

A close-up photograph of a pair of glasses resting on a sheet of musical notation. The glasses have a dark frame and clear lenses. The musical score is printed on aged paper and features various notes, rests, and dynamic markings such as 'p', 'cresc.', and 'sf'. The background is a dark, semi-transparent grey band.

# ORCHESTRATION ONLINE

## SCORE-READING

### Course Notes

# SCORE-READING COURSE NOTES

compiled by Thomas Goss and Lawrence Spector

## INTRO TO THE SCORE-READING COURSE

This course is intended as an introduction to score-reading for developing musicians at the orchestral level: composers, arrangers, and conductors in training. As stated in the video, score-reading should be a lifelong habit. The experienced score-reader will eventually be able to develop the ability of determining which score, for them, is a timeless artistic statement by whether that score always has new things to say to their eye and inner ear.

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## Part 1: Your Visual Ear

### I. What is a Score?

- a document which contains an artistic work, free from its creator
- a set of directions for the conductor and musicians
- a visual record of an auditory experience from the imagination of the composer

*The purpose of this series is to bring the two experiences of hearing music and seeing notes very close together. A very experienced composer or conductor will observe a page of music and know exactly what it's supposed to sound like. This is called "mental hearing," and can be developed through years of scoring and score-reading (and conducting as well).*

### II. Musical Literacy

- imagine learning to read music with time spent comparable to learning to read text
- my definition of musical literacy: the ability to read the score of the great works (in addition to knowing styles and eras of music, performers, repertoire, etc.)
- we must learn to absorb music as it happens; as we read it, hear it, and internalize it
- this requires frequent score-reading
- source scores and CDs from IMSLP, libraries, YouTube, used books stores, etc.

*I'm pretty serious about point b. Imagine if your literacy about novels rested mostly on listening to books on tape and going to movies based on those stories. What kind of writer would that make you? Literacy doesn't just mean "being familiar with," or even "being a frequent consumer of," but even more so "being able to read it and write intelligently about it." In the case of musical literacy, "write intelligent examples of it." Great virtuosos often composed music as a way of deepening their understanding of the repertoire: Vladimir Horowitz, Robert Casadesus, and many others. So it's all part of one language that we must give and take (and read!).*

**Part 1 (cont.)****III. How Often Should You Read Scores?**

- a. a professional orchestrator will read scores constantly during their daily routine
- b. a developing composer must learn to prioritize daily sessions of score-reading
- c. set goals of studying a new work every day or every week
- d. listening to one work several times over the course of a week is highly recommended

*I often suspect that this advice is listened to and agreed to by my viewers without really making a strong commitment to it. "Sure, Thomas is right! I'll get right to it tomorrow. Or maybe the next day." And then I'll get many questions on YouTube comments and in the Orchestration Online Facebook group that (while I'm usually happy to answer) would be obvious to a regular score-reader. You might as well face it now. **No professional orchestrator will ever be successful without regular score-reading habits. Period.***

**IV. How Scores Are Read**

- a. conductors read for:
  - entrances of instrument
  - parts that need support
  - the overall rhythmic, dynamic, and thematic shape
- b. copyists read for:
  - errors
  - cautionary accidentals, tacets, voices of parts, etc.
  - rehearsal numbers, section endings, repeats and DC, etc.
- c. concertmasters will assign bowings and mark potential rough spots
- d. directors, choreographers, presenters etc. read for narrative and production cues
- e. technical crew read for cues in lighting, staging, entrances, miking, etc.

*I don't know how many times I've seen a copy of one of my scores, especially to an education or crossover concert, sitting on the house manager's desk next to the mixing board and lighting panel. This is a sign that the concert is in good hands, and that the crew are watching every move that's happening on stage, and are much more prepared for emergencies. And truth to tell, some scores have detailed instructions written all over them for the production staff; not just operas and ballets, but concert works such as Berlioz's *Symphonie Fantastique*.*

*Another great sign I mention in the video: to receive your score back from the conductor and find it marked up with circles, arrows, highlights, and notes across the margin. Like I say, this is a compliment. The conductor cared about your music and wanted to get it right. Of course, not getting many markings can be another kind of compliment: that the meaning of your score was absolutely clear to the conductor, and didn't need extensive notes. Every situation is different.*

*In my final comments to this video, I urge viewers to consider these factors along with Texture, Balance, and Function. What's the collective realization of the musical idea, the character of the part-writing? What's the historical context and that period's orchestral approach? Or to be even simpler about it, what's the function of each part? How do the separate parts balance to create unique, compelling textures?*

**REFERENCES**

[Lectures on Texture, Balance, and Function](#)

## Part 2: Techniques

### I. Where To Begin

- a. string quartet parts are easy to follow and teach vital approaches to string scoring
- b. baroque concertos are also good in this regard
- c. early classical symphonies are models of balance
- d. make your first few pieces case studies: familiar and well-liked works
- e. avoid a huge score as your first piece of score-reading!

