
On the study of violin playing

A guide to learning,
practice and
performance

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Introduction

In the following I outline a broad context which I believe informs the study and practice of violin playing. Theoretical interest aside, I address my remarks to students, parents and colleagues hoping that this will assist them further in understanding my pedagogical approach and provide clarity about the foundations which guide my conceptions of the concrete aims and expectations in the work with young musicians and performers.

Over the many years I have worked with students and in music I have made the repeated observation that one of the most difficult challenges for musicians is to find a natural balance between the intense activity of musical performance and the thoughtful reflection which should inform such activity. Musicians frequently shun reflection and reject theory. They fear with some justification that these may dilute their artistic intensity, projection or charisma. At the same time it has become clear to me that intense or relentless activism quickly fails even if it is nurtured by inspiration and enthusiasm. It becomes stuck and undermines itself as the “divine fire” alone does not automatically convey the capacity to find effective means of realisation.

The challenge for any musical performer then seems to me to achieve balance here, to build awareness, attention and reflection while engaged in the intensely exciting and personal activity of music making. To assist this, this paper has two aims: it discusses a fundamental understanding of the art of violin playing and some core principles and methods of study.

Purpose

In all activities in which we search for improvement and excellence our understanding of purpose is perhaps the most important source guiding our approach and directing our motivation. Unless we know why we do something we will be unlikely to summon and dedicate our best spiritual, mental and emotional energy to the activity. Doing anything without clear purpose will over time result in a loss of momentum and ultimately dull our spirit. Holding intensely fast to an unclear or perverse purpose may result in fanaticism (even terrorism) and leads to often significant damage to our self and others. Accordingly, in deciding to study the violin properly we need to think, search and determine why we do so truthfully and sensibly. Naturally, the answer to this question of purpose is manifold and we will express it through different personal preferences, histories, needs and beliefs. There is no one answer and even one person may give a different answer at different times in their life and development. However, without a clear and coherent purpose our learning and our work will lack its vital context and our art will remain meaningless or merely pathological.

Autonomy of purpose and *Eupraxia*

No matter how manifold the ways are in which we express the purpose of what we do, fundamentally the playing of music is an end in itself. As an art it is independent of instrumental interests, of pragmatic usefulness or of personal agenda. It is an autonomous activity in which we find a fulfilment of our humanity and the freedom of our human being. In this sense at least music making cannot serve any immediate practical or egocentric interests. While motivations which are connected with personal achievement, gain or gratification may and must accompany what we do to give our real life concrete zeal and fire, occupying the overwhelming place of purpose in our work undermines this work itself and distracts our attention. Paradoxically, playing the violin with the overwhelming purpose of gratifying our self, achieving public success or building a career will ultimately not allow us to develop to our highest potential as our attention becomes divided, fragmented and compromised. Instead, we must focus on the excellence of the art itself.

Making music and playing the violin are intrinsically valid and valuable activities. Activities of this kind have an autonomous purpose and their excellence lies within themselves. The Ancient Greeks

referred to such activities as pursuing *eupraxia* or “good practice” which is justified simply by being good in- and for itself. In our concrete context this goodness and such motivations are not always easy to recognise and we sometimes find it hard to distinguish authentic from imposed or compulsive purpose in our own motivational structure. We are, after all complex beings and the purposes of what we do can be manifold and interconnected in confusing ways. However, it is important that we remind ourselves regularly and as a matter of habit that the musician makes her ultimate commitment to the playing of music purely. A true musician simply wants to make music as well as possible. The beginning of any serious study needs to include a search for an uncontaminated engagement with music.

Our consciousness of the purity of purpose requires cognitive and spiritual maintenance just as our physical being requires regular exercise and attention to thrive. In order to realise the aims of *eupraxia* as public performers we will need to work on the balance between internal demands and public approval and develop an all-inclusive relationship with these. Success, achievement and admiration are important to what we do and we should not dismiss or deride them. However, we are wise to remind ourselves frequently that they are not the central purpose of what we do and that they exert an at times toxic influence on our motivational structure. And if we have to make a choice between success and excellence (a choice we should never provoke) we will be well advised for our long term benefit to generally choose the latter!

Striving for excellence in music and violin playing requires then recognition of the self-sufficient purpose of this wonderful art in the first instance and a capacity to adjust our view from time to time to remind ourselves of the relativity of a purpose which is related to personal ambition and ego. The reality is that concrete success will ordinarily follow from excellence; however, excellence does not necessarily flow from success. In our approach to violin playing, therefore, we must privilege the attainment of excellence of the art and our substantial improvement of skill at all times over the achievement of approval and applause. In my view and experience we can find a very concrete benefit in this approach: A sustainable career in music is less likely to be achieved by planning or emulating success. It will come more readily to us by focussing on- and pursuing excellence in what we do.

Talent and learning

It is common to describe a musically skilled and accomplished person as “talented”. However, while we readily refer to talent, we are less clear what we really mean by such a reference. Used without clear understanding and as a stereotypical description or distinction of musicians, the term “talent” seems a distraction at best. Like intelligence, any concept of talent is bound to be very complex. According to a model developed by the developmental psychologist Howard Gardner, we need to understand musical talent and intelligence as a multidimensional concept in which several factors (visual-spatial, emotional-, learning-, analytic- kinetic- intelligence or talent and so on) combine to constitute a starting potential or initial approach. While we are often mesmerized by this potential as a defined or fixed set of qualities, in reality circumstances and challenges engage our interest and learning responses in various ways at various times. In addition our engagement and the available opportunities modulate our potential and this in turn sets our context for further opportunity. This formation of our “talent” is not necessarily productive and depends to a great extent on our capacity to integrate the various dimensions of the skills required.

A metaphor of a card game will clarify this: We can view talent as the set of cards we receive initially for a game- it is the hand we are dealt. Our success in the game depends on our ability to play with this set of cards in a context that is also determined by cards received by other players and by their respective ability to play. Over the course of the game, our set of cards changes constantly and according to the progress of the game and the ability and interest of the players. We may have

started the game with a better set of cards than we hold at the end – especially if we do not play well or fail to pay adequate attention or if we fail to receive appropriate opportunity. However, what must interest us in this metaphor, is that it describes a dynamic model of development and learning in which certain given factors are applied, moderated, transformed and developed within a fluid and dynamic context describing both factors within- and outside our control and capacity. If the card-game analogy describes the relationship between “talent” and learning it is clear that no set of abilities or “talent” can predict artistic and musical achievement. No set of cards allows us to predict the outcome of a game with any certainty.

