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## **'Three Neglected Techniques' in the Instrumental Music Education: Technique of Practice - Technique of Study - Interpretative Technique**

### **Abstract**

#### **BACKGROUND**

Most often, music students' instrumental training consists of (1) lessons, planned and led by a teacher, and of (2) students own practicing, going on without any supervising. During lessons the student is taught, during practicing the student, in fact, teaches himself. In the training of professional instrumentalists, for example, the student gets about 30 hours/year individual lessons, while his/her own practicing could be estimated to at least 600 hours/year.

Usually the teacher's as well as the faculty's concern and effort are focused on the teaching part of the education. Both its content, forms and methods are discussed and planned, the results then supervised and evaluated. While this part is considered to be teachers' obligation, students' practicing is considered to be students' own responsibility. It is correct, but only if the student knows how to practice. Unfortunately, quite often students' ideas of practicing are limited, or restricted to one aim only: to build up a fast finger-mobility, without any larger regard to the body's dispositions and the character of music. Hardly ever a student asks 'How should I practice?', the most frequently asked question is 'How many hours every day I should practice?'

Nevertheless, consequences of bad practice habits can be that the practicing becomes ineffective, that the student's instrumental and artistic development will be impeded, and at worst that serious occupational injuries occur.

#### **AIM**

The project's aim is

- to give students solid and objective advice for their own practicing (in form of a compendium and a periodically recurrent course) – which would make students' work more efficient

- to increase students' awareness of the connection between instrumental technique and musical interpretation, that is of the brain-body-instrument-music interaction - which would benefit students' artistic development
- to learn students how to plan and evaluate their own work effort - which would increase students' independence
- to exclude all basic and to any instrument generally applicable learning problems from instrumental lessons - which would give more time at teacher's disposal during lessons.

## **Final report**

(This project was realized in 1998-2001 and sponsored by the Swedish Council for the Renewal of Higher Education.)

### **THE PROJECT'S AIM**

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Usually the teacher's as well as the faculty's concern and effort are focused on the teaching part of the education. Both its content, forms and methods are vividly discussed and meticulously planned, the results then supervised and evaluated. While this part is considered to be teachers' obligation, students' practice is considered to be students' own responsibility. It is correct, but only if the student knows how to practice. According to my repeated experience the student seldom knows.

Quite often students' ideas of practice are limited, or restricted to one aim only: To build up a fast finger-mobility, without any larger regard to the body's condition and the music's character. Hardly ever a student asks 'How should I practice?', the most frequently asked question is 'How many hours every day should I practice?'

Nevertheless, consequences of bad practice habits can be that the practice becomes ineffective, that the student's instrumental and artistic development will be impeded, and at worst that serious occupational injuries occur.

For those reasons, proper instruction in the art of practice should be given to all music students. Because the practice is an important part of the student's musical education: during lessons the student is taught, during practice the student teaches himself.

## **The project's aim was**

- to give students solid and objective advice for their own practice-which would make students' work more efficient
- to increase students' awareness of the connection between instrumental technique and musical interpretation, that is of the brain-body-instrument-music interaction-which would benefit students' artistic development
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As the instrumental playing more or less is involved in all music education, the project results should benefit all music students; because of the connection between playing technique and musical interpretation, they also complement the already established theoretical disciplines like form analysis, music history, and others.

## **Proceedings**

At meetings with students and teachers an inventory of questions concerning the practice was made and the problems discussed. That accumulated knowledge and pointed out differences in practice regarding various musical instruments.

In order to ascertain students practice habits an inquiry was carried out (see below).

In April 1999 a theoretical lecture in practice was given to the students (all grades) for the first time, in September 2000 for the second time (grade 1 only). Since 2001 this lecture is permanently included in the introductory course for students in grade 1.

On February 2000 I also held a lecture on the practicing, open for the public.

For regrettable reasons the students could not be involved in the planning of the project, but during the lecture on practicing they always are encouraged to ask questions and comment my statements. Each time the introductory course is finished the whole body of students meets all the lecturers involved in the course for a discussion; the students also evaluate the course in writing.

Involved in the project was also the Centre for Music Medicine at the School of Music, Göteborg University.

At the initial stage of the project a meeting with prof. Harald Jørgensen (Norwegian College of Music in Oslo) took place; his experience with a similar project in Oslo implied valuable information.

## **Inquiry**

In an inquiry (questionnaire) the students answered 27 questions concerning their practice habits. The inquiry was confidential; the students did not unveil their names, but they stated the instrument, grade, gender and education program. 97 students (of totally c.150) rendered their answers.

