Principles of Learning and Teaching for String Players

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This seminar….

1. Principles – Principles of performance and principles of learning (theoretical stuff).
2. Practical issues: technical matters, including: Posture, left hand (material) bowing and sound (form), co-ordination
3. Practice: Teaching and Learning (lessons, individual practice)

Theory: Principles

Reminding us about “Performance”…

Ontology of performance

- > Attitude to performance

Why it is important to think about performance on its own terms -> the development of thinking as a performer

The role of analysis, critique, feedback

The importance of consciousness, technique and possibility or impossibility of improvement (indirect processes)

Instrumental playing

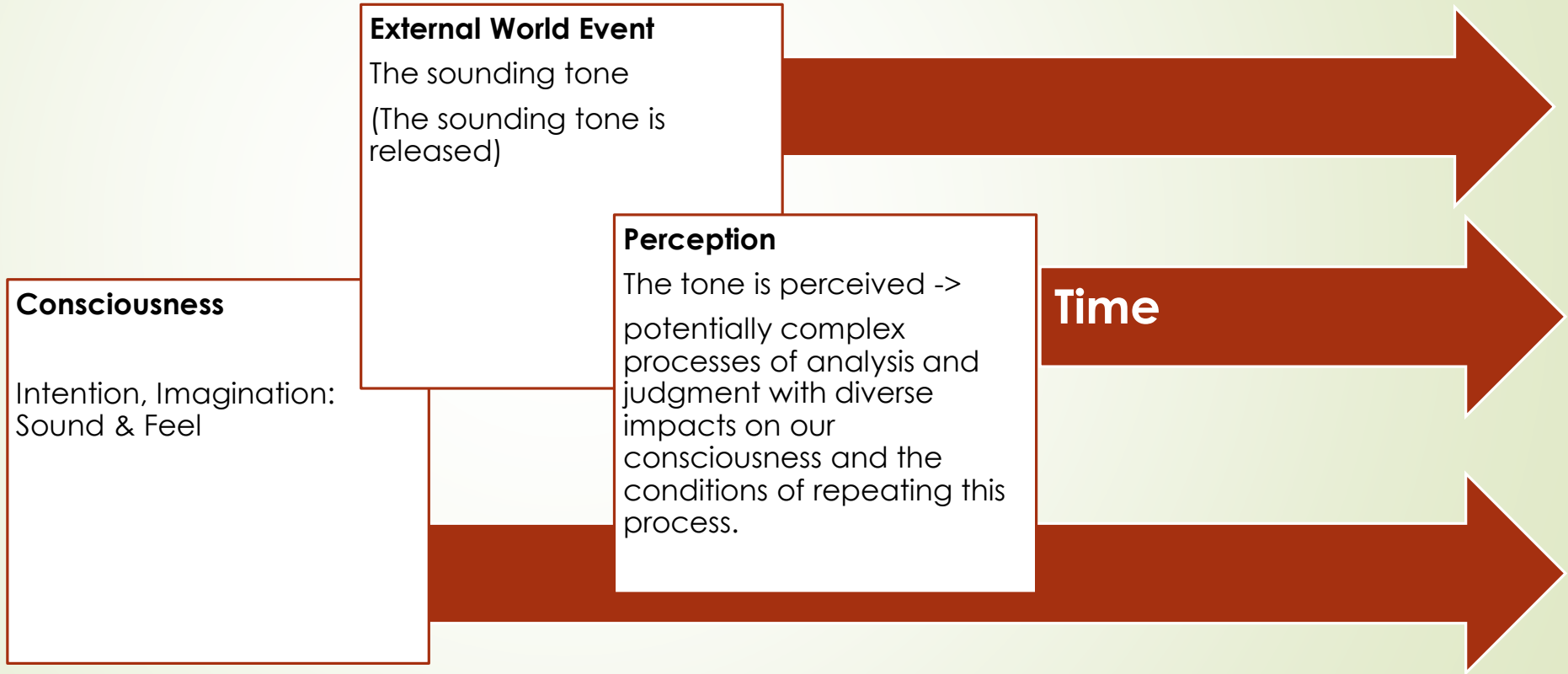
The instrument and the body -> incorporating the instrument into the body.

