

Do you hear me?

Handbook to contemporary violin notation
by Dejana Sekulić

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Author's Note:

This might be a work with no end, as it is almost impossible to think of there could be an end of this research, and of this essay. Every new sign, sonority, color, timbre... experience in reading and playing becomes additional material. With (almost) each new piece, there will be new additions, especially to the segment “Notation: see me-hear me-make me”. It is, as well, very likely that new chapters will arise, both on left and right hand technique, as well as marks on other sonority and timbre remarks. This publication captures this research at this point in time, and should not be considered as the ultimate statement, but the base on which the future findings will be added on. Special thank you to Marc Danel and Bart Bouckaert.

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Introduction

“Experimenting, that’s the only way to find out – by trying things.”

Ruggiero Ricci, violin virtuoso who is considered one of the godfathers of improvement in artistry and technique of violin playing moving the boundaries. This quote is taken from interview he gave in the “Where do we go from here?” project.

“Nobody has enough technique, you could never have enough. And nobody knows enough interpretation, you can always know more. So, there isn’t any limit!”
- Ruggiero Ricci, violin virtuoso*

Violin and violin playing have always been improving, with the most intense period occurring during the late XIX and beginning of XX century when a large and relatively fast progress happened, making the instrument reach its brilliant virtuosity that also resulted in the immense enrichment of the repertoire and transformed some violinists into superstars. Artists like Arthur Grumieaux, David Oistrakh, Jascha Heifetz, Yehudi Menuhin, Isaac Stern, Jacques Thibaud, Joseph Szigeti, Ruggiero Ricci largely contributed to this by combining both tradition and innovation. As great as the impact of this period was, and its reverberations are dominant even today, that special period has also created a barrier that not many are willing to cross easily. Although, the recent years have, undoubtedly, seen the increase in the number of artists willing to tackle the issues of how to go beyond “known

and possible”, the most prominent of them being Anne-Sophie Mutter, Gidon Kremer, Hilary Hahn, Rachel Barton- Pine, Jennifer Koh, also chamber ensembles as Kronos Quartet, Arditti quartet, Danel Quartet, the exposure and accessibility to the contemporary violin music is still limited. While the rising number of performances of contemporary music can be seen as another proof of its importance and beauty, as well as, its increasing acceptance, still existing gap created by the prolonged period of neglect to follow the innovations and regularly introduce them through repertoire, together with brilliance of already existing repertoire, did leave its mark. Those experimental pieces that exist and have managed to cross some of the barriers, have introduced new ways and possibilities. New notation*, demands of interpretation, new way of creating melody*, that represents signification, goal through which we express artistic inner feeling which further brought demands for new timbre, that are not always considered as beautiful, and technique – tools and craftsmanship. But through all of this a number of issues arise. Issues that were left unresolved, broadening the gap every step of the way until today when, because of not understandable and not standardized notation and unfamiliar technique that requires developing new physical habits, most violinists find

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*Notation is always changing and improving, but if left with no structure to follow these changes and standardizing then it loses its purpose – being a media, understanding it for the purpose of using and re-using it for transferring knowledge. Cajori (1928) and Gardner (1978)

*Melody, through education and existing big repertoire, especially from romantic period, became something very important for violinists. During the survey I recently conducted, this became really clear – violinists are very fond of the melodic line of romanticism and because of cultural heritage we have it is seemingly easier to understand, making the path to brilliance shorter and decreasing interest for experimenting with something unfamiliar – as melody of contemporary piece is

contemporary music undesired on their repertoire. This leads to undeniable need to tackle one of the first steps: understanding notation. And that is exactly desired intention of the following essay.

Notation is a medium of communication. When a composer writes down his piece, using different symbols he communicates with a performer, telling him a story that than the later has to transfer into sounds. But what happens when the sounds are not conventional? The notation becomes non-conventional. New signs start appearing... The great advantage of learning notation is that we can anticipate how that certain symbol, even before we hear it, sounds. When encountering, for the first time, the contemporary piece it can be very intimidating — in fact, it resembles a foreign language that one cannot even imagine how it sounds. By playing more and more and discovering newer and newer pieces, we have to learn and expand our possibility to imagine beyond what we know at the given moment. Having a better knowledge of what a certain sign means, helps in imagining and anticipating the sounds. As I discover each new piece, I collect sometimes new, sometimes less new but still not common signs. Explanations are just a mere tool of aid, to help process a contemporary score, written with

contemporary language. But of course, this is just one step. Each sound can then be further experimented with. Finding the right timber, nuance, expression... to an non-conventional sound is just as important as finding a right way to express a g-sharp in an a-minor phrase. When we see g-sharp in an a-minor piece, even though we see just a simple round (black or white) dot, with a “hash-tag” before it, we feel its tension, direction, and meaning. We give it a different vibrato; we talk and think about changing its color; we are searching for its rightful meaning thus deciding on how it should sound. Therefore, why would x be any different? With the experience of performing, but also knowing the history and background of the piece is how we make these decisions. This sound also has a right to all the expressiveness possible. “Do you hear me?” is a simple handbook to give some technical suggestions, advices that came out of personal experience while working and preparing contemporary pieces for violin. Needless to say, each individual can have different approach, whether for simple personal reasons, physical differences, or finding most pleasant and comfortable way of executing technical difficulties, therefore some descriptions are more widely applicable and some would need immediate adjustment.