- 64 % of the students meant that they practice too little. (However, the reason might be that their practice manner is inefficient, and that they in fact are rather discontented with the results of their practice; in that case more time spent at practice might not do any difference). None of them meant that he/she practices too much.
- 13 % never got any instructions on how to practice at the college/university level. 10 % got such instructions from their fellow students only.
- Only 37 % use to plan their practice beforehand, and only 29 % evaluate the results of their practice sessions.
- For 6 % of the students practice always is a pleasurable and inspiring experience, for 51 % often, and for 42 % sometimes. One of the 97 students answered this question with 'never' (poor guy!).
- 13 % are often in pain caused by practice, 74 % now and then (stiffness after the training), 12 % experienced such problems at the time of the inquiry, 25 % (!) consulted at least at one occasion a doctor in consequence of that kind of pain.
- 69 % approach the music mainly in an intuitive way, 26 % mainly intellectually.
- Only 3 % always start the study of a music composition with a theoretical analysis, 51 % quite often, 46 % never. (Compare with the preceding line-'intuitive' respectively 'intellectual' approach.)

The results of the inquiry corroborate the primary assumption that an education of students concerning their practice is useful and desirable; an unacceptable number of the students did not get a proper advice how to practice, there are severe shortcomings in both planning and evaluating of practice sessions, dangerously many experience pain (and in the future maybe even injuries) in connection to practice.

## **Conclusions**

The project showed very convincingly that a proper advice concerning the instrumental practice should be given to all students at college and university level; the teachers should not assume that the students got such information already. Discussions with the teachers and the students pointed out that the best method of forwarding these instructions to the students is to do it in two ways complementing each other:

- (1) General advice, common to most of the instruments can be rendered to students summarized, in a lecture or in writing. This guarantees that all students get the elementary and universal advice. - See 'Basic hints...' bellow; it is a summary of the lection on practicing mentioned in the

'Proceedings' above. (Because these 'hints' are both minimized and simplified there is a certain and regrettable risk for misinterpretations.)

- (2) Advice more specific for the particular instrument, as well as a guidance adapted to individual student's needs, lies upon the instrumental teacher.

Bearing the latest sentence above in mind, the teacher should combine two tasks: To teach students to play, and to lead them to an independence regarding instrumental practice and musical interpretation.

Conversations or rather private chats with the students gave me to understand that unfortunately there is a kind of teaching which does not fulfil such demands, a manner sometimes called 'monkey-see, monkey-do'. A teacher who just says 'Use this edition, change these fingerings, put metronome on 92, and watch me I'll show you how to play it' certainly uses a very efficient method. That teacher does all the thinking and delivers very concrete advice (quality of which can be very high, indeed). The student merely follows the advice and does the practicing. Both parties feel happy because the student usually makes fast progress. What's wrong then? Well, the student gets to know 'How' but not 'Why', and the 'Why' is the key to student's independence. Furthermore, knowing 'why' creates the necessary conditions for student's development towards a unique musical personality.

The question left to be answered was why some teachers act in that manner. In my opinion—and the discussions with my fellow colleagues fortified me in this belief—the following circumstance might be the reason. Quite often the teacher himself is an active musician, not seldom a renowned instrumentalist, and as such accustomed to be in focus and to be authoritative. At a recital he cannot say to the audience “This phrase can be played in several different and amazing ways so which one would you prefer to hear now?”. He alone has to make the choice and also convince the listeners that exactly that very option is the best and only one. He then, if even unconsciously, tends to act in the same way in a teaching situation, that means he feels obliged to make decisions, to defend own choices, and to persuade the student to accept them. As much as it is understandable, this is really a pitiful behaviour. A lecture should rather be a meeting between two colleagues, the elder one experienced and helpful, the younger one gifted and curious. Both of them passionate yet patient, both of them ambitious yet humble, both of them dealing with music in the first place. The teacher is supposed to point out various options, solutions and their consequences, to explain and discuss them, and then to let the student to test those during the practice in order to form his own preferences and make his own decisions. For the student this is a very demanding but in the long run the most profitable way of learning and practicing.

Lessons have to be considered as being a part of students' continuous work, an opportunity to get a qualified feedback, advice and inspiration for further

practice. Lessons give a guarantee that everything is under control and nothing will go wrong.

Usually a student who begins music studies at a university is not only talented but also very ambitious. According to my own and more than thirty years long experience as a university teacher, most often such a student also wishes to make a rapid progress, wants to play the fastest and the most difficult compositions at once in order to get his/her own talent corroborated. This student experiences own technical shortcomings as a main hindrance, which has to be eliminated at the very beginning-'*First we will fix the fingers and then we will deal with the music*'. At this stage of the student's development the technique for him/her is identical with a perfection and speed of finger movements, coupled with a mathematical precision regarding the time. A robot-like behaviour which-practiced for a longer time-will hamper the student's musicality; instead of a musical interpretation the student will achieve a mechanical sound-reproduction of the score.