The relevance of set-up and posture

Different perspectives: object (instrument), subject (player), process (playing) – What are the methodological consequences?

The centrality of artistic intention –> the instrument is instrumental

Schematic analysis of the phenomenon of performance



Movement

The principles of human movement:

- Intensity & forces: balance
- Active - passive
- Timing and Rhythm
- Connectedness (the person plays) -> psycho-physical unity, movement changes person, person changes movement
- The role of the imagination in movement

Somatic Attention through movement:

Alexander Technique (primary control, inhibition, corrupted kinesthesia),

Feldenkrais (awareness through movement, centric focus (pelvis), **Dalcroze** (musicality through movement, rhythm – eurhythmia)

The basis of playing
Rhythm & Co-ordination

"Ear training alone will not make a child love and appreciate music; the most potent element in music and the nearest related to life, is rhythmic movement" (E. J. Dalcroze)

Thinking and movement change "timing" and change as a result of time

Mind and body regulated and correlated through rhythm

-> Galamian's concept of "correlation"

Rhythm is "felt" – Stability of rhythm depending on condition of body.

Rhythm is felt because we feel the impulses and recoveries. This points to the centrality of relaxation and relaxation techniques to instrumental development. (Gingold: "…we do not practice the notes, we practice in between the notes…"). Rhythm and movement regulate change.

Intentionality & Attention

What generates difference? How do we learn?

The importance of intentionality (directedness).

The limits of attention -> perspectives, habituation (in practice)

Working with the imagination

The fundamental role of the imagination

The purpose of performance: thinking in action, playing with others

How do we play? How do we play together?

Thinking together -> fundamental role of intent in ensemble performance

Leading imagination, perception harmoniously -> eliminating interference

Leading rhythmic and energetic impulses -> allowing free balance.

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Technique - τέχνη

"Einstmals hieß techne auch das Hervorbringen des Wahren in das Schöne"

"Once techne also referred to the bringing-forth of truth towards the beautiful."

(Martin Heidegger, Die Frage nach der Technik/ The Question concerning technology, 38)

Fritz Kreisler (1875-1962)

"Technical exercises I use very moderately. I wish my imagination to be responsive, my interest fresh, and as a rule I have found that too much work along routine channels does not accord with the best development of my Art. I feel that technic should be in the player's head, it should be a mental picture, a sort of 'master record'. It should be a matter of will power to which the manual possibilities should be subjected. Technic to me is a mental and not a manual thing." (Martens, 105)

"The technic thus achieved, a technic whose controlling power is chiefly mental, is not perfect – I say so frankly- because it is more or less dependent on the state of the artist's nervous system. Yet it is the only kind of technic that can adequately and completely express the musician's every instinct, wish and emotion. Every other form of technic is stiff, unpliable, since it cannot entirely subordinate itself to the individuality of the artist" (Martens, 106)

Technique & Tone

What is technique?

The instrumental conception of technique: production, functionalization, rational, control -> analysis. “Mind in the machine”.

An alternative view: technique as condition. Centrality of listening: Listening to the body. Discovering ways of doing and maintaining the unity of play. (-> Flow?)

Dependency of Concepts on technical perspective

Analysis – imagination

Judgment – attention

Body-mind duality – minded body/embodied mind

reaction – action

paranoia – confidence

anxiety/ confusion – clarity/ creativity

Tone is primary: connectedness through body. The privilege of the contact point and the necessity to connect forces through the largest muscles. -> use of bow and bilateral co-ordination.