Beautiful noise and sound of silence

Through the history of music, above all western classical music, there has always been a gradual development. This movement, development, shifting of “importance” and where and on what the emphasis of the music has changed through time. Influenced by the development of the world, society, technology... composers searched and found inspiration in very diverse things. Sound and rhythm are constant components that surround us and our every day life. Whether it is the sound of trees in the wind, birds, horns, pattern of someone’s footsteps, their rhythmical repetition... It has and it will always be part of us. A sort of soundtrack to life, music in its most different forms. With evolution of humanity, the spectrum of these sounds evolved as well. With it, inspiration evolved as well — from woods and nature, to the sounds of metropolis. The more we know, the more experience and senses we have awoken and satisfied through what already exists, it is more likely that someone will become inspired and experience something new, or old in a new non-conventional way, and then put it on a paper — write a new composition. Even if each new piece might not become important or bring some

big change and innovation, every now and then the breakthrough piece is created. Sometimes it would be initially rejected; sometimes it would take time, some kind of a of gestation process; sometimes it could be accepted immediately and become instant success. As long as the idea behind the creation comes from the true passion, sincere inspiration and drive, not purely from “different for difference sake” it will reach more audience: among musicians, performance and public, the listeners. It is a natural process that has been happening, and it will most likely continue for times to come. If not, we would not be lucky to nowadays have and enjoy the pieces such as Bach’s solo sonatas and partitas (at the time when they were composed were something completely new, and presented for the first time the full and elaborate use of violin as the polyphonic instrument). We would certainly not have reached to the brilliance, virtuosity and, at the same time, depth of emotions and colors of violin that exploded especially during romanticism and XIX century and brought by numerous composers and most diverse pieces both for technique, like those of Paganini, Spohr, Vieuxtemps, Bazzini, Wieniawski, Ernst... and depth of meaning, soul, sound like those of Brahms, Tchaikovsky, Mendelssohn, Franck, Chausson, Dvorak, Sarasate, Elgar...

followed by yet another polyphony and sound defining master piece like Ysaye's solo sonata, followed by Bartok... and so on. Music and composers in times had moved boundaries of expression. Shifting the focus from melody, to rhythm, brought especially by the beginning of XX century, Stravinsky's "The Rite of Spring" being the perfect example of that, it was only a matter of time when something new will come along. And then it came: the texture, or, more precisely the texture of sound. Music of the late XX and especially of beginning of XXI century focuses on texture, experiments and enlarges its importance to a great extent, exploring the possibilities of instrument far beyond conventional, with high and extensive demands, search for new ways, for extended techniques. But again, all for artistic purposes, for extending the possibilities of expression. This new sounds, new timber, can provoke senses on a different way as sometimes goes as far as being unpleasant. The production, playing of this kind of sounds presents a new challenge for every player, both from physical and artistic and intellectual point of view. In the same time, this level of difficulty is no more difficult than that of Paganini or Ysaye. We are just less used to it, understand it less, are not always at ease in knowing how to approach it, but with true dedication to work and understanding

Do you hear me?

we can always come to grasp it all. Just like we do with the rest of the repertoire*. The aesthetic barrier that we often might encounter brings up the question of “beautiful sound”, in concern with sometimes the sounds and timbers used are on the boarder of noise and scratching. The question meaning of the question “What is beautiful?”* should be just differently perceived. What we perceive, from our education, tradition of playing and inherited culture, should not be a closed subject, a spectrum with definite end. In giving the piece a just chance, expressing all nuances that it has, that composer felt compelled to write, we must approach it with a thought that every sound has its purpose. “Not beautiful” sound, in context of the piece, of expression of fear, pain or what ever else it is describing becomes necessary just as it is, and therefore becomes beautiful. It falls to a musician, performer to employ interest and curiosity to experiment and develop further his/hers technical abilities but also emotional intelligence and emotional energy.

*Igor Ozim talks about it in his interview in “Where do we go from here?” project

* On discussion on beautiful and taste in contemporary world - see: P. Bourdieu: “Distinction - a social critique of the judgment of taste”

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*Eduard Schmie-der talks about emotional energy, the present yet intangible element present in every performance in the interview he gave for the project “Where do we go from here?”

In the present time we are simultaneously blessed and cursed with having the advanced technology and recordings. It is more likely that a musician (especially a young musician), when preparing a new piece, will reach first for a

recording rather than for a manuscript and score. Even though it is immense legacy and bliss to be able to hear recordings, it comes with a potential price of destroying creativity, process of thinking and quest for the individual expression. Creating a sound in your imagination before producing it, searching the score for direction and background... it is all part of creating a convincing and unique performance. When the first source is a recording, subconsciously that interpretation influences our own. It disables further development of the process of thinking, advancing, thus making it even harder to approach contemporary piece, especially contemporary piece that brings something unconventional, and new. Slowly and insensibly leading the journey of music, of life of music arts to decay. Degrading in the process heritage left to us by our great predecessor, ourselves and our peers and what we are leaving for the future.

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Notation: see me-hear me-make me

The signs will be divided in groups for pitch, time/rhythm, timber, bow/right hand, left hand/fingers and Lachenmann. Sometimes however, with additional marks, a left hand sign becomes applicable to right and vice versa. In most cases the composer notes this type of changes in the score. Very

important to playing and imagining how the piece will develop is anticipating with inner ear. With clear vision of what which sign means and how does that particular sound sounds like and of course with a lot of playing and practicing we build and enrich our sound pallet, from which we can after choose and decide how do we hear written score even before we play, making the execution easier and more about the music (not technique).

●*Pitch*

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In Western music tradition music the most common distinction in composing falls to coordinate and subordinate harmony, where subordinate harmony is the hierarchical tonality or tonal harmony well known today and coordinate harmony is the older (Medieval and Renaissance) tonality, *tonalité ancienne*. Interval cycles create symmetrical harmonies, which have been extensively used by the composers Alban Berg, Arnold Schoenberg, Béla Bartok.* With music developing further, the pitch and intervals palette enlarged tremendously during time, developing the common use atonality* and semitones as well. When practicing intonation, we follow different systems depending on schools, but most practice falls to relationship between notes, practicing in intervals and with open strings. Doing the same with semitones,

*Carl Dahlhaus (1990) in "Studies on the Origin of Harmonic Tonality."

*Ulf Holshner: "In our nature is that we need gravity. We tend to it. So sometimes atonal music is more difficult to apprehend, both for audience and for performer.", from interview in project "Where do we go from here?"

while considering them equally a tone as a non-semi tone, helps a lot in getting used to their pitches, to training your ear to hear them, feel them and anticipate them. Then they are more easily incorporated in the piece and flow of the music, as we don't see them anymore as just a slight change of regular pitch note.