*I'd add to the above list: chamber music, like duo, trios, quintets, same with piano, wind and brass instruments, and smaller mixed ensembles. Try to keep the vertical count of staves at ten or less. Then slowly build up you capacity to process more and more simultaneous information.*

### II. Practical Concerns

- a. scores cost money; free scores from IMSLP are hard to read on a standard screen
- b. printing out free scores from IMSLP can cost a lot, more than a Dover reprint
- c. a vertical screen can be a cost-effective way of addressing the problem
- d. all pages may be read at the size of a conductor's score

*And might I add here the convenience of scoring a large-scale multistaff work using a vertical screen? It's a significant factor of the speed at which I work - so much so that I'm not sure how I went without one for so many years.*

*Shop around. I got my screen for only a couple hundred USD\$ a few years ago. Brands and models come and go, so it doesn't make much sense for me to recommend anything. All models that can do vertical orientation sit on swivels, and can orient horizontally as well. Get something decent, not too expensive but with a good track record, and test it out in the shop first!*

### III. Basic Procedures

- a. listen without the score at first:
  - a familiar work, or
  - a new work with which to test your reading skills
  - make sure your ear is well-acquainted with the work
- b. listen to the audio while reading the score, picking a good type of player:
  - CD players are difficult to move forward and back through sections of music
  - anything on which you can move the playhead easily is better, like a YouTube clip
  - mp3 players are best, as you can set up exact timings and repeat modes
- c. read in small sections, like single movements of works, several times each
- d. beginning score-readers should focus on:
  - melodies and thematic episodes
  - big entrances
  - percussion hits/patterns and brass flourishes
  - the bass line
- e. as you develop, try to absorb larger amounts of horizontal and vertical information
- f. this capacity is similar to reading text by phrases and sentences, rather than by words
- g. learn to look at everything that's happening - with repetition, you notice more and more

*I end this section by touching on how I learned to score-read the hard way. I'd start at the beginning of a piece and score-read one staff all the way through, then the next staff and the next. I learned a lot about instrumentation, markings, and part-writing, but not about the actual architecture of scoring for orchestra. A much better way is to get a good grasp of the structure of the work with the first couple of readings. Then look for how instruments and sections work individually and with each other. Notice doublings, harmonic voicings, patterns, and pedal tones. Then go back again and keep track of special techniques like mutes, pizzicato, tremolo, portamento, and so on. That's in addition to what I suggest in the next section.*

**Part 2 (cont.)****IV. Developing Your Perceptions**

- a. establish the melodic structure and thematic development at first, then look for
  - balance of elements, like dynamic levels and timbres
  - comparison of instrumental registers and how they are used
  - doublings
- b. think not only of sequential but simultaneous elements:
  - rhythmic density
  - individual function and horizontal continuity
  - support of the musical idea in each part
- c. the conductor will be focusing on the dynamic and emotional arcs - so should you!
- d. read each score many times until you can develop your recognition of these elements

*I finish up the video by recommending that once you're very familiar with a score, that you read it without listening to any audio, and to let the notes on the page guide what you hear in your mind. I don't go into detail about this, but it's what's called "mental hearing." It's different for everyone. Some composers need a musical instrument to work out their ideas, but still have a very developed sense of mental hearing. Others use their inner ear to compose whole orchestral works.*

*I found that memorizing long passages and even whole movements of symphonies and listening to them mentally was excellent practice for developing as a composer. For one thing, I could never be bored with so many great pieces of music stored in my head. For another, I had an orchestra of the best players in the world up there, who could also be asked to try out any other piece that I might imagine. And once my memory had been developed and stretched, I could work on long stretches of orchestral works at any time, with or without writing them down.*

**Part 3: Reading Mozart****I. Mozart's Orchestra**

- a. an important first step in reading a score is to understand its layout and instrumentation
- b. cellos and double basses share a staff, making them easier to read
- c. natural horns pitched in E-flat and B-flat (see charts in video)
- d. only one flute; doubled winds otherwise
- e. clarinets were added later by Mozart

*Just the tiniest look at the score reveals instantly the level of information a conductor might need in order to conduct a satisfactory performance of a work like this: historical context, instrument development, orchestral numbers, performance practice - and that's not even including the notes, or Mozart's "it all sounds so simple, but it's actually really hard to make it sound perfect, and it has to sound perfect" kind of style.*