Posture

- Instrumental set up -> posture is possibility, Dynamic concept of of posture. Movement fundamental to string playing
- Dynamic conception of posture -> concept of balance (and harmony of movement), breathing, posture as "reactice"… what is tension?
- Changing movement, playing, technique means changing idea of movement, playing, technique… (Dounis) -> the role of attention and intention
- Alignments – feet, hips, shoulders.
- Arm movements -> Active/ passive body. Posture enables movement
- Exercises to create awareness and ability to move (balance board, squatting, etc)

Material content: Left Hand

- Size of instrument: why is it important, how do we know what the right size is.
- Placement of instrument to body. Instrument as part of the body.
- The role of the left … the bilateral foundations of playing. Anticipation and co-ordination of movements. Left leads (temporal) – Right forms. (artistically, right leads)
- Hands as pivoting systems… thumb vs. fingers.
- Joints, muscles and bones. Impulse and recovery -> rhythmic movement. The relativity of relaxation. (active/ passive)
- Energetic ideas of playing -> the burden of intonation
- Finger angles and contacts (is there a hand "position" -> possibility to move; considerations for balance)

Intonation

Harmonic vs melodic intonation

Eliminating physical obstacles/ interference (silent rehearsal)

Intonation is a reflection of referencing -> establishing referencing signposts

Correcting intonation occurs at the level of intentionality (attention)

Intonation & balance (unisons, octaves need to be balanced), melodic intonation referenced to bass line (not full harmony).

Methods to improve intonation/ pitch: audiation, miming, referencing, re-scoring, building listening ahead

Form and Expression: Bow and Sound Production

- Bow Hand -> Hinge concept. Galamian's five rotational possibilities
- Are the fingers active? (Capet) "The third finger is the spiritual leader of the bow hand"
- The arm leads, the hand follows (Flesch)
- Basic movements (Flesch), freedom to move (joints, active/passive movement)
- Tone production: Sound point -> the implication of sound point for co-ordination
- Tone and imagination (limits of mechanical understanding). Feeling as central to playing. The elasticity of the bow.

Co-ordination (bi-lateral), playing, imagination

Technical challenges are (mostly) co-ordination challenges

Simplification occurs across several dimensions: speed (slow playing = slow thinking), simplifying, chunking, etc

Flesch's principle of isolating left and right… finger patterns (tapping, repetitive exercises -> left; bow schemata -> right)

Rhythmic variation to improve co-ordination (improving order: balancing posture (rest position!), anticipating [mental practice]) (Galamian's rhythm variations)

Silent rehearsal techniques, embodied cognition -> miming as a basis of practice (the evidence of sports psychology)

Effective methods build… listening to hear

Freedom of movement, effortless playing (posture, balance; **listening** to body)

Autonomous intent and listening (**listening with imagination**)

Collaboration, collaborative ability (**listening to others**)

Playing through intent, forward thinking and imagination (**hearkening**)

Rhythmic clarity, rhythmic co-ordination (**listening to movement**)

Effortless contact with instrument and sound point (**listening to tone**)

Ever increasing alertness to musical structure (bass line). (**listening to music**)

Practice: Learning & Teaching

Found on Facebook

My daughter is starting trombone. I am looking for someone who can teach her trombone in parallel with School. You don't need to be a proper teacher just someone who plays well is fine.

Teaching & Lessons

Learning and conditioning for learning (...practice…. what happens between lessons)

1. Acknowledging achievements. (Facts: what is the case)
2. Setting expectations and demands (good learning results from demanding expectations)
3. Providing learning strategies (performance learning is not restricted to "problem solving", ie: performance learning is creative -> lessons are not an analytical graveyard but a creative building site -> inspiration and expert advice
4. Affirmation of purpose and organisation of work
5. Containment of frustration -> invigorating creativity
6. Directing practice (comprehensively)

Reflective and Creative Consciousness

- Reflective
  - objectifying, factual, reactive, analytical
- Creative
  - doing, future-directed; imaginative
  - Thinking-in-action
- How are these integrated in performance and performance learning? -> role of attention, critique, intention, imaginative conception.
- Teaching: building capacity for performance. -> mental practice

Lesson Structure

Dividing the lesson time according to the material: Technical Material, Studies, Repertoire, Play-time. Starting and stopping points for lesson parts (clock in sight of teacher, not student)

Allowing performance time and listen to the home/set work: examination, assessment lead to didactic direction -> resilience, autonomous thinking, creativity and dynamic learning.