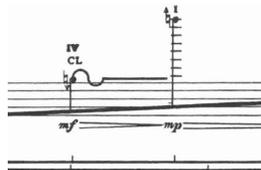
**Microtones alterations*

 — 1/4 tone higher

 — 1/4 tone lower

 — 3/4 tone higher

Beside these microtonal sharps and flats, John Cage used special signs when the pitch is just slightly influenced (the performer is to follow the pattern)



Example: John Cage - Freeman Etudes

****Highest (and lowest) pitch***

It is only possible to make different highest pitch, as lowest is mostly determined. Highest pitch can differ from possibilities of the instrument itself or also of players skills. Therefore while the lowest pitch should be marked with regular notation, the highest should be notated with:



The highest pitch sometimes comes after playing *sul tt*, making that the whole area where the highest pitch (which can be also very well after the end of the fingerboard) is to be played covered with rosin. The finger playing this highest pitch can then become also covered in rosin and then when coming back, what in most cases is, becomes sticky and difficult to use. In this case, it can be very useful to use the nail of the thumb of the left hand. During the process of shifting towards this note, while anticipating with elbow and preparing good position of the hand, the thumb can be just slipped underneath the fingers and take their place. The fingers should stay close together, to enable a smooth and fast change back.

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Examples on the following page.

Example#1: Tõn-Thât Tiêt - "Métal-Terre-Eau"

Example#2: Peter Swinnen - "Faviolina"

Example#3: Pēteris Vasks "Tala gaisma" (Distant Light), violin concerto

*Indeterminate pitch

When the pitch is not determined, it can be notated in several ways. If it is noted in regular five line system the note-heads are omitted, leaving the stem ends to show approximate high. Other possibilities are to notate on three or one line, for symbolic duration of the note:

Do you hear me?



- Indeterminate pitch in five line staff



- Indeterminate pitch on one line grid

● *Special note-heads*

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- ◇ — harmonic
- ⊗ — tapping, slapping
- ⊗ — white noise
- — immediate, maximal bow pressure, distortion of the sound
- ⊙ — airy, unpitched, crisp sound
- ▲, Δ — highest pitch
-  — played with the screw of the bow
-  — undetermined pitch

●Time/Rhythm

 — accelerando, speeding up

 — riterdando/ralletando,
slowing down

 — following the pattern
going from slow to fast and
vice versa

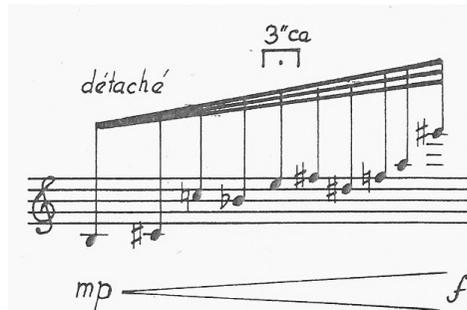
Examples:



Example#1: Peter Swinen - "Faviolina"



Example#2: Alfred Schnittke - Violin Sonata No.2



Example#3: Tôn Thất-Tiết - "Métal-Terre-Eau"



— playing the group of notes fast, but not necessarily with précised rhythm



— playing the section/group of notes as fast as possible, without exact rhythm



— very short pause/breath



— short pause/breath



— short fermata



— fermata



— longer fermata



— very long fermata

• *Left hand*

**Muting, muffing and damping*

There are a few signs that can mark muting, muffing and damping the string. The difference between the two is that damping occurs after the pitch, sound was produced and muffing usually before, whit blocking the string, with undetermined pitch.



— muting sign should generally be executed by placing the hand lightly over all four fingers. If exact position of the muting stop is given, the muting should be made with respect to half harmonic pitches.

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— stop muting sign- marks the place when the hand should be taken away from the string

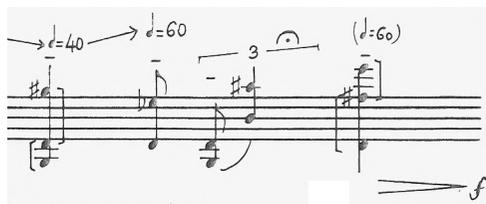


— if the process of un-muting should be heard, the sign for audible release is present and usually the execution should be done with precise rhythm

□ — completely muting the strings with left hand, with unspecified pitch; placing as much of the flesh, sort of “grabbing” and wrapping the hand around the fingerboard.

**Chords and double stops*

24 Playing chords and double stops demands a special attention and technique. From intonation, starting the chord, releasing the tension for better sound, speed of the bow, vibrato and its diverse amplitude for different moments during the playing of the chord... to how the chord is to be broken. Chord playing is most of the time creating an illusion of playing more than three strings/tones at the same time, by paying attention and employing all the technique previously mentioned. Soloists mostly decide on their own how the chord is going to be broken, on which segments, dividing it in lower and higher. In contemporary pieces it is very often that composer notates how the certain chord is to be broken, this is marked by connecting the notes to be played together with [] .



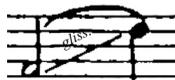
Example: Tôn Thất Tiêt - “Métal-Terre-Eau”

**Glissando*

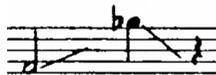
Glissando falls under one of the most peculiar and quirky technical embellishments in the violin playing. Even when not indicated in the scores, players would add and feel a need to express through them. Making them very personal.

The traditional glissando is produced by sliding the finger, fairly fast towards the next note. In the pre XX century music glissandos were mostly used just at a last moment of changed. Not written, but rather left to the interpretation of the performer. In contemporary music however there are more precise demands, starting from that that the glissando will probably start immediately when the pitch was played, indicating speed and all the variations of the speed and is often notated using graphic notation. The destination of a glissando can be open or closed with the end note. It is not any more considered simply embellishment, but equal expression technique.

one of the first noted appearance of use of glissando is that by Calo Farina in his piece Capriccio Stravagante from 1627

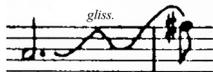


— from note to note

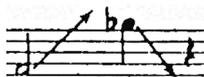


— open ended

Do you hear me?



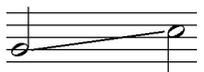
— curved glissando



— to the highest pitch



— varying speed



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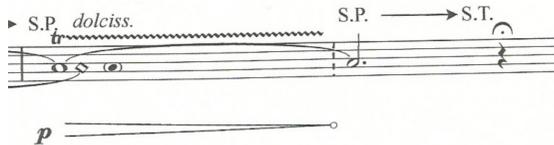
Example#1: Pierre Boulez - "Anthemes"
-open ended glissando

Example#2: Alfred Schnittke - Violin Sonata No.2
-glissandi between single notes corresponding to the graphic design

***Trills**

Trill provides yet another technique that changes the pitch. As this fast change of the frequency is in a way similar to changes in the pitch that occur with wide vibrato, there are pieces that experiment exactly with this transition between vibrato to trills, and vice versa.