What matters in this analogy (as in any informed explanation of talent) is not the personal dimension or the detailed conceptual insufficiencies of the analogy but the recognition that the dynamic rhythm of our learning (“the game”) is determined crucially by our attention. This explains while even “talented” people can achieve disappointing results over time. Their development becomes arrested where attention has not kept pace with all aspects of their opportunity. And vice versa, it explains why people with modest “talent” surprise us through their development and achievement. A static concept of “talent” is clearly limited. Relying on it to understand ourselves and others is particularly dangerous if it makes us forget that useful learning processes and methods can slow down and invert, divert or pervert outcomes often quickly. The responsible factor here is often the erosion of attention as a result of adaptation, experience or theory-driven expectation.

Attention

Making attention and learning central concept of our being takes account of the fact that we are fundamentally autonomous beings who develop in dialogue with radically personal directions. This sets the limits of instruction for teachers and parents who can always only indirectly facilitate a development that is already on the way and must be completed by the learner. The popular notion that the world of music is inhabited by talented students who are initiated and enlightened by masters of their art is only true in a very limited sense. In reality, outstanding musicians are excellent learners who bring comprehensive, consistent and astute levels of autonomous interest and attention to their tasks. Great musicians and performers do not always make good teachers as their curiosity for others and their capacity to respect and develop the autonomy of the other is contradicted by the necessarily strong conviction in their own perceptions, ideas and projections with which they are often largely preoccupied. Directing the student’s attention towards the conceptions, ideas and insights of someone else is often not useful for the learner who learns through her own independent form of attention. In fact, an instruction which negates the student’s independent attention sets a context for distraction and serves to undermine learning. This important point extends to all relevant aspects of violin playing including detailed technical and musical perceptions. It also points to the danger that any well-meaning assistance or manipulation from parents and teachers to pre-form learning and dispense it to students as if it was readily absorbed is doomed for failure. Such approaches are likely met by diminished – and continuously diminishing attention and a slowing of development.

Lessons

If we accept this view of learning, we arrive at a clear definition of the role of the lesson: the violin lesson is student-centric. It promotes attention, sets contexts for practice where substantial learning takes place and assists students in forming understanding and strategies for their productive development. Students are discouraged to rely on the lesson and the teacher to solve their problems. Instead, the lesson is primarily a place in which the student presents her work and learning achievements (her discoveries) and experiences affirmations, suggestions and further direction to build her own aims and expectations. Naturally, problem solving will play a part in any pedagogical direction, however, it is the student who must be encouraged to solve problems

(autonomously as much as possible or in a facilitated way which makes way for independence at the first opportunity) if learning is to occur. The role of the teacher as a facilitator of learning naturally incorporates various functions including modelling, frustration control, the simplification of tasks, the organisation of goals and practice, the projection of expectation and the direction of attention. However, the teacher's most important task is to promote and direct the student's attention towards her own productive learning. At no time should instruction or teaching displace such attention through comprehensively pre-formed solutions, recipes or other forms of manipulation even where such "help" may be well-intended.

Unfortunately it is my observation that over-instruction and a definition of technical or musical patterns which are then rote-learned or "drilled" are common among young musicians who are presented with the intention to create an appearance of maturity and inspiration. Such tricks often suggest that the students' skills extend far beyond their real developmental levels. They are promoted to further the interests of teachers and parents and can lead to short term success in limited contexts. It is not uncommon that teachers and parents compensate their own musical or instrumental failings by becoming manipulators of "talented" students with artificially enhanced abilities to gratify their own ego. However, an extreme teacher- (or parent) defined way of playing has in my observation and experience truly disastrous consequences in the long term: The student's autonomous attention is switched to an auto-play pattern achieving conformity with a prescribed model. Playing processes are no longer noticed and the student becomes distracted from a perception of the rhythmic energy of their movements leading to a breakdown of technical capacity along the way and ultimately unnaturally forced playing. In addition, the student's imagination is suffocated and is replaced by a compulsion for task-fulfilment which derives its motivation often from the gratification of narcissistic tendencies or approval through teachers, achievements, applause, perceptions of success, etc. A demand for conformity induces at times considerable stress and the resulting psycho-physical tension induces anxiety and mental noise which slows learning and further undermines technical and musical development. In the extreme consequence, the student's attention and motivation "burns-out"¹.

In the place of such essentially harmful and irresponsible pedagogical practice, the teacher must motivate the student to rely truthfully on her own perceptions and to direct her own learning in an effective way from the start. This direction will rely on the promotion of attention and the understanding of the foundations of playing. It is formed in the processes of practice as exploration and discovery which takes a central position in the consideration of violin playing in its entirety.

¹ This way of approach is common in contexts which validate themselves essentially through achievements in competitions, prizewinnings, etc. When I gave a masterclass in a major city in South-East Asia to young violinists from an "elite" training institution in 2011 my refusal to give substantial instructions initially generated consternation. Students (parents and teachers) had clearly come to the class to learn technical tricks and artistic recipes for success or to have their problems fixed. However, in working with the students my insistence that they report their own perceptions (in particular those related to proprioception and rhythmic energy of movement) and accept these as the guide to their learning induced evident panic. It was clear that these students had never been directed to notice (let alone articulate) any of their own perceptions. Yet, they were quickly able to accept this approach and when their autonomous attention led to immediate and striking technical and musical progress parents and students (and some teachers) experienced a form of shock. Parents told me after the class of their – and their children's psychological and physical trauma. Unable to fulfil the demands for yet "more practice" to train the "muscle memory" they and their children struggled for motivation in the hope that this is what the tough life of an "elite" artist must be about. The common-sense idea that such demands make absolutely no sense unless practice is validated by the student herself through immediate and noticeable improvement had not occurred to them.

On Practice

In accordance with the above remarks, then, for anyone serious about violin playing, practice is a central activity. Its reality and achievements should occupy the reflection of teachers and students consistently. When we think about practice we need to think about how much we practice and how we practice. There are no standard answers to either question as everyone learns differently, has different capacities for attention and faces different pragmatic challenges. The most important requirements of practice, however, regardless of individual circumstances are that we must bring to practice active participation and full attention and that we practice consistently and sufficiently. When thinking about practice the following may be useful.

Time to practice

Quantity of practice does matter. If we practice consistently too little, we will not be able to learn the amount of studies and repertoire that we should know. We simply will not know enough. In addition, our mind and body may not be fit enough and we may not be resilient to the demands of performance.

In addition, if we practice within a mode of attention which is anxious about the amount of time we spend on practice in total our practice may not be very efficient and we may not be physically and mentally comfortable enough to learn. The first step in practising then is to make a realistic assessment about the time we are going to spend practising every day. We need to put boundaries around this time and defend this time against all the exciting, important, necessary and unpredictable things that may impact on our life. We also need to plan some time for rest during the practice time so that our mind and body have a chance to recover from their work.