**II. Excerpt from Mozart Symphony no. 40 in G minor, Movement 1**

- a. strings are dominant in classical scoring, individual parts stand out well
- b. winds are surprisingly delicate, often in the background
- c. Mozart avoids doubling but supports melodies in subtle, ingenious ways

*To expand on point c: this type of care allowed Mozart to have a very light, agile, and clean sound picture within which the listener could hear everything clearly. He spent much time on careful balancing of lines, resulting in very natural, effortless-sounding architecture.*

*Haydn had a similar approach, but nowhere near as cleverly constructed and radiant-sounding. His textures are more workmanlike, though they can be terrifically intelligent and subtle in their own way. Beethoven, though, took the orchestra places Mozart and Haydn never imagined.*

**Part 3 (cont.)****III. Excerpt from Movement 2**

- a. score is heavily notated - watch carefully, then listen for things I didn't mention:
- b. horns act as gateway between winds and strings
- c. the simple scoring allows Mozart freedom to modulate in surprising directions

**IV. Excerpt from Movement 3**

- a. basses/cellos typical, but start daisy-chaining downwards in patterns of 5ths and 2nds
- b. violas cross the cello lines quite often
- c. bassoons double cellos, except in the middle where they double the violas
- d. horns compensate for this seemingly piecemeal approach
- e. 1sts and 2nds play melody in unison and then octaves
- f. melody doubled and then tripled above by barely audible flute (adding resonance)
- g. oboes and clarinets double each other, sharing melodic and contrapuntal duties

*After the next part, which is divided over three videos, I've playlisted my favorite movements of this symphony from what's available on YouTube. One has to be careful about these things, because several clips only use oboes, as Mozart originally scored. Others use huge orchestras that play very heavily, which may rock but it's not Mozart. If links are dead due to take-downs, please contact me immediately and I'll find a new selection for the missing movement.*

**REFERENCES**

[Mozart: Symphony no. 40 in G minor on IMSLP](#)

**Part 4: 10 Recommended Scores**

*As I mentioned above, this fourth part of the course was divided over three separate videos. This was due to YouTube's old 10-minute time limit for new members. I refer to all scores here, and the notes touch on the salient points of each work. All titles are linked to IMSLP pages.*

*Looking back on it now, I almost feel like this list is really asking a lot. "This list is for beginning score-readers," I say, "but that doesn't mean that the works are simple or straightforward - far from it!" In fact, there are some fairly complex things in there, so if people have been struggling a bit, then it's perfectly natural.*

*So now I'd say: "Try several examples of each genre as you go." Along with the Brandenburg Concertos, check out some Vivaldi and Telemann. In addition to the overture to "A Midsummer Night's Dream," listen to other overtures of the period, like Mendelssohn's Hebrides, or Weber's Euryanthe, or Beethoven's Coriolanus. And don't stop with the Ravel, but try out quartets by Mozart, Haydn, Beethoven, Borodin, Debussy, and many others. Score-read at least a dozen string quartets, over and over until you know them as well as your favorite symphonies.*

**I. [Bach: The Brandenburg Concertos](#)**

- a. many instruments scored no longer exist, but are played by modern counterparts
- b. scores cover a wide range of instrumental combinations
- c. my favorite is the Third Brandenburg Concerto, scored for a triple trio of strings

*Speaking of score-reading, some musical historians have theorized that the concertos above were originally intended to be read as idealized musical documents, rather than played aloud by musicians. Parts of them are used in other works, notably his cantatas, so you may run into familiar phrases if you score-read more J.S. Bach.*

**Part 4 (cont.)****II. Mozart: Wind Serenade K. 361, “Gran Partita”**

- a. model lesson on how to score well for winds
- b. scoring for winds and horns, but no flutes
- c. good piece with which to study scoring for the basset horn

*I might also mention that you should carefully study this score’s phrasing, breathing, and articulation: here, it’s quite delicately and perfectly handled. Notice how players have time to collect themselves between featured solos, or play off of each other’s lines. The true definition of a masterpiece if there ever was one.*

**III. Mendelssohn: Overture to “A Midsummer Night’s Dream”**

- a. composed when Mendelssohn only 17, yet already a mature composer
- b. it shows many approaches of Beethoven and Mozart, along with the composer’s
- c. a good model of the classical style (though it is a Romantic-era work)

*Overtures were often written to theatrical plays by composers of the 19th century, from Beethoven to Grieg. Theaters often had pit orchestras that might play opening music, entr’actes, and curtain-closers to productions, a very timid step towards musical cues in films. Grieg’s Peer Gynt had music that opened and closed scenes, and accompanied big stage numbers like “The Hall of the Mountain King.”*

**IV. Berlioz: Symphonie Fantastique**

- a. an enormous leap forward in style, drama, and orchestration from Mendelssohn
- b. the first truly programmatic symphony
- c. superbly original, unprecedented treatment of winds and brass