It is not uncommon that in contemporary pieces there is a trill that is done by the same note, with just putting finger slightly away and the re-block it on the same place.



Example: Kaija Saariaho - "Nocturne"

Also newer use of trill comes through harmonic trills: the base note of artificial harmonic stays unchanged while on top of it (what is usually 1 finger) 2nd and 4th finger, as half harmonics, are exchanging fast, creating a harmonic trill.

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Example: Salvatore Sciarrino - "Sei capricci"

***Harmonics, half harmonics and subharmonics**

There are two most distinctive kinds of harmonics: open and stopped. The most common sign for open harmonics is ° above the note and the stopped are notated with diamond note-head (◊) over pitched note (in different intervals).

Subharmonic is a sound that sounds one octave lower than g string. To produce this sound it is of great importance the use of bow - the place, speed and pressure. It is however extremely unsustainable and unpredictable, thus it is difficult to use it much in the compositions.*

*composers using subharmonics include George Crumb, Mari Kimura

Half harmonics: beside harmonics, which are notated conventionally and to be played normally, the half harmonic stop also plays important role in this work. It is notated with a diamond shaped note head, like normal harmonics, but is black like a quarter note; moreover, it can be recognized by the horizontal beam which shows its duration. It is important not to produce any harmonics here; the result should be veiled, almost immaterial and hardly perceptible coloring of the dominating string sound produced by the stopped note which, as indicated, is only lightly touched, in conjunction with the flautato bowing.

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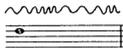
****Vibrato***

Vibrato is a left-hand technique that is commonly understood as a slight pitch variation. In the beginning, in Renaissance period when it was introduced, it was used only as a ornamentation in the end of the piece, cadenzas.* During time, and with the development of violin literature and music vibrato became more and more present in interpretation, as one of the main coloring tools. However, in contemporary music, use of vibrato should not be assumed.

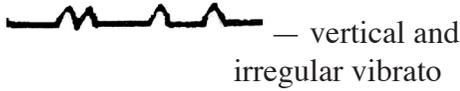
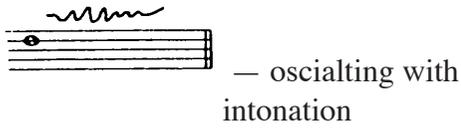
* "Vibrato, or a tremar, may be used for greater expression" Ganassi in Regola Rubertina

The composers most of the times will write exactly which vibrato and what combinations of vibrato should be used.

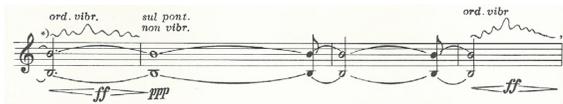
The first and foremost concern when thinking of vibrato is the speed and the amplitude. Both of these aspects of vibrato, in contemporary music especially, are taken to its extremes and very often varying very close to each other. Some vibratos are so wide, that they completely change the pitch — for half a tone both higher and lower, or even as far as being so wide and fast that resemble glissando.

- s.v. — senza vibrato
-  m.v. — molto vibrato
-  — very fast vibrato
- osc. (oscillato)** — exaggerated (wide, slow) vibrato which results in slight fluctuation of the pitch upwards and downwards (~1/4 tone)
-  — change of the speed
-  — change of the speed and with it intonation for quarter ton
-  — from non vibrato to very fast and wide
- 29

Do you hear me?

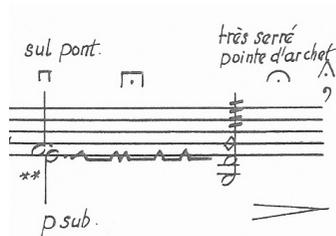


Examples:



Example#1: Alfred Schnittke - Violin Sonata No.2
vibrato of varying intensity

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Example#2: Tôh-Thôt Tiôt - “Métal-Terre-Eau”



Example#3: Sofia Gubaidulina - Der Seitänzer
-pitch changing vibrato

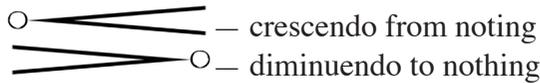
● *Right hand*

**Timbre*

Most common signs, for describing changes in timbre, place of the contact of the bow with the string include sul ponticello and sul tasto. Control of the bow, speed of the bow, pressure, division and contact point is of essence, especially when the music demands gradual change (in slow or fast tempo).



Example: Camden Reeves - Scordatura Squid II



nat. or ord. — normal bowing area

s.t. — sul tasto or tasto; playing over the fingerboard

m.s.t. — molto sul tasto; playing almost in the middle of fingerboard

flute or fl. — sul tasto extreme at 1/2-way nod, if possible over fingerboard

s.p. — sul ponticello or pont. ; playing near the bridge

m.s.p. — molto sul ponticello; playing almost on the bridge

o.t.b. — on the bridge

Do you hear me?

It is very common to have a gradual change from extreme sul ponticello to extreme sul tasto, and it is mostly marked like:

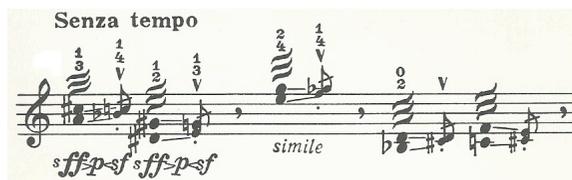
P ———▷ SP ———▷ Ord ———▷ ST

c.l.b. — col legno battuto or L.B. : this technique demands playing with the wood of the bow, by “beating”, dropping the bow from the air on the string. If not comfortable for using a regular playing bow, it is advisable to use a bow of lesser quality, as sometimes the fear of not breaking the bow might interfere in quality of execution. It is not always necessary to drop the bow from very far, causing it to hit the string stronger. In fact, the more concentrated strokes give more energy, making the sound project better. It is not unusual to combine con legno battuto with tremolo, what gives a very special effect:

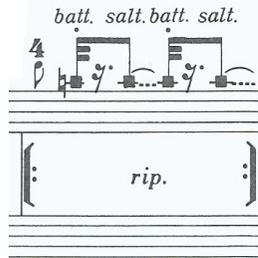
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Example#1: Sofia Gubaidulina - Der Seiltänzer



Example#2: Alfred Schnittke - Violin Sonata No.2



Exaple#3: Helmut Lachenmann - Toccata

c.l.t. — col legno tratto or L.T. : this technique demands playing with the wood of the bow, but on the contrary to con legno battuto, where the player has to drop the bow, the demand here is to play as playing when using a regular bowing, just playing with the wood. Sometimes it is good to pull the bow slightly sideways, as it produces better resonance. In keeping the sound in longer notes it is advisable to keep extreme control, and staying on the upper half of the bow, closer to the fingerboard (if not indicated by composer specifically on which part of the string to play). Also, octagonal bow is of better service for this stroke than round bow — as the possibility of flatter surface, gives a better and bigger surface to play with.

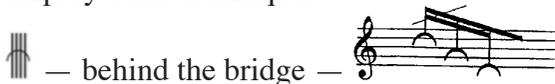
33

½ **legno tratto** or ½ **L.T.**: play with the hair and the wood of the bow simultaneously

Another point of contact is behind the bridge: **sub ponticello**. The specific characteristics of this technique is why it

Do you hear me?

found its way to the contemporary music: non determinant pitch, that is made easy as it's production is only based on contact point — thus clarity and sound projection is more precise and brilliant, the various possible noise sounds, depending on the place of contact (closer or further from the bridge), and it should not be underestimated the fact that while producing this non-determinant pitch sound, left hand is free to employ other techniques.



— behind the bridge —
Signs for different bow pressure (in front of bridge, conventional point of contact)

 — constant maximal, extreme bow pressure

34

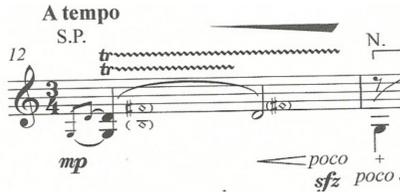
(scratching); control and good sound is much easier achieved if using slow bow, closer to the bridge but not sul ponticello. Use and pressure from index finger is very valuable. If it is indicated to play this in piano, it is much better effect if it is played on fingerboard, with almost non moving bow, using more side of the bow-hair and with extreme pressure of the index finger.

 — suddenly decrease maximal, extreme bow pressure

 — gradually increase bow pressure to maximal, extreme

 — gradually decrease bow pressure form maximal, extreme to normal

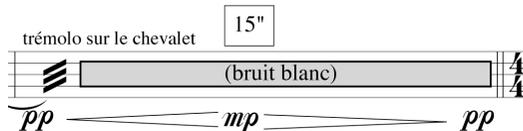
 — gradual change from normal to extreme, maximal bow pressure and back to normal



Example: Kaija Saariaho - "Nocturne"

 - **"bruit blanc"/"white noise"**; there are two ways of producing this sound. Some composers ask or it to be produced by playing on the bridge with the bow while some indicate that it should be played, with the bow, on the side of the body of instrument. "White noise" should be without pitch, therefore it is safer to play on the body of the instrument. If the strings are damped the effect is the same when playing on the bridge. It can be combined with tremolo.

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Example: Jean Lesage - "Ivresses sourdes nuits"

*Pizzicato

Whether it is made by flesh of the finger, fingertips, nail, combination of flash and nail or plectrum, the first rule of any

pizzicato is: be ready and start from the string, no matter what! Left hand and fingers always anticipate, followed by ready, on the string right/left hand plucking finger(s) moment before it is time for the note to sound. Very often, pizzicato, attention to it's sound and nuances is more neglected than for playing with a bow. But just as it is important for the sound how we deal with the bow (point of contact, place, division, pressure, speed...), the same goes for sound produced with plucking, with pizzicato. Beside horizontal movement of the finger, direction of the finger, quantity of fingertips used, it should always be taken in consideration place on the string where we pluck. As the tension of the string changes along the fingerboard, so does the sound produced — depending whether it is plucked closer to the bridge (sharper) or over the fingerboard (softer, but also broader if plucked in a right manner). If the tempo is fast, it is better to stay as close to strings as possible, making the contact and attack of the string more precise and synchronized. Also, when in a faster sequence or passage, end of the fingerboard (just where the place for bow starts) makes a good point of contact, as the tones are sharp and forte enough to be heard clearly, jet the amplitude with which the string vibrates as a result of plucking is not as wide, allowing better control and

faster return. Beside horizontal movement of the finger, in combination with slightly angled finger pluck, with direction of the angle either towards or opposite direction from the bridge depending on what sound we wish to achieve, there is much to think about for strong projecting forte pizzicatos by using a vertical plucking. By using the weight of the right arm when doing so, the natural weight and direction of the plucked string gives a very strong reaction, with strong and more powerful sound projection.

Another factor that should not be neglected is the role that the left hand has, not only for the quality of sound and sound projection, but even more for rhythm. As much as it is important how we block the string with left hand fingers for intonation it is equally important for sonority, sound production, length of pizzicato sound — for example dipper pressure gives longer resonance, dipper pressure with specific vibrato even longer, while semi harmonic pressure or faster lift shortens the note. Combining all this aspects makes for more clear, projecting and expressive pizzicato playing.

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It is not uncommon to even use more than one finger when playing pizzicato — as some *fff* chords in pizzicato sound much better if played with equal

importance, at the same time. Also, it is practical when playing double stops, where one note lays unchanged while the other changes – giving the free sound to the laying note, unstopped by moving of the fingers.

The most common sign for pizzicato is simply “pizz.” (above or under the note from where the pizzicato is to be played). Further more, among different pizzicatos we distinguish some that are more common in practice. Like:

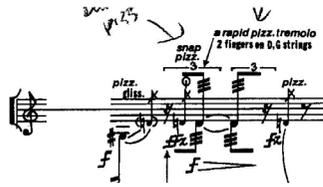
◆Pulling the string to the side and releasing it

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◆Bartók or Snap pizzicato: string is pulled up and away from the fingerboard with more flesh of the finger and upon it is released, it must hit the fingerboard making a “snap” like sound. This pizzicato made popular through Bartok’s music, thus it became known as Bartok pizz.