Conclusion and synopsis: outcomes which inspire practice.

Lesson structures can be pre-planed or improvised... Structure according to **purpose**!

Purpose

Characteristics of a Teacher: Personality, pedagogical ability and intention, organisation and purpose -> **Why teach? -> Why learn?**

Verbal interaction: affirmative vs nihilistic; student vs teacher centric; metaphorical interaction; the contingent importance of judgment

Modelling -> point needs to be clear and succinct -> modelling with purpose

Hands-on interaction (NB: child-protection issues, parent present, invite permission, restrict to minimum -> investigate alternatives whenever possible)

Making music together -> (Flesch vs Enescu)

Discussion of purpose -> Purpose sustains intrinsic motivation (maintaining motivation actively)

Flow of learning

Adequate record keeping across lessons, weeks, terms, semesters, years

Setting goals (short, medium, long) and revising trajectories (goals) -> setting boundaries to facilitate attainment of goals

Understanding student's learning and practice (organisational, contextual, environmental issues)-> bringing matters back to "scaffolding" development

Developing performance -> collaborative learning (student centric) -> the essence of music is social, music and music making are forms of communication, ie. students need to develop skills which are useful for musical collaboration

(Watkins & Scott, *From the Stage to the Studio: How fine musicians become great teachers*. New York, NY: Oxford University Press, 2012)

Practice

- Preparation for performance (both in general and in specific terms)
- Learning of specific works of music
- Active, purposeful conditioning of
  - Attention/ intention (attitude)
  - Thinking
  - Way of playing
  - The limits of reaction to playing
- Individual learning process, involving the instrument – but not only and not always. ("mental practice")
- Organised learning process (practice continuum)
- Reflection of purposeful overall progress (The ambivalence of skill development and specialisation)

Why practice?

- Develop skills (instrumental, musical, artistic)
  - Develop fluency: mental abilities, correlation (mind-body), co-ordination of hands, balance, etc (technical matters)
  - Imagination (Clarity, vividness, interpretative, metaphorical imagination)
  - Specific areas: pitch, rhythm, sound, co-ordination
- Develop ease
- Develop and refine interpretation (-> building, performing time)
- Rehearsal of performance

Flesch (1873- 1944) on Practice

- "We regard accordingly the recommendation of cardinal virtues as less important than the realisation and removal of obstacles as the main task which needs to be addressed" (Flesch, II, 3)
- Practice: "the path which leads from "non-being able to play" a passage to "being able to play it" (Flesch, I, 77)
- Three stages of practice: (i) not knowing – not being able to play; (ii) to know without knowing by memory (iii) being able to play = memorised
- Transformation of conscious into unconscious movement (reflection leads to mistakes)
- "The frequent repetition of a passage has nothing to do with music" (78). Repetition is a "necessary evil" (ie. an evil)
- Avoiding exaggerations
- Technical skills are to practiced frequently but in small quantities (non multum, sed multa)
- One hour general technique, one and a half hours applied technique (technical study of repertoire), one and a half hour of pure music (concert like performance)

Galamian (1903- 1981) on Practice

- Practice is a process of self-instruction
- Complete and constant mental alertness during practice
- Mechanical routine-functioning and endless repetitions…

…"practice of this kind, lacking both direction and control is a waste of time and effort" (Galamian, 94)