*I could have done a five-part, four-hour series on Symphonie Fantastique and still ended up with more to say. It was the “Rite of Spring” of its time, a piece that harshly divided musicians and music critics, but won over in the end because of its vision and sheer audacity. The work was tied up with Berlioz’s personal life, and it’s worth reading the whole sordid, hysterical, and often hilarious story in the composer’s autobiography.*

**V. Ravel: String Quartet in F**

- a. Ravel is acknowledged as a master texturalist by many orchestrators and composers
- b. this reputation is largely based in his approach to string scoring
- c. there are few such listenable quartets with this many different effects and approaches

*In a blind premiere of new works, Debussy unerringly identified the piece by Ravel, stating that “no other composer has such an ear.” He was absolutely right about that - and it was an ear that always found the sense within a sound or a phrase, intimately tied to the technique and timbre of the instrument that played it like no other composer before or since.*

**VI. Prokofiev: Suite from “Lieutenant Kije”**

- a. though this score is not yet universally available on IMSLP, it is worth purchasing
- b. excellent piece of orchestration, though horns are placed unusually below trumpets
- c. interesting use of cornet and saxophone
- d. Prokofiev is a storehouse of simply expressed, dramatically original orchestration

*“Lieutenant Kije” was a film score before it was an orchestral suite. One of its selections, the Romance, represents one of only a very few double bass solos in the repertoire, and once again is a highly original and yet straightforward bit of scoring. Prokofiev was so disappointed with the original bass singer on the soundtrack (the Romance was also sung), that he kicked him out and sang all the solos himself!*

**Part 4 (cont.)****VII. Debussy: Prelude to “The Afternoon of a Faun”**

- a. the composer’s first significant work for orchestra
- b. it showed a way forward between post-Romantic formalism and Wagnerian hysteria
- c. it suggests certain tones that aren’t even in the score

*This work was really a turning point for French music, and provided a stylistic example of how strict forms could be abandoned, along with traditional harmony. It influenced composers of many different cultures and countries, not just France. When Nijinsky set his highly sensual, erotic choreography to it, it caused a scandal that just made modernism all the more attractive. It’s never lost its freshness, and continues to be a mine of innovation to orchestrators today.*

**VIII. Dukas: “The Sorcerer’s Apprentice”**

- a. it’s a work that perfectly combines form and musical storytelling
- b. the use of winds and brass are particularly agile and well-scored
- c. orchestral phrasing has unusual force and vitality

*I somewhat garbled my video presentation of this piece, and said a few things backwards by accident. Of course, Dukas’ pastel-like colors look forward, not backward, to Debussy’s orchestration. This piece is the penultimate expression of French Romantic scoring (not of Debussy’s approach). This is why I now work from a script, instead of talking out of my hat. ;-)*

**IX. Holst: The Planets**

- a. highly expressive work that is heavily quoted and imitated by cinematic composers
- b. blunt orchestration of devastatingly simple ideas makes it easier to score-read
- c. orchestral color is highly individual, with confident and dynamic development of ideas

*One of the main reasons for this work’s impact is its simplicity of architecture. There are rarely more than two or three functions happening at any given time, plus emphasis by percussion. Yet the scope of the sounds is made towering by quadruple winds and a nine-piece brass section, not to mention all the special effects of harps, celesta, and percussion. Add the tone-weight of the hall organ to some chords, and it’s a universe of sound, not just a concert hall.*

**X. Beethoven: Symphony no. 9 in D minor (“Chorale”)**

- a. this epic symphony is decidedly not a perfectly orchestrated work
- b. imbalances due to classical approach to scoring imposed on evolving instruments
- c. and yet it’s one of the greatest pieces of music ever composed
- d. its vision of humanity has special meaning for composers, creators, and artists
- e. each of the unique variations of the finale are lessons in orchestration
- f. Schiller’s words become a puppet to the grandeur of Beethoven’s vision
- g. this was also the very first score I ever read

*And even after all this, I feel I’ve barely given viewers what they need to get started. I feel like a college professor who’s spouted off a few pointers on reading novels, listed a handful of books, and then told a bunch of students “All right, class, now go out and become informed readers and writers.” The truth is that musical literacy is a long road to wonder, one in which every great work that you hear for the first time grows the sense of possibility within you. And every score you read gives you more insight, craft, and competence when you do your own composing. The teenaged Beethoven had access to collections of nearly 200 symphonies, 80 of them Haydn’s. You’ve got it thousands of times better and luckier. Go do it, now.*

Requiescat in pace - Robert T. Goss: writer, teacher, dreamer. 1932-2011

Thanks, Dad!