◆Fingered tremolo: by using index and middle finger the sound and speed of pizzicato is immensely increased. It is possible to use even more than one finger. It is also possible to create tremolo with just index finger moving back and forth very fast.

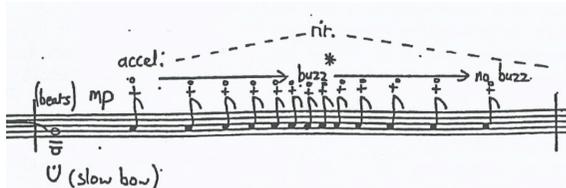


Example: George Crumb – Four Nocturnes

(buzz pizz.)



◆ **Buzz pizzicato:** after plucking, the string rebounds against the fingernail or against the side of the finger on the neighbor string creating additional buzzing noise to the pizzicato sound.



Example: Richard Whalley – Ad Infinitum

◆ **Touch pizzicato:** instead of pulling or plucking the string, the finger depresses and releases the string, creating with this upward movement a release of pressure makes a sound. This minimal movement makes a very soft and rapid sound.*

* Ligeti called this "an echo of the pizzicato"

◆ **Thumb pizzicato:** pizzicato a la chitarra. Playing of this pizzicato demands a stroke of the thumb to be in the angle movement, towards the scroll. The round sound of this kind of pizzicato is very suitable for chords.



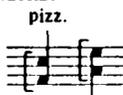
◆ Fingernail pizzicato:

executed by plucking the string with the fingernail.



◆ Strumming, fast arpeggios:

a pizzicato played with arpeggiated movement. Unless specified differently the movement starts from the lowest note. If indicated with both up and down arrows, the movement is from bottom to top and top to bottom note – like guitar.



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◆ Two-finger pizzicato:

a very useful and powerful for sound projection for chords. The chord/double stop to be played with two fingers has a mark [.

◆ Glissando: glissando pizzicato can have

determined  and indeterminate

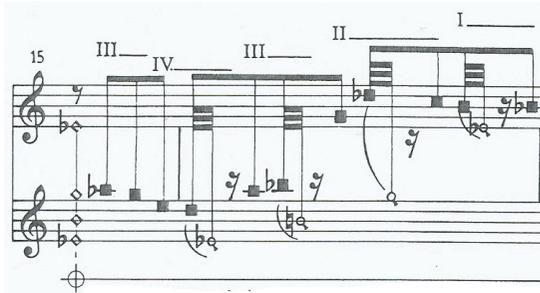
end . Left hand, immediately after the string is plucked, starts to slide in its indicated direction. If the arriving pitch is determined, the hand stops on that pitch. If it is an open end glissando pizzicato, the hand goes as high as possible (usually in this case the movement of the hand is much faster).



◆ Pizz+ Finger: no glissando, but after the plucked tone, the left hand finger is put on a different note, producing new pitch.



◆ Pizzicato made by screw of the bow: with hitting the fingerboard, catching the string from the side and plucking – the pitch is approximate, related to the place of the plucking and if the strings are muffed, and how.



Example: Helmut Lachenmann - "Toccatina"

****Irregular bow directions***



— irregular motion in form of an "eight"



— irregular circular motion; the circular motion can vary in its amplitude from very small to large from bridge to , it can be made with faster and slower motions, ranging from very wind like sound to distortion like sound; it can also be done in precise rhythmical patterns.

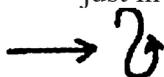


— oblique, “windshield-wiper” like, motion that moves back and forth from the bridge over the fingerboard

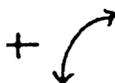
42



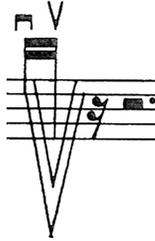
— vertical motion, that moves backwards and forwards from bridge over the fingerboard, in a straight line; it can also be marked with the arrow just in one direction (↓ or ↑)



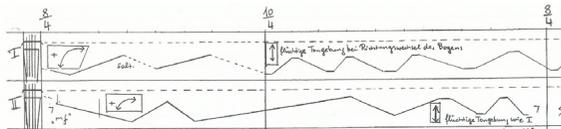
— the horizontal arrow before one of these signs means that the natural playing is to gradually transition to one of the irregular bow strokes.



— a plus sign before indicates that the motion should remain, but should become more intense



Example#1: Helmut Lachenmann – Toccata
-sweeping movement



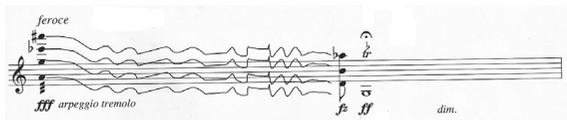
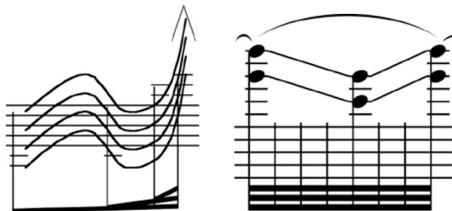
Example#2: Helmut Lachenmann - Grand Torso

Another irregular bow technique appears in John Cage's "Freemen Etudes" and it is marked with signs:



**Arpeggio tremolo*

The arpeggio technique requires a lot of careful coordination and control of both the bow and the fingers. This technique is mostly used to express a gust and bustle sound. In contemporary pieces, the pitch however is not the most important. It is the dramatic gesture and texture that it gives that is occasionally all that is needed. As the pitch became less important, notating the arpeggios started to be giving the direction of the movement.

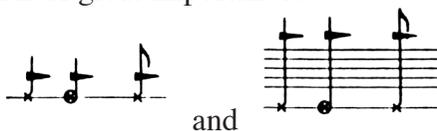


Example: Krzysztof Penderecki - Violin Sonata No.2

**Tailpiece*

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To indicate bow contact and playing on the tailpiece (beside bridge clef, about which more in chapter “Helmut Lachenmann”) it is possible to find other marks, like wedges through the stems. This notes are of course without a pitch, but their perfectly executed rhythm is of great importance.