Our management of the time we allocate to our own development is critical. I suggest that the minimum average amount of time for a serious violinist who is developing should be four hours daily – depending on circumstances this may even increase a little². Carl Flesch recommends around four to four and a half hours daily, Dorothy Delay five hours or more. Four hours of daily practice are a modest expectation and we should be able to achieve it on average. We should be aware that increasing practice beyond that does not necessarily mean that we learn more. Of course, ideally we will, but often our attention is no longer in a productive condition. Many who practice for six or even eight hours achieve very little in their final hours and, in fact, often create real reasons or compulsive perceptions for a particular practice regime.

Within the total available time for practice we need to allocate time for all the aspects of our work. Carl Flesch introduces a useful distinction between

- a. General technical work (Scales, Exercises, “Technical Topics”). In this area we aim to maintain and improve our “fitness” for all contexts of violin playing and explore the raw material of our way of playing.

² Heifetz is supposedly reported to have answered to the question how much practice is required: “If you practise with your hands no amount of practice is sufficient, if you practise with your head, three hours are more than sufficient.” Other violinists (Grumiaux, even Louis Spohr and Milstein) have held surprisingly modest views about practice and considered two or three hours daily sufficient. In fact, their view was that anyone needing more time should not undertake this demanding art. Kreisler’s view of practice as “harmful” reflects a very astute observation that practice as mere repetition to secure automatic playing processes in fact dulls our imagination and undermines our playing both technically and artistically. We must not forget, however, that these views were mostly articulated by the mature artists who already had completed a large part of their significant technical and musical development.

- b. Applied technical work (Studies). This material aims to broaden specific technical and artistic abilities. We develop a comprehensive performance artistry that can respond to relevant stylistic and expressive challenges.
- c. Repertoire.

If we work within a four to (maximum) five hour time allocation for practice per day, we might divide our time easily between general and applied technical work (50%) and repertoire (50%).

Quality of practice: attention, attitude and fitness

While the focus of practice is on learning works or repertoire we wish to play, practice is a form of conditioning of our mental and physical habits, our attention and our attitudes and expectations. In addition we maintain and improve our mental and physical “fitness”. However, while we are aiming at improvement our practice also has a potential to damage our skills and our aims. If we are not alert or our attention is not flexible we may acquire unproductive skills and habits. If our practice is shaped by anxiety, stress or a sense of inadequacy or despondency we may not learn well. If our practice does not selectively improve our physical and mental fitness we may lack the necessary foundations for our future development. If we insist on solutions and methods of practice without careful observation about their productive outcomes we may in fact “un-practice” our skills and abilities.

Practice as care of self

It is clear that clear observation and attention (rather than repetition) is central to practice. As we learn through attention we will learn better if our attention is keen and we are not tired. Tired attention can result from routine, from practicing too much or it can result from a lack of genuine interest in what we are doing. Regardless of the reasons, instances of poor attention must be tackled. Practising within our autonomous attention is a form of care of the self as we discover what we would like to do, learn to observe what we can do and find ways to form a mutually informative relationship between the two. If we practise without sufficient attention, we may acquire detrimental habits. In this case, it may be better not to practise. In addition, we may practise without directing our intentions and thus our learning occurs by trial and error rather than purposefully. Purposeful practice of the kind that can lead to real improvement involves clarity of con- and perception and thus a keen sense of attention.

Failure and mistakes as value-free information

We learn best with a sense of optimism. In practice (as in life) we can perceive identical facts from at least two extreme perspectives: We can perceive a lack, an obstacle or problem and the limitations it places on us and our lives. Or we can see a challenge and its unlimited potential it offers us for our development. This is often known as the “glass-half-full-or-half-empty” paradigm. A productive performer uses – by nature or habit – the second approach relying on optimism and seeing largely possibility. She is future directed and her fundamental mental habit must be to identify all challenge as possibilities in her perceptions and reflections. A performer needs to practise experiments of thought and the activity of the imagination in which even “catastrophic” experiences are transformed into productive experiences and future conditions of possibility.

This attitudinal practice has two important components: In practice we need to develop a discipline of judgment in which we perceive “failure” as value-free information and success as positive confirmation. We can welcome mistakes and the experience of failure because this helps our learning. We enjoy success because it confirms our optimism in the future and affirms imagined possibilities. In the final analysis the performer has an asymmetric view of success and failure: failure supplies information and assists us to perhaps exclude certain possibilities. Success is confirmation

that possibilities exist and that these can be realised. Both become keys to excellence and ultimately success. They suggest different paths towards future possibilities which we are already pursuing in a productive and positive way.

Fitness

Fitness is a holistic concept. Our physical development and the conditioning of our playing technique are the result of mental direction, kinaesthetic perception (proprioception) and a clear sense of rhythm and timing. When we look at fitness we look at the way in which our mind and body interact and correlate. Having said this, the physical condition is actually quite important for musicians as it improves our sense of well-being and our stress-resilience. However, the fitness of a violinist is an overall fitness acquired through intelligent and perceptive use of technical exercise directed by clear thinking and imagination.

The acquisition of new skills and abilities is very exciting and fulfilling. It needs to be experienced as such. In the first instance violin playing is a discovery: a discovery of the beauty of music, of our imagination and our spiritual self and of new ways of playing. New skills are learnt by finding them. Learning is accomplished without delay. Therefore, practice needs to have an active and searching orientation and we take an active and autonomous role in directing our learning. Practice that simply fulfils directions given to us by someone else or by a pre-conceived method which promises deferred returns, is- no matter how authoritative and well-meaning in its original directions- much less productive and powerful than practice and learning which is self-directed and noticeably successful. In the former case we can hope to perfect functional possibilities but we also accept given functional limitations. While improving some skills, this practice always also reinforces limitations. In the second case, however, we discover new possibilities and skills from within and we acquire knowledge by doing. This knowledge enables us to transcend functional limitations through attention, reflection and creative experimentation. Practice which is self-directed is a reflective process in which we take directions, gather experience and engage in thinking to arrive at an insightful purpose. Through attentive and purposeful-repetitive activity this purpose is realised and becomes a part of our skills and our being.

The practice of General Technical Material

When we refer to “general technical material” we ordinarily refer to exercises, scales or scale-related materials (arpeggios, double stop scales, etc). We practise general technical material to acquire new skills or to maintain and refine existing ones (“fitness”). Often, however, the practice of scales and exercises has the characteristics of a routine. The student practises exercises and scales to comply with expectations. This translates into a reduction of learning. I am suggesting (following Wronski)³ that we approach the practice of general technical material in three ways:

1. We identify the technical topics of practice;
2. We practise each topic for a concise and limited amount of time, but regularly and preferably daily;
3. We practise the same technical topic with a variety of material to restimulate our attention.

Technical Topics

Technical fitness underpins our ideal of violin playing as involving complete freedom of correlation between musical imagination and physical execution. This fitness can be achieved through working on specific technical topics rather than voluminous amounts of technical material. A major demand from this approach is the participation of the student and her attention. Students must establish and articulate an individual and autonomous structure (in discussion with their teacher). A comprehensive model of such a structure is given at the end of this paper (Appendix). This structure must contain sufficient variety of material to enable a consistent refreshment of attention. The student will develop her own practice material and resource base with a developing understanding of their playing and the demands of the art of violin playing.

