davis 2010, 21] Segugio added that contrasting discrete episodes occur in the composer’s earlier operas as well, such as *Bohème*. It was a vital part of his style. For example, in *Tosca*, Scarpia opens a window, we hear a gavotte playing outside in a different key, then he shuts the window and the original music returns.

«But quick shifts in Puccini scores happen at much faster rates as well», Segugio said, «This is what has been labeled Puccini’s ‘mosaic’ technique by many scholars and critics». «I know», said Christie, «I underlined what William Ashbrook said about it: ‘With *La Bohème*, Puccini began to use a lapidary technique, constructing an act of carefully wrought and contrasting details, building up a musical mosaic.’» [Ashbrook 1968/1985, 216] «Yes», said the professor, «you surely remember the scene from Act I of *Bohème* when Rodolfo’s bohemian friends have just exited (in Gb major). Then he sits down to write his article (in B major), which quickly disintegrates as he grows disgusted. Then he throws down his pen and says ‘I’m not in the mood.’ But suddenly—in D major—there’s a knock at the door: it is Mimi, and the trouble begins».

Christie nodded. Segugio continued, «Well, that technique has also been called ‘bracketing’ by Suzanne Scherr, and ‘framing’ by Steven Huebner. [Scherr 1997; Huebner 2001] But it’s also possible to see the same phenomenon as *interruption*. Looking at the quick shifts to new music as appearances over a background layer of sound (rather than being framed by it) changes one’s perception of the phenomenon. It implies, Segugio thought, that the background layer is on a deeper structural level, that it is actually being prolonged somehow. If auxiliary notes could prolong a pitch, and auxiliary chords could prolong a tonicization, why couldn’t parenthetical interruptions (even in other keys) prolong a whole musical fabric?»

The professor’s eyes lit up as she remembered a letter that Puccini had written to his friend Riccardo Schnabl about *Turandot* that might help. *Did Puccini suggest his own name for this technique?*, she wondered. She found the letter and read: «*Turandot* is sleeping. It lacks a big aria in the second act. I need to graft it in». [*Turandot dorme: ci vuole una grande aria al secondo, bisogna innestarlà.*] [Gara 1958, 530] *A graft*, she thought, “‘innesto’ in Italian.

And, after a beat, *it’s another sort of conflation!* The two techniques were related—the adding together of sonorities was “direct conflation” and the interruptions (or grafts) were
“indirect conflation.” Perhaps I will write this up someday, she thought.

Segugio and Christie turned back to the printed Turandot score. «Then, Professor, would you call this ‘indirect’ or ‘direct?’» asked Christie, pointing to I/30/1. At that point, a bitonal section pops up in the midst of clear A-flat major, with a pentatonic melody. [Es. 13]

And do you remember what Casella wrote about bitonality and polytonality?» Segugio added. «Not really...» answered Christie. «Well, writing in 1923—just a year before Puccini’s death—Casella described polytonality as “simultaneous modulation” and compared it to pictorial Cubism. According to Casella, in cubism an object is simultaneously viewed from diverse perspectives in space and time—the negation of normal time flow.» [Casella 1924, 8-9] Something struck a chord: they were thinking about playing with time...

If that’s the case, said Christie, «would polytonality also be simultaneous prolongation?» «Let’s think about that,» answered Segugio, «perhaps you have found your thesis topic!» But silently the professor wondered: these two kinds of conflation seem to be different only in regard to how they occur in time—simultaneously or sequentially. Perhaps they are two forms of the same technique!

Dr. Segugio’s Iphone was beeping again. She finally put down her copies of the Turandot sketches that she had been poring over for hours. It was a text message from Christie: «Urgent! I must c u!» The professor wished that students would not use “c” for “see” and “u” for “you” but by now it was part of the language. What could be so important?

She phoned Christie, who blurted out, «Professor, I think some of the Turandot sketches were stolen! Someone named Zuccoli. Maybe Alfano didn’t get to see all of them!» Segugio knew that every once in a while, some Turandot sketches surfaced and were sold at private auctions. Dieter Schickling was a master at tracking these down. Christie told her that she had found an Internet listing for an auction in England in 2002 that had offered some unknown Turandot sketches.

«Well, let’s check Schickling’s catalogue [Schickling 2003] and see if they are there», Segugio said. She opened it to page 374 and began leafing through the list of sketches. She picked up the phone again and said to Christie, «You are correct that a sketch (Schickling lists it as 91.A.II.48.a) was sold by antiquarian Lisa Cox in Exeter, but it seems to be for the riddle scene in Act II, not the finale. It had been in the possession of Guido Zuccoli’s daughter. [ibid., 376]

But wait! Segugio’s eyes fell on the following page of the Schickling catalogue, about halfway down. [ibid., 377]Zuccoli’s name was mentioned again for sketch 91.A.III.35.a. This sketch, according to Schickling, contained annotations in the composer’s hand that were not normal
score indications. The sketch had been reproduced by Celli, but was practically illegible. But now Schickling had found the original somewhere in Germany and confirmed what Celli had deciphered. Segugio read just what she had been waiting to see: *Puccini had written down what needed to be done!*

... ...

Under the heading «stacco per duettone» [interruption for the great duet], Puccini had written the following: «Nel villaggio but with chords and harmonized differently and modern movements and reprises and surprises, etc.» [Celli 1985, 53-54] [Es. 14a-b]

**[inserire circa qui Esempio 14]**

Instantly, Prof. Segugio knew what Puccini meant: “Nel villaggio” referred to a very diatonic aria from Puccini’s second opera, *Edgar*. In other words, Puccini had been planning to interrupt one passage with another (*indirect conflation*), and adorn the simple diatonic melody of the earlier work with new harmonies, rhythms, returns—and surprises (that is, *direct conflation*). *In this case, Frazzi was right!*

Dr. Segugio ventured over to the piano. She took out the score of “Nel Villaggio” and played through the melody. She then penciled in a few “indossi”: a tritone in the lowest part, then chromatically rising dominant seventh chords, and finally, in the upper range, parallel augmented triads following the melodic line. She held her breath and played through it. *Could Puccini have composed this?* she thought. [Exx 15a-b]

**[inserire circa qui Esempio 15]**

The answer was not so simple. It *did* sound like the sonic world of *Turandot*, but there would have to be much more studying to be done for any reconstruction to truly reveal what the composer had wanted. But this was a real clue, in Puccini’s own hand. And it was a good first step at solving the riddle of *Turandot*—and the Puccini code.
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