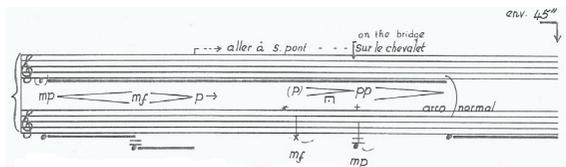


●Percussive techniques

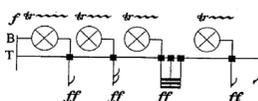
More and more often composers bring tapping the instrument as one of the ways of expression. The tapped notes are usually notated with x shape note-head

note: ✕. Tapping can be produced with both left and right hand/fingers. If it is to occur on several places on the instrument, it should be notated in several line staff. Tapping can also be produced with bow and in combination with playing behind the bridge. Depending on the rhythm, the tapping sounds can be produced with one or with four fingers — for example is the rhythm is in triplets, it is much easier to employ using three fingers, tapping the body of the instrument with fingertips. If place on the body of the instrument is not specifically marked by the composer, performer should search for the best sound producing part of the instrument, finding just the right color for the piece and expressing its meaning. Depending on the quality of sound we want to achieve, we can choose whether to use fingertips, fingernail, knuckles or palm. And we can also use different kind of strokes, attacks, such as tapping, slapping, knocking, tremolo technique. If the place of contact is fingerboard, when placing the finger on the fingerboard and tapping the string, there is a certain pitch, depending on which place we tap the string. If the tapping should be without a pitch, but on the fingerboard the composer might ask for damping the strings.

Do you hear me?

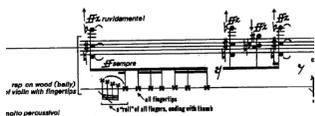


Example#1: Tôn – Thât Tiêt “Métal-Terre-Eau”
-fingerboard tap, with a pitch

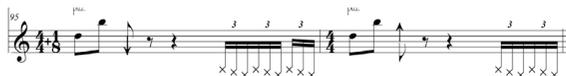


Example#2: Daniel Wyman - “The Shadow Nos”
-finger trills on the body and snaps on the bridge

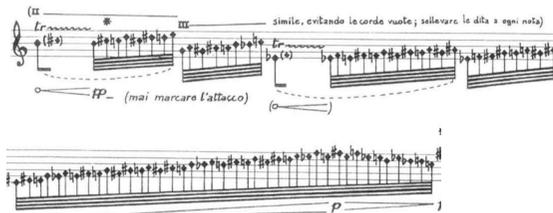
46



Example#3: George Crumb - “Four Nocturnes”



Example#4: Aurélien Dumont - “Eglog”
-on the body of the instrument



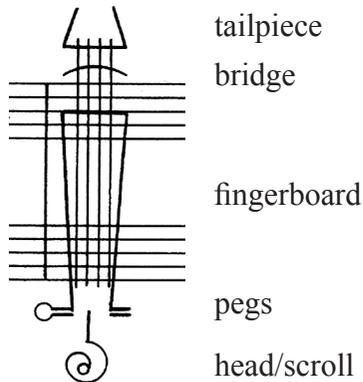
Example#5: Salvatore Sciarrino - “Sei capricci”
-on the fingerboard, with pitch

● **Helmut Lachenmann**

Music of Helmut Lachenmann is undoubtedly challenging for senses: both for a performer and for audience, and therefore opening a chapter dedicated just to him and his music seems like most logical step. He explores and brings out completely new timbres from instruments, using completely unconventional way of playing and extended technique that was at the time of composing certain pieces completely new. The pieces that mostly stand out (for violin and string instruments) are definitively Toccata for solo violin (1986) and his string quartets, especially Grand Torso.

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● *Bridge key*



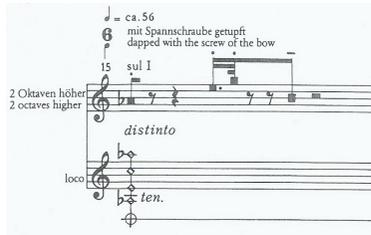
The bridge clef schematically reproduces the front of the instrument between the tailpiece up to the head/scroll of the violin. This allows the depiction of the point of contact of the bow on the instrument as well as its distance from the bridge, while it also indicates the direction of the bowing.

The variation of the bridge clef is string clef, that illustrates action on the four strings below the bridge, but it is more common practice to use only roman numbers I, II, III and IV to indicate on which string the action is happening.

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● *Bow technique - dabbing with the screw of the bow*

This technique is performed by holding the bow in a vertical position and dabbing the string with the screw of the bow from above, either stacatto or tenuto. The pitch indicated shows the approximate place where the bow should touch the string – and if it would be played normally, this is where the fingers of the left hand would be placed.



Example: Helmut Lachenmann - "Toccatina"

Arising from the combination of left hand pizzicato and dabbing with the screw of the bow there is "pizzicato fluido", whose sound moves opposite to direction to the notated change.



On a practical note: if possible, it is advisable to have a bow that has a screw that has flat, not round end. It is easier to control and have good contact with the string, without the crew sliding of the string (because of the curve). Another point to take in consideration is that the body of the screw is made in one piece, not having the middle part any other material, or structure. No matter how good and smooth the transition is, even the micro change of surface may bring difficulty when playing screw pizzicato with tap on the finger board. Since it is necessary to also catch the

string and pull the string upwards from the inner string, this micro change can damage the string, causing it to break.

Be Practical

50 Sometimes it is really the smallest things that help a performance be more successful. As challenging as contemporary pieces are, with all the changes and coordination necessary, performer is not obliged to play (even a solo piece) by heart. But, when preparing and practicing, we spend a lot of time with the piece and music. During this process it is most likely that part, most or the whole piece is memorized. Still for the purposes of ease and security, it is mostly that when performing, we put the score in front of us.

● *Arranging you score*

This is why it is very important that we plan in advance. Sometimes, the writing of contemporary piece demands for a very complicating score. More often than not, it is spread over numerous pages, having very little to no time and pauses to turn the page. As soon as we start working on the piece, it is advisable to while planning its musical structure, we organize sheets in a manner that we will on the end allow us uninterrupted performance. Not only for

*good example to this is chamber music performances.