The planning of technical topics and the amount of time spent on each topic will need to reflect individual or particular needs, requirements and possibilities. This approach should be regularly reviewed so that we gain a comprehensive technical exposure. Over time, we can include in addition to obvious scales and technical exercises in our general technical material etudes or concise excerpts from the repertoire (including chamber music or orchestral repertoire). On the whole it is important that the practice of general technical material is done with active attention and attentive participation and does not deteriorate into a mindless routine.

The practice of Applied Technical Material

The practice of etudes or studies plays a central role in the development of violinists. It is an important form of practice as it allows us to discover and refine our playing in the engagement with contained and largely clearly focussed artistic aims. In addition it provides us with material to establish a flow of learning which has wide benefits: Improving technical fluidity is based on the mental capacity to direct a complex combination of skills (reading, playing, listening, etc). Their development relies on variety and volume of material.

In addition the collections of studies by violinists and teachers from the elementary to the most advanced level offer us synoptic insights into the artistic understanding of violin playing. The studies by Kreutzer, Fiorillo, Mazas, Rode, Dancla, Wieniawski, Paganini and many others do not only contain rich material of technical development but they present us with aesthetic and stylistic statements. They summarize a way of playing, a (master-) violinist’s aesthetics and a (master-) violinist’s way of thinking and playing. To be sure, their detailed interpretation improves our

³ This approach has been articulated by Tadeusz Wronski. (Tadeusz Wroński, [Techniki Gry Skrzypcowej \(Technique of Violin Playing\)](#). Warsaw: Wydawnictwo Naukowe PWN, 1996.) I am grateful to Adam Wasielewski who has made a chapter of Wronski’s book accessible to me with his excellent English translation of the Polish text.

functional technique. Most importantly, however, a reflective and thoughtful engagement with them will educate us artistically and musically.

I am suggesting that over time a violinist needs to acquire practical competence in- and comprehensive knowledge of the following collections of etudes (listed here in mostly progressive order):

Wohlfahrt, Studies op 45
Kayser, 36 Studies
Mazas, Studies op 36, Bks 1,2
Dont Studies op 37
Fiorillo, 36 Studies
Leonard, Etudes Harmonique
Kreutzer, 42 Etudes
Tartini, The Art of Bowing
Martini, Rhythmic Etudes
Kreutzer, 42 Studies
Vieuxtemps, 32 Studies
Rode, 24 Caprices
Campagnoli, Seven Divertimenti
Meerts, Bowing Studies
Campagnoli, 30 Preludes
Rovelli, 12 Caprices
Saint-Lubin, 6 Grand Caprices
Mazas, Studies op 36, Bk. 3
Alard, 24 Studies
Dancla, Studies op 73
De Beriot, Studies
Sivori, 12 Caprices
Gavinees, 24 Matinees
Dont, Studies op 35
Wieniawski, Etudes Caprices
Wieniawski, Ecole Moderne
Paganini, 24 Caprices
Ernst, Transcendental Studies

In addition to working on etudes, the practice and study of works for solo-violin provides us with important opportunities for technical and musical development. In particular, the study of polyphonic music broadens our understanding and way of playing of what is initially a melodic instrument. It is important that the study of polyphonic music is commenced at an early stage. The Suites for Cello in their transcription for violin by J. S. Bach are a good starting point. The following is a selective list of works

Works for Solo Violin

Bach, Cello Suites (arr. Violin)
Chandoskin, Sonatas for Violin Solo
Telemann, Fantasies
Nardini, Caprices
Pichl, Fugues
Prokofiev, Solo-Sonata op 115
Paganini, 60 Variations on a Genuese song (Baracuba Studies)
Bach, Solo-Sonatas and Partitas
Ysaye, Six Solo Sonatas
Reger, Solo-Sonatas

The study and practice of Repertoire

The study of repertoire should be undertaken with purpose and at a flowing pace. Our learning is best when the learning stimulus is new and the enthusiasm and excitement about a work is fresh. Wearing this down through slow and detailed practice can slow down our learning and may not help us in the long term. Thus, while we need attention to detail, such attention has to come easily and needs to lead to quick, if not immediately perceived progress. We need to progress through repertoire at a purposeful pace which preserves our interest, curiosity and attention. It is better to learn a work and revise it after some time than to subject it to intense and protracted practice until it is "perfect". Our learning pace should be purposeful and brisk and our expectations of accomplishment within this pace should be high. We aspire to both quick learning (including quick memorisation) and refined playing. The latter does not only include objective qualitative aspects like intonation, rhythm and sound quality but also the attainment of ease and subjective comfort. Without the latter the quality of the artistic achievement is severely diminished.

This view evidently informs the choice of repertoire at any particular time. Developing violinists should only learn repertoire they can learn- or be expected to learn relatively effortlessly and quickly and to a high level. The speed of learning is an indication of the nature of our skills. Teachers and schools have often ordered repertoire according to levels of difficulty. While a detailed organisation is helpful for individual students a rough orientation of three levels of repertoire is given here:

Repertoire Curriculum (three stages)

I		
Concerti	Sonatas, Duos	Short Pieces
Bach, Concerto a minor Haydn, Concerto G major Viotti, Concerto No 23 Bach, Concerto E major Rode, Concerto No 7 a minor Mendelssohn, Concerto d minor Kreutzer, Concerto No 18 d minor Spohr, Concerto No 2 d minor De Beriot Concerto No 9 a minor Viotti, Concerto No 22, a minor Mozart, Concerto Bflat major K 207 Mozart, Concerto D major K 211 Kabalevsky, Concerto Vivaldi, Four Seasons	Dvorak, Sonatina op 100 Schubert, Sonatas op 137 Mozart, Sonatas (esp. K 301, 304 etc) Grieg, Sonata F major Tartini, Sonata g Leclair, Sonata "Le Tambourin" Bach, Double Concerto Bartok, 44 Duos Leclair, Sonatas Mazas, Duos op 39 Schubert, Songs (arr. 2 violins)	Alard, Fantasy on Themes of Faust Bartok-Szekeley, Roumanian Dances Bax-Heifetz, Mediterranean Beethoven, Romance in F Beethoven, Romance in G Bohm, La Mouche de Beriot, Airs Varies Nos 6, 7 Brahms, Waltz De Beriot, Le Tremolo de Falla, Suite Populaire Espagnole deBeriot, Air Varie op 1, No 1 deBeriot, Scene de Ballet Debussy- Heifetz, Golliwog's Cakewalk Debussy, Beau Soir Debussy, Girl with the Flaxen Hair Debussy, La plus que Lente Dohnanyi, Rurialia Hungarica Drdla, Souvenir Drigo, Serenade Drigo, Valse Bluette Dvorak, Slavonic Dance No 3 Elgar-Szigeti, Serenade Faure- Elman, Apres un Reve Fibich-Kubelik, Poeme Gade, Jealousy Glazunov, Meditation Gliere, Romance Granados-Kreisler, Spanish Dance Hellmesberger, Gewitterscene Hubay, Hejre Kati Hubay, La Fuite Hubay, Preghiera Hubay, Rozsa-Czardas Hubay, Violin-Solo from "The Violin Maker of Cremona" (RM) Hubay-Liszt, 1ere Valse Oubliee Joplin-Perlman, Ragtime Korngold, Pieces op 11 Kreisler, Francoeur, Sicilienne and Rigaudon, Old Refrain, Schoen Rosmarin, Liebesfreud Kreisler, Gipsy Caprice Kreisler, La Folia Kreisler, La Gitana Kreisler, La Vida Breve Kreisler, Old Refrain Kreisler, Preludium and Allegro Kreisler, Syncopation Kreisler-Albeniz, Malaguena Kreisler-Dvorak, Slavonic Dance No 1 Piazzolla, Introduction al Angel Piazzolla, Milonga en re Prokofieff-Grunes, Three Pieces from Romeo and Juliet Rachmaninov, Dance Hongroise Rachmaninov-Gingold, Vocalise