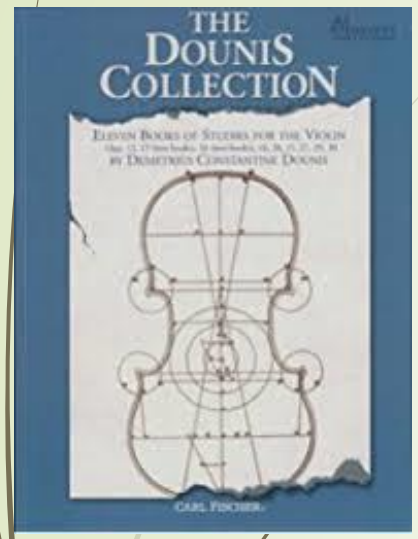
Division of practice time:

Building time: principle of mental preparation is of paramount importance (correlation). Solve one problem and proceed to next (useless to repeat over and over again a problem that is mastered). Mind anticipates the action

Interpreting time: emphasis on musical expressiveness; no interruption of execution, practice performance attitude and resilience

Performing time: "..entirely different conditions of the mind and muscles in the playing of a passage as an exercise and in playing it as a part of a musical composition (101)

Dounis (1894-1954) on Practice



- "Firstly, Dounis expected memorization of each new piece before it had been played….Most importantly, memorization of all the sensations of motion and relationships of body parts was stressed in order to lessen difficulties and to allow the musician to recreate positive sensations. Dounis believed that before any movement a very specific picture should be reflected in the brain." (Constantakos, 56,57)
- "Most violinists believe that the solution of the problem "How to practice" lies in repeating, every day, various finger exercises, scales, arpeggios, bow exercises, etc. But this supposition is a fallacy. No one will every learn how to practice by repeating day in, day out, finger exercises, scales, or in fact, the whole compendium of daily exercises for the violin. The result of such monotonous and arid study is usually worthless. This procedure explains why after years of intensive study, there are few violinists, very few indeed, who acquire and infallible technique… the true technical training of the violinist is not merely a training of the arm and the fingers but, principally, a training of the brain and the memory (Dounis, 8/10)
- "Cultivate at all times a feeling of absolute comfort while practicing" (233)

Wronski (1915-2000) on Practice

- Analysis of practice behaviour of successful violinists
- "Just as time for technical work is frequently wasted by the knowledge that pieces are waiting and there is less and less time before an upcoming lesson, so too work on repertoire is spoilt through feeling guilty about neglecting proper technical preparation or having spent time where nothing more than a warm up was achieved. My first recommendation is that work with the violin should be thoroughly planned and one must execute practice with full knowledge that it is needed and that it saves time later when working on repertoire. One and a half hours a day is sufficient time for pure technical work. Through planning and uncompromising performance of technical exercises, one introduces a sense of inner calm and a clear conscience into practice." (Wronski/ Wasiel, 11)
- Topic based approach (short time frames, in minutes)
- "the hand likes change" (variation of material)
- Practise a holistic process and reflects the holistic nature of violin playing. (rotation of material across larger learning cycles)
- Training plans devised by students for each day

- Plan daily technical practice and the time allocated for each element as accurately
- as possible;
- Practise all elements of technique daily;
- Practise each technical element differently everyday;
- Practise with a watch and fulfil all points precisely in your plan;
- Have all "learning aids", including scale compilations, exercises, caprices and pieces, by your side so that you do not have to take a long time to find them;
- Plan technical work for the following day every evening on paper;
- Once a week introduce a “special day” where you spend time working on a certain set of problems;
- Do not practise technique at all on Sundays;
- Do not get used to always practising technique before repertoire.

Mistakes and repetition

- Mistakes present information
- Reacting to mistakes may preclude their solution -> keeping learning process open
- Repeating in response to mistakes is mostly an expression of frustration or confusion (habit)
- Just because we repeat, does not mean we will improve anything ("Repeating the same thing over and over again
- Purposeful repetition: recovery and anticipation (thinking).