When we play in a trio or quartet we will, almost always, have the score with us. But we will also know most of it by heart. Still having the score, to glance at, and be at ease for performing is never raised as an issue.

the sake of when to turn, but having while practicing sub-concisely (or even better concisely) we remember photographically how every page looks like – making it easy that when on performance we look away from the score, returning to it is easy and without any thoughts about it. It is habit that we build while we work, we get used to it, we “know our score”. And with that removing any unnecessary obstacle to a smooth performance, allowing only to music it self to be important. Sometimes the score is already perfectly comfortable arranged by the publisher/edition, but it is not always the case. As well when a score is a not published version, but manuscript. Changing this in the last moment before the performance will most definitively take attention to a very unnecessary concentration to a technicality as “turning the page”, making a performer “glued to the score”, reducing freedom in expression.

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● ***Color coding***

Color coding is a practice used in music very often through history, whether for children, while learning notation, or for easier deciphering of themes (it is common practice by many musicians to leave color marks especially in Bach’s music, as the appearance of the themes is more obvious). In contemporary music the succession

of movements and technique very often changes drastically between two beats – for example sul tasto and sul ponticello. According to neuroscientists studying motor skills, if you work on several skills simultaneously, what is the case when one is presented with this kind of piece, you do not retain what you learned as well as if you focus on one skill at a time. So, with already established good reaction to colors, it is highly useful (and profitable) to create self color patterns – where, for example, each sul tasto would be marked with blue and sul ponticello with red (and so on). Using always the same color (at least in one piece, but it can be very useful to continue the same patterns for every next piece, as there are techniques of playing that are more common and returning in all pieces) makes the moment of reaction to the change much easier and it becomes just a flow of movements that expresses music, “music tool” rather than exposition of technical skills for the sake of technique.

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Do you hear me?

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pression and General Linguistic*. *Oxon*.

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These internet resources are just a stating point,
since once you start browsing trough links, you
can get very far.

<http://brahms.ircam.fr>
[http:// www.musiquecontemporaine.fr/](http://www.musiquecontemporaine.fr/)
<http://www.grovemusic.com/>
<http://www.furious.com>
<http://www.ubu.com/>
<http://www.sikorski.de/>
<http://www.schrimer.com/>
<http://www.boosey.com/>
<http://www.thestrad.com/>
<http://www.allthingsstrings.com/>
[http:// media.mit.edu/](http://media.mit.edu/)
<https://ccrma.stanford.edu/marl/>
<http://cnmat.berkeley.edu/>
<http://www.ina.fr/>
<http://rwm.macba.cat/>
<http://mic.stim.se/>
<http://www.universaledition.com/>

Scores

This list contains not only pieces that are used as reference in the essay, but other pieces that were part of the research and are relevant to extended techniques, interpretation and notation of contemporary violin.

John Adams: Violin Concerto

Alban Berg: Violin Concerto

Luciano Berio: Sequenza VIII, *Universal Edition*

— Due Pezzi

Pierre Boulez: Anthèmes, *Universal Edition*

— Anthèmes 2, *Universal Edition*

John Cage: Freeman Etudes

— Two6

Eliot Carter: 4 Lauds, *Boosey and Hawks*

Do you hear me?

- Rhapsodic Musings
- George Crumb:** Black Angel
- Four Nocturnes, *Edition Peters*
- James Dillon:** Del Cuarto Elemento, for solo violin
- Traumwerk, for two violins
- Franco Donatoni:** Argot
- Ciglio
- Henri Dutilleux:** L'Arbre des songses
- Morton Feldman:** for John Cage
- Philip Glass:** Strung Out, *Chester Music*
- Sofia Gubaidulina:** In Tempus Praesens, violin concerto, *Sikorski*
- Rejoice, for violin and cello, *Sikorski*
- Der Seiltänzer, *Sikorski*
- Offeratorium, *Sikorski*
- Heinz Holliger:** Trema
- 58 — Lieder ohne Worte II
- Helmut Lachenmann:** Toccata,
- Gran Torso (string quartet)
- Zwei Studien
- Claude Ledoux:** ...V, for violin and piano
- Ajma, for solo violin
- Jean Lesage:** Ivresses Songes sourdes niuts, *unpublished manuscript*
- Witold Lutoslawski:** Partita
- Luigi Nono:** "Hay que caminar" Orchester des WDR Köln, soñando (for two violins); *Ricordi*
- Varianti; *Ars Viva*
- Arvo Pärt:** Spiegel im Spiegel
- Krzysztof Penderecki:** Capriccio for violin and orchestra
- Violin Concerto No. 2 Methamorphosen
- Violin Sonata No.2, *Edition Schott*
- Capriccio for solo violin

- Henry Pousseur:** Flexion III
— Paganiana
- Camdan Reeves:** Scordatura Squid I
— Scordatura Squid II
- Steve Reich:** Violin Phase; *Boosey and Hawks*
— Triple Quartet; *Boosey and Hawks*
— Different Trains; *Boosey and Hawks*
— Music for 18 musicians
- Wolfgang Rihm:** Über die Linie VII,
— Lichtes Spiel, *Universal Edition*
- Kaija Saariaho:** Nocturne, *Chester Music*
— Nymphaea, *Schrimer*
— De la terre
- Alfred Schnittke:** A Paganini; *Sikorski*
— Sonate No.2 (QuasiUnaSonata); *Sikorski*
- Salvatore Sciarrino:** Sei capricci; *Ricordi*
- Igor Stravinsky:** Violin Concerto in D
— Duo concertante for violin and piano 59
— Suite Italienne
- Peter Swinnen:** Faviolina, *Lantro Music*
— Point d'Appui, *Lantro Music*
- Yuji Takahashi:** Six Stoicheia, *Edition Peters*
- Toru Takemitsu:** Rocking Mirror Daybreak,
for two violins
— Far calls. Coming, far! for violin and
orchestra
— Hika
— Distance de fee
- Thôn Thât-Tiêt:** Métal Terre Eau, *Jobert*
- Pēteris Vasks:** Tala gaisma (Distant Light),
violin concerto
- Richard Whalley:** Ad Infinitum, *unpublished
manuscript*
- Iannis Xenakis:** Mikka, *Salabert*
— Mikka-S, *Salabert*