		<p>Raff, Cavatina Ravel, Piece en forme de Habanera Ravel-Fleury, Pavane Ries, Introduction and Gavotte</p> <p>Rode, Air Varie G major op 10 Rosza, Suite op 5 Sarasate, Malaguena Sarasate, Romanza Andalusia Schubert, L'Abeille Scott, Romance Shostakovitch, Fantastic Dances Sibelius, Ballade Smetana, From my Homeland Stravinsky-Dushkin, Berceuse Suk, Four Pieces Tchaikovsky, Melody Tchaikovsky, Serenade Melancholique Vieuxtemps, Adagio Religioso Vieuxtemps, Air Varie Vieuxtemps, Three Album Pieces op 40 Vieuxtemps-Hubay, Cantilena Vieuxtemps-Hubay, Lament Vieuxtemps-Hubay, Reve Wieniawski, Fantaisie Orientale Wieniawski, Legende Zarzycky, Mazourka</p>
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II

Concerti	Sonatas	Pieces
Conus, Concerto Bruch Concerto d Sinding, Suite Karlovic, Concerto Haydn, C Mozart, Concerto K 216 Bruch, Concerto g Spohr, Concerto No 8 Spohr Concerto No 9 Mozart, Concerto A, K 219 Mozart Concerto D, K 218 Mendelssohn, Concerto e Schumann, Concerto Bartok, Concerto No 1 Goldmark, Concerto Wieniawski, Concerto d Barber, Concerto Lalo, Symphony Espagnole Respighi, Concerto Gregoriano Saint-Saens, Concerto No 3 Bruch, Scottish Fantasy Vieuxtemps, Concerto No 2	Elgar, Sonata Beethoven, Sonatas D, a, Eflat, F, A, G (op 30,2) Grieg, Sonata G Mozart, Sonatas Busoni, Sonata op 29 Mendelssohn, Sonata op 4 Messiaen, Theme and Variations Stravinsky, Suite Italienne Brahms, Sonata A Copland, Sonata Schumann, Sonata a Viotti, Serenades Spohr, Duos op 3, 9 Berwald, Duos Mazas, Duos Brillantes Reger, Canons and Fugues	Sarasate, Malaguena Sarasate, Navarra Sarasate, Romanza Andalus Sarasate, Zapataedo Shostakovitch, Fantastic Dances Sibelius, Ballade Spohr, Pieces Spohr, Polonaise op 40 Suk, Four Pieces Szymanowsky, Mythes Tartini-Kreisler, Fugue Tchaikovsky, Valse Scherzo Tchaikovsky, Three Pieces Vecsey, Cascade Vieuxtemps, Air Varie Vieuxtemps, Ballade and Polonaise Vieuxtemps, Fantasia Appassionata Vieuxtemps, Fantasy Caprice op 11 Vieuxtemps, Rondino Vieuxtemps-Hubay, Cantilena Vieuxtemps-Hubay, Lament Vieuxtemps-Hubay, Reve Vitali, Chaconne Weill-Frenkel, Pieces from "Three-Penny" Opera Wieniawski, Airs Russe Wieniawski, Capriccio Valse op 7 Wieniawski, Fantaisie Orientale Wieniawski, Polonaise A Wieniawski, Scherzo Tarantella Ysaye, Mazurkas

III

Concerti	Sonatas	Pieces
Vieuxtemps, Concerto No 4 Khatchaturian, Concerto Stravinsky Concerto Saint-Saens, Concerto No 1 Dvorak, Concerto Edwards, Maninyas Joachim, Concerto in Hungarian Style op 11 Lalo, Concerto Russe Prokofieff, Concerto No 2 Beethoven, Concerto Saint-Saens, Concerto No 2 Glazunow, Concerto Vieuxtemps Concerto No 5 Paganini, Concerto No 1 Prokofieff, Concerto No 1 Sibelius, Concerto Wieniawski, Concerto f# Ernst, Concerto f# Korngold, Concerto Brahms, Concerto Shostakovitch, Concerto # 1 Bartok Concerto No 2 Elgar Concerto Berg, Concerto Walton Concerto Paganini Concerto No 2 b minor Hindemith, Concerto Weill, Concerto (with Brass) Berg, Kammerkonzert Brahms, Concerto for Violin and Cello	Beethoven Sonatas Brahms, G Brahms, d Debussy, Sonata Faure, Sonata op 108 Francaix, Sonatine Franck, Sonata Janacek, Sonata Paert, "Fratres" Prokofiev, D major Sonata Prokofiev, f minor Sonata op 80 Ravel, Sonata Ravel, Sonata Posthume Saint-Saens, Sonata No 1 Schubert Duo A Schubert, Rondo b minor Schumann, Sonata d Stravinsky, Duo Concertant Tartini, "Devil's Trill" Webern, Four Pieces Spohr Duo op 67, op 39 Wieniawski, Etudes-Caprices Schnittke, Moz-Art Prokofiev, Sonata for 2 violins	Alard, Norma Fantasy Bartok, Rhapsody No. 2 Chausson, Poeme Ernst, Airs Hongrois Ernst, Othello Fantasy Ernst, Transcendental Etudes (incl. "Last Rose", "Erlkoenig") Kreisler, Recitativo & Scherzo Caprice Milstein, Paganiniana Paganini, Il Palpiti Paganini, La Campanella Sarasate, Carmen Fantasy Sivori, Concert Variations on Il Trovatore Wieniawski, Polonaise D Waxman, Carmen Fantasy Wieniawski, Fantasia Faustowska