The Objective Ear

- Galamian: "To train the ear for objective listening is of the greatest importance in order to be able to hear the sound as the audience would hear it and to free oneself from the flattering fallacies of the subjective ear" (Galamian, 102)
- Leimer: "Most pianists have not the faculty of hearing themselves correctly…the noticing of the exact tone pitch is, so to say, only secondary when compared with the noticing of the exact tone quality, tone duration and tone strength.. The thorough training of the ear is a prerequisite for rapid progress" (Leimer, 10)
- Is there an objective ear? Is it desirable?
- The relevant perspecitves:
  - Internal: performer's perspective.
  - External: audience perspective
  - Different temporal relationships, but performer must "match" these, yet in the process of matching must not loose "**internal ear**"

Organisation… time, attention, progress

- Balancing work & Developing attention (units of practice that sustain attention, refreshing attention)
- Keeping track of progress
- Abandoning unproductive approaches and changing agendas (limits of planning and method)
- Noting progress – increasing expectations (high expectations sustain effective learning) Student works on their own practice development (organisation of time, content, balance of work). Discussions in lesson on quantity, content/ quality
- Rotate topics and include silent / mental practice in planning
- While there are guidelines on practice times for students (set for the various levels) the student is in charge and determines their time and rate of progress. Practice is entirely student centric.
- Central concern of practice is effective learning

Organisational Model (box practice)

- Organisation of time to reflect areas of work (General Technique 20-30%, Applied Technique 20-30%, Repertoire 50%)
- Organisation in practice units ("boxes" of 20 minutes- can be modified). Work with clock

Daily

GT (Scales, Arp)	AT (Kreutzer 10)	GT (Double Stops, Bow Ex)
Kreutzer 10	Repertoire (Bach E)	Bach E

Week commencing _____

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
At						
Gt						
AT						
GT						
Rep						
Rep						

String Playing

- Overall Primary Direction from the internal ear (singing)
- Movement based performance. Playing is determined by anticipation, relaxation, co-ordination, rhythm
- Principle of attention to movement: arm/ fingers move while balance of movement is free. Attention on non-moving parts. (Leimer's "relaxation") (effective/ efficiency)
- Working on co-ordination and balance: technical practice establishes (ideal) models of co-ordination (left, right, left-right).
- Practice which separates feel -> pre-feel, pre-hear. (Yankelevich) Practice without bow, without violin & bow (miming)
- Applied Technical work and Repertoire studies must follow through on models established in technical work
- Models of playing guide imagination (and are in turn guided by imagination) – Metaphorical approach

Specific Issues…

- Son-file: practicing rest balance, tone production
- Rhythmic practice (cf. Galamian) to improve co-ordination in
  - Ie. Left hand dexterity (mordents, trills)
  - Bowing technique
  - Specific passage work
- Rhythm: impulse & recovery (energetic attention)
- Anticipation (anticipate complete playing – connection of internal ear & feeling)

Conclusion

"An English admirer of the great violinist Nicolo Paganini inadvertently revealed the secret of the latter's musical technology, which was the phenomenal activity of the internal ear. This man would today be termed a fanatic (if not a stalker): he followed Paganini around for 6 months, staying in the same hotels as the violinist, and in adjoining rooms. The curious Englishman wanted to penetrate the mystery of the artist's holy of holies- to observe him practicing by himself. But no matter how hard he tried, he was never able to catch the master at this intimate musical occupation, from which the impression arose that the enchanting sounds which issued forth from his violin in concert were totally spontaneous and unprepared: Paganini apparently never practiced, and nothing but silence ever came from his room.

Then one day fortune finally smiled on the despairing admirer. Peeking through the keyhole into the maestro's room, he suddenly caught sight of Paganini raising his incomparable Guarneri violin to his shoulder. Anticipating at this point the enjoyment of a concert to be performed for himself alone, the admirer froze in expectation. And then he saw the maestro barely touch the instrument's strings; he played soundlessly, controlling his performance solely with his internal ear. The music sounded in Paganini's head even when he did not play a single note - and this 'practice' was sufficient to him to remain in phenomenal artistic form. The curious admirer went away with nothing and fell into even greater confusion than at the beginning of his trip; he had no concept of the internal ear". (Kirnaskaya, The natural musician, 2006, pp. 160/161)

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