Method: Violin playing as a pursuit of physical, mental and spiritual freedom

The study of violin playing is essentially a search for freedom. What is meant by this statement? Initially I have two meanings in mind: In the first sense, it means that our imagination and conception of music seeks to realise itself freely, merely in accordance with demands for truth and authenticity and not in response to alien or imposed demands. This is a natural affirmation of the essential characteristics of our imagination of music: Musical imagination is of necessity autonomous and active as music is only truly heard when it is actively conceived and when it is imagined or conceived in its entirely original, unmistakable and unique individuality. Our imagination which contributes to the performance and perception of music is a vivid and living power. It is affirmative of transience because it unfolds in the creation of particulars, of unique and individual ideas and images, of sounds or sounding events that are always original in their individuality and inimitable in their exact particularity. Our imagination creates or re-creates the sounding forms of music - and with them itself - always anew. This freedom and characteristic of authentic creativity is not only a feature of the human imagination but it is an essential characteristic of music itself. Music is an ever changing art. It reflects continuous change and re-invents itself continuously. Music and the imagination of music are substantial expressions of the human capacity to search for- and experience freedom.

In the second and more concrete sense, the search for freedom refers to physical capacities and attitudes of musical performance. In particular, violin playing strives for freedom of movement. For the string player, the production of sound and pitch in time is guided by her physical movements and more importantly by the co-ordination of such physical movements in time. The temporal organisation of physical energy and intensity appears to be the most fundamental and the most important technical demand of violin playing. Properly understood this attainment involves the entire unity of body, mind and spirit of the violinist and is thus not merely a form of technical advice. The experience of temporal form is ultimately an artistic principle. The musician imagines and realises music as temporal form or as “sounding, moving form” (Hanslick). As temporal form, music is essentially musical movement or the flow of sounding intensity in time. Technically, the violinist realises these “sounding, moving forms” through specific and clearly visible physical movements. Unlike singers or wind and brass players, the timing, intensity and energy of movement and the nature and freedom of its organisation which determine the sounding reality have visible correlates which have often lead violinists to describe the technical features of violin playing in terms of their mechanistic and geometric properties (positions, geometric descriptions of technical fundamentals, etc). While there is no suggestion that such descriptions are false or irrelevant, they seem to me incomplete. In addition my experience as a teacher in particular has suggested that they can in fact become a distraction at times. Accordingly, I propose to add to an ultimately static description of the principles of violin playing based on the exposition of geometric principles a description of dynamic properties of movement which can be clearly perceived through our proprioception or kinetic perception. These properties are captured in a description of the temporal form of movement, in the temporal organisation of intensity, in particular in a description of the temporal flow of our mental or imaginative conception and perception and their correlation to left and right hand movements and a description of these movements as they are organised in themselves and in relation to each other. Movement and in particular the temporal organisation and freedom of movement is a crucial link between artistic intention, technical realisation and concrete musical reality.

The “ping”

In the following I attempt to explain this link, the development of freedom as the source of the mental and physical capacity of the violinist, further. I explain this phenomenon by referring to the concept of “ping”. This concept uses the observation that all free movement has swinging characteristics and that movement becomes freer when we focus our attention on the recovery or

expiration of our kinetic energy. The importance of this characteristic was identified by the German physiologist Friedrich Adolph Steinhausen at the beginning of the 20th century in a work entitled “The physiology of bowing” as follows⁴:

“The most important thing is that all practice aims at economy of effort, recovery, passivity, brief impulse and swinging movement. A swinging movement (Schwung) is the final aim, perfection, accomplishment, highest ability, perfected technique. Absence of swing (schwunglos) is: inadequate, artless (stumperhaft), not accomplished and therefore devoid of spirit.”⁵

In essence what I term “ping” (or Steinhausen’s *Schwung*) is a simple energetic phenomenon: It describes the concentration and discharge of physical energy (“p...”) and the subsequent silence of recovery (“...ing”) which follows any such discharge. My practical understanding suggests that all discharge of physical energy and any necessary, subsequent and near-instant recovery grants the mind and spirit time to prepare for the next impulse that is required for sustained activity. It is this “ping” profile, the continuous and organised flow of mental, spiritual and physical activity which unfolds in silence, and the respective temporal (or rhythmic) correlation between the streams of activity which I regard as fundamentally important to the constitution of the freedom of any freedom of movement and ultimately of the freedom of imagination.

The essence of rhythm and the “ping”

The importance of “ping” is rooted in the structural congruence of music and movement provided by rhythm⁶. Both musical and physical movement are governed by a tangible experience and consciousness of their rhythmic characteristics. This quality is in its most simplistic form “ping”-like: The flow⁷ of rhythm is constituted as an often rapid succession of energetic impulses followed by silences or recoveries of these energies. In music, rhythm organises the duration and emphasis of tone and thus the pace, shape and life of music. In movement, rhythm organises the organic flow of movement, the efficiency and effectiveness of impulses and impulse recovery. Physical movements are energised by organic impulses which have to be recovered to constitute a free and natural flow. The innervations and their recovery are co-ordinated automatically and harmoniously in most of our complex physical activity (walking, talking, etc). A well-organised balance of innervations and recoveries, a swing, does not only provide the body with a foundation of its freedom, but most importantly assists the organisation of mind, perception, representation and our intuition which becomes free to engage with the music in its flow directly and without being distracted by the “noise” of poorly co-ordinated physical activity.

If impulses are urgent, self-conscious (over-energised) and relentless or remain unrecovered, movement becomes stiff and disorganised. The same should be said for music: Music that is without swinging shape or natural phrasing ceases to engage the listener who becomes overwhelmed in her attention and ceases to listen. The essentially cyclic or swinging flow of impulse and recovery which characterises the rhythmic character of our physical movements is constituted by a sequence of innervations separated by silences. A free technique is characterised by a harmonic and appropriate distribution of such innervations and physical silences. My experience is that musicians are often

⁴⁴ For a more scholarly and detailed discussion of Steinhausen’s writings and importance see my discussion in *String Praxis, Volume 1 2011* found at www.stringpraxis.com

⁵ A. Steinhausen, *Physiologie der Bogenfuehrung*, 4th ed., Leipzig: Breitkopf und Haertel, 1920

⁶ The important early 20th century musician and music educator Emile Jacques-Dalcroze identified the central and primary nature of rhythm to music and musical performance, in fact to art as a whole. (“Rhythm is the basis of all art”, see: E. Jacques-Dalcroze, “The initiation into rhythm” (1907) in: E. Jacques-Dalcroze, *Rhythm, Music and Education*, New York: Putnam, 1921)

⁷ The word “rhythmos” is derived from the Greek “rho” or flow.

driven towards increasing the generation of physical impulses on account of their intensely emotional and energetic conception. In this over-energised approach we lose any sense of swing through neglect of physical silences or recoveries. This has potentially debilitating musical and physical consequences. All- and even the most intricate and complex physical actions are rhythmic sequences of impulses and recoveries. Without appropriate recovery, physical movement become noisy and stiff. Free movement and freedom of action relies on a rhythmic conditioning of impulse and recovery. It is my practical experience that such freedom is directly felt and realised in the consciousness of recovery rather than in the consciousness of active innervations. The “ping” thus describes in the main an active attention to recovery and practice of “silence” (as Steinhausen suggests as well.)

Any technical benefits aside, the need to organise physical movement in accordance with its “ping” characteristics has important artistic reasons and benefits. If we condition disorganised or a-rhythmic movement patterns, our attention becomes exhausted and distracted inhibiting the conception and imagination of music itself. Movement which is stiff and unfree is a source of mental anxiety and spiritual distraction and thus a source of disturbance to our imagination. The clear understanding of freedom of movement and our consistent attention to it are thus self-sufficient ends: their presence grounds the affirmation of our mental and spiritual capacities. Without clear attention to the “ping” qualities of physical movement, we cannot expect our artistic imagination to fulfil its potential.

How do we use the “ping”

How is freedom of movement achieved and how do we concretely recognise whether a movement has a swinging characteristic and “pings”? Freedom of movement has two attributes: the efficiency or conservative expenditure of energy and a sufficient presence of impulse recovery. Free movement is movement that is flexible, can be accelerated or stopped without resistance, instantly and with only our simple intention to do so. Free movement has a naturally rhythmic- or “ping” structure. Through our kinaesthetic awareness we can easily identify this “ping” nature of our physical movements as they are relevant to violin playing throughout our body. Our ability to do so results in a direct connection between our imagination of the music with its spiritual and expressive characteristics and its acoustic realisation. It is depend on awareness for- and attention on physical balance and energy.

In my experience, attention to a presence of “ping” in our movements enables us to achieve almost immediately a transparent conception of “technique” which does not insert itself between imagination and sounding reality. A student who is reminded to search for the “ping” in a particular movement (eg. left hand finger action, bow arm movement) will immediately improve the relevant musical attributes of her performance, such as her intonation or sound, for example, without direct attention to the latter phenomena but through sole attention to the energetic properties of movement. As confirmation of the importance of the “ping” it is my experience that the immediate direction of attention to the phenomena of intonation or sound quality themselves often produces the opposite negative effect. The reason is that attention on secondary attributes of playing often lead to a further disorganisation of physical co-ordination and movement as a result of stress and increased energy which remains unrecovered. Such lack of freedom then creates a further obstacle to the improvement of the phenomenon in question.

If we understand and learn to perceive the swinging or ping-character of physical movement we will progressively discover a range of highly productive applications of this concept to our ongoing work: our kinaesthetic perception can immediately identify aspects of our playing which require attention and practice without recourse to a derivative analysis. Practice of “ping” then focuses largely on the recovery of impulses and movements although on occasion and in instances where movements are

stiff or sluggish the dynamism, that is, the contrast between energetic impulse and instant and complete recovery may need to be practiced as well⁸. A practice that has its basis essentially in thoughtful perception, in self-observation and musical imagination rather than in abstract, second-hand technical analysis will be significantly more effective and efficient. It promotes our attention and directs our perception in an autonomous fashion. As attention and perception are the central forces in our learning, we rely on a simple cyclic organisation: clear mental representation and preparation, creation of physical freedom and balance in rest-positions, emphatic movement followed by comprehensive recovery (*Schwung* or “ping”), renewed mental representation and preparation, etc. This schema is identical to the practice of passagework, where we may combine groups of notes into varying fragments (played at speed) while focussing and improving our recoveries and mental preparation at stop points. (Stop-practice).

Concrete relevance of the analogical concept of “ping”

The discussion of the rhythmic essence of the “ping” has already identified important priorities for our practice: Focus on kinetic energy, recovery and timing lead to ease and freedom. Our practice methods are based on the central concepts of recovery and rhythm. All practice has rhythmic elements and is based on attention to rhythm and timing in a dual sense: as a musical reality and as characteristics of movement. Our choice of the practice tempo is important: slow practice may occur at the beginning of our learning cycle but also at its end, in the days before a performance, to promote our clear conception of recovery and the opportunity to attend to the psychic and physical energy “between the notes”. However, slow practice can only have limited success and will erode attention. Rhythmic- and stop-practice are used to sort out sluggish co-ordination and to avoid hyperactive correlations (“panic”) between our mind and our hands. Simple stop patterns for passages are used according to generic rhythmic principles.

In addition to the general characteristic of movement, the rhythmic integration of partial movements into larger, co-ordinated movements (eg. the integration of the movements of the left with the right) benefit clearly from attention to “ping”. A simple exercise can make this immediately clear: playing a series of notes (scale) with ping-stops where the timing of the left precedes the timing of the bow-movements embed a distinct correlation between imagination, left and right hand movements which has its roots in the silence of recovery that forms part of the movement cycle. This alters the movement instantly and merely through attention on timing also in a continuous flow and speed. It is thus clear that we change the energetic properties of any movement by changing the timing of the impulse consciously especially with attention to the temporal initiative of the left (left leads as it has the more complex task). This is most significant as it creates entirely different and stable patterns of movement on the basis of attention to the energetic recovery of movement at different times. In addition and in particular in relation to the co-ordination of the left and right hands, it allows us to direct energy appropriately into the bow from the left (and vice versa) and at a time when the left is capable of achieving this.

Organisation of Work

The organisation of our work is crucial to our learning. There are some very practical things we can do to assist our purpose and focus and to refresh our attention. In particular, we can

- Keep a practice diary or journal in which we plan our practice and reflect on- and review our practice day regularly;
- Keep analysis simple and perceptions direct;

⁸ Trill or Vibrato practice benefit from such “explosive” approaches to movement conditioning.

- Enforce boundaries around out work, minimise disturbance and interference (switch off phone, facebook, etc)
- Use a variety of materials and method- variety stimulates attention and assists learning
- Think and listen always: practice with active focus and purposefully at all times

On Performance

The purpose of our study and practice is the improvement of our performance. Performance involves a particular mindset and mode of attention which is a result of the external circumstances in which we perform. A performer is in public view, cannot stop and must – while accepting the present- shape the future with full attention. In performance our intense interest and focus is on the communication of our musical inspiration and meaning – performance is intensely pragmatic and whatever works, goes. Critical assessment or reflection provides a distraction here as it does not only dwell on the past but also erodes our capacity to determine the future. This differs from the mindset of practice to an extent. Although the practice of performance may be part of practice, practising involves directing attention to a variety of aspects of our playing and identifying the best way of doing things. In performance, however, our focus is narrowed and we must be able to tolerate mistakes. Our fitness and condition will crucially determine our ability to perform as will our ability to direct our focus.

In particular we need to practise the attention and timing which precedes and accompanies a performance. These are the summary points which can inform how we think about the practical relationship between practice and performance. They inform our way of practising but more comprehensively our way of performing.

- i. Clear musical ideas are fundamental (practise consistently without instrument)
- ii. Attention to temporal correlation between thinking and doing, clear imagination of sound and feel as preparation to a productive correlation between imagination, left hand (left leads) and sound/bow movement in particular and sense of freedom of movement establish natural performance. Comfort in the practice room is the basis for comfort on stage.
- iii. Feeling for *Schwung* or “ping”, dynamic sense of timing and rhythmic command both mentally, physically and in the correlation of imagination to concrete sound establishes familiarity with timing and direction of timing.
- iv. Sense of sound in the context of interpretative intentions and feel of ease establish natural connection with sound under varied conditions.
- v. Promoting resilient spirit, attitudes and skills that promote sustainability of performance establishes long term learning and development.

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Appendix: Technical Topics (100 minutes)⁹

Scales	10'
Arpeggios	10'

Bloch, Scale System

Sevcik, op 1, Vol. 3

Flesch, Scale System

Galamian

Gilels

Paganini 5, 7

⁹ The suggestion of material given under each topic is by no means exhaustive. It is a starting point for individual exploration and modification of schema and content.

Dexterity and Trills 5'

Scales

Yost

Sevcik, op. 1

Sevcik op 7

Schradiack, School of Violin Technique, I

Sitt, School of Velocity

Kreutzer Studies: 9, 11, 15, 16, 17, 18, 19, 20, 21, 22, 31, 34, 40

Kreutzer 27 (modification)

Fiorillo 2, 6, 7,

Vieuxtemps 10, 14

Saint-Lubin, 4

Rode 4 (4th finger exercise, modification)

Rode 16, 20

Mazas, 61

Rovelli 4

De Beriot, 6, 22

Sitt, op 69, 2, 3, 4, 5, 6, 15

Wieniawski, op 18, 3

Lipinski, op 29, 1

Paganini 5, 6, 15, 17, 24

Vibrato

3'

Scales, Arpeggios

Kreutzer 1, 6, 7

Chromatic Glissandi, independence 3'

Chromatic Scales and Exercises

Geminiani Exercises

Flesch, Urstudien (Basic Studies)

Sevcik, op 1, Vol 1 Ex. 7,8,9, 19, 20

Yost, Extension and retraction ex.

Hetzl's "Gummifinger" Exercises

Paganini 2, 3, 6, 12, 24

Shifting 4'

Positions 4'

Scales and Arpeggios with one, two fingers only on one string

Scales and Arpeggios in position (Yost, Galamian)

Schradieck (positions)

Sevcik op 1, Vol 2

Sevcik op 8

Fiorillo 11, 13, 20, 22

Rode 3, 10

Dont 15

Paganini1, 15, 23, 24

L.H. Pizzicato

3'

Scales

Sarasate, Caprice Basque (excerpt)

Saint-Lubin, 5

Rode 4 (modifications)

Paganini 24

Harmonics (single and double) 3'

Flesch

Paganini, 9

Thirds

5'

Flesch

Yost

Kreutzer 33

Fiorillo 4, 17, 18

Rode 23

Saint-Lubin, 2

Dont No 8

Rovelli 6

Sivori 9

Sitt, op 69, 7

Dont 8

Paganini 1, 4, 8, 9, 13, 18, 22, 24

Fourths/ Fifths **5'**

Yost

Kreutzer 3 (modified)

Sixths

5'

Flesch

Galamian

Yost

Dont 16

Saint-Lubin, 2

Sivori 2

De Beriot, 14, 15, 16

Wieniawski, op. 18, 5

Dont 16

Paganini 19, 21

Octaves **5'**

Fingered Octaves **5'**

Flesch

Galamian

Yost

Kreutzer 4, 24, 25

Fiorillo 5, 18, 31, 33

Rovelli 1

Dont 8

Rode 19

Sitt, op 69, 8, 17, 20

Paganini 3, 7, 8, 15, 17, 23, 24

Tenths**5'**

Flesch

Galamian

Yost

Fiorillo 18, 24, 27 (end, modified), 33

Dont 8

Paganini 4, 22, 24

Development of Sound 5'

Scales

Sons-File bowing (Tartini)

Portato exercises

Contact Point Exercises

Roulé Exercises

Kreutzer 1, 35, 38, 41

Fiorillo 8, 14, 25, 29 (slow introduction), 32, 35 (slow introduction)

Slow Introductions from Rode Caprices 1, 4, 6, 9

Rode 13, 20, 13, 14

Mazas, 58, 62

Saint-Lubin, 1

Sivori 5

Wieniawski, op. 18, 1

Paganini 3, 6, 7, 18, 19, 20, 21, 24

Detache **3'**

Grande Detache **3'**

Scales

Kreutzer 2, 3, 5, 7, 8, 10, 12, 13, 30

Fiorillo 1

Rode 2, 5, 6, 8, 10, 24

Rovelli 6

Dont 2

Paganini 2, 16

Martele & Slurred Martele/Staccato 3'

Viotti- and Hooked Stroke 2'

Scales, Arpeggios

Kreutzer 4, 6, 8, 9 (slurred martele) 10, 15, 16, 17, 18, 21, 36

Fiorillo 3, 9, 10, 12 (modified, Viotti Stroke), 15,

Vieuxtemps 20

Rode 1 (Moderato)

Rode 7, 9 (Allegretto), 21

Rovelli 2, 8

Mazas, 59

Sivori 11

Sitt, op 69, 11

Wieniawski, op 18, 1

Paganini 11, 7, 10, 15, 21, 24

Spiccato

3'

Scales

Kreutzer 2, 3, 6, 8, 10, 13

Fiorillo 13 (Presto)

Sitt, op 69, 14

Rode Caprice 9, 17

Paganini 4, 13, 18

Sautille

4'

Scales, Arpeggios

Kreutzer 2, 3, 5, 6, 8

Saint-Lubin, 4

Mazas, 66, 67

Wieniawski, op. 18, 4

Sitt, op 69, 16

De Beriot, 23

Lipinski op. 29, 3

Paganini 5

Ricochet

2'

Scales

Kreutzer 2, 3, 5, 13,

Fiorillo 21

De Beriot, 28

Mazas 69, 70, 71

Paganini 1, 5, 9

Thibaud-Exercise 2'

Scales

Kreutzer 2, 3, 5, 7, 8

Chords

3'

Fiorillo 23, 36

Kreutzer 13, 37, 42

Rode 24 (introduction)

Saint-Lubin, 3

Dont 24

Mazas, 59, 62, 73

Rovelli 5, 10

De Beriot, 2, 19

Sivori 6, 11,

Lipinski, op 29, 2

Paganini 9, 11, 14, 20, 24