The teacher's responsibility is to explain for the student that technique and music must not be separated. They need to mature together in a mutually enriching interaction, for otherwise the balance necessary for a technically right and musically vivid interpretation gets lost. Especially when practicing etudes the student must be aware of their musical potential and aim, as well as of the risk at focusing too much on their mechanical side.

The project was successful and its aim was achieved - a yearly recurring lecture on practicing has been incorporated in the introductory course. The students appreciate this lecture; here some quotations from the students evaluations in writing of the introductory course regarding the lecture on practicing: 'To practice means to master the instrumental technique, but to create the music demands another kind of practicing.' - 'Can you play freely and relaxed then the music will sound in that way, too.' - '[Prof. Holecek's] ideas about the time needed for the practice have influenced me. He said: "Stop the practicing while you still have energy and feel pleasure."' - 'I wish we'll get more of this further on, much more!'

As already stated, a lecture on practicing given in the first grade is important and useful. Yet there is a dilemma here. Though it is necessary for the students to get a proper advice at the very beginning, I am afraid that a certain number of the students are not quite ready for it, not mature enough to understand, to really understand. They are all too much occupied with their fingers and scales at that stage. Accordingly some kind of follow-up should take place. Maybe the lecture could be presented in two parts, a shorter introduction in the first grade and an advanced, more profound course two or three years later on.

## BASIC HINTS FOR THE PRACTICE

(The following text is a part of the final report on the project 'Three Neglected Techniques' in the Instrumental Music Education: Technique of Practice-

Technique of Study-Interpretative Technique, realized in 1998–2001 by professor Josef Holecek, Ph.D., and sponsored by the Swedish Council for the Renewal of Higher Education. - The 'Hints' are free to be forwarded to the students at colleges and universities, but the author and the sponsor has to be mentioned.)

There are some crucial questions the student has to consider before beginning to practice:

- *What is the instrumental practice?*
- *What happens when I practice?*
- *How shall I practice?*

### **Practice**

You can practice for three reasons: To learn something new, to improve your existing skills, or to maintain them. That in respect of both the playing technique, the musical interpretation, and the repertoire.

Practicing a musical instrument should never be a thoughtless, merely mechanical drill, or a boring, daily recurrent slavery. Neither it should be just an uncritical playing for pleasure only.

*A meaningful practice is a purposeful, planned, controlled and evaluated work.*

An efficient and successful practice is a creative and highly stimulating activity. It enables you to explore, to experiment, and to discover. During the practice you learn things about the music, about your instrument, and about yourself as well. It increases your awareness both of the options and of the limits.

When practicing you are teaching yourself. For that reason you have to know what the teaching is about. You have to listen, observe, and experience; actively, carefully, critically. You need to notice and solve problems. During your lessons do observe your teacher and try to find out the teacher's reasons for the directions he/she gives you; ask questions. Because as much important for your development as 'how' is to know 'why'; one day your education will be finished and you will be on your own. From that day on you must be able to guide yourself.

Practice regularly and hard but never put your development under stress. Learning—both manual and mental one—takes time. Hustle and eagerness might disturb and even stop the process of mature. Be stubborn, yet patient.

### **Planning and evaluation**

In the first place you have to define your goals. E.g. 'I want to become a concert pianist'. Be realistic, you have to estimate your chances to avoid a disappointments. But if you decide to become a concert pianist, then go for it. No hesitations, no maybes, no 'I would like', just do convince your mind and programme your brain: 'I will become a concert pianist, that's my destiny'.

Then you have to organize your time and plan your work. Planning the practice is like drawing the road map, which leads to your goal. Start with planning in long terms, like 'During the coming year I will focus on baroque music', 'This Spring I shall improve my tone production', 'After a month I shall perform this sonata'.

Work out what you have to do to in order to attain your goal, then divide the task into smaller, demarcated sections and organize them in a progressive succession. Also try to estimate the practice time needed. That is planning in short terms, like 'This week I'll practice the first movement of the Sonata', 'Today I'll devote fifteen minutes to this very passage, and I'll practice it in this particular way'.

Make it a rule to evaluate the results of your practice; both the shortest sessions and the long terms practice. 'Did I follow my plan and fulfil my intentions? And if not then why?'

The long terms planning guarantees that both the goal and the way to it are distinct. The short terms planning helps you to organize and control your daily practice. The evaluation gives you a valuable feedback; it also helps you to refine you planning.

### **Body**

As your whole body in some degree—probably more than you are aware of— is involved in your playing you should get familiar with the principles of ergonomics; plenty of books and articles on this subject are disposable.

At playing the body has to be well balanced and relaxed, yet ready for action. But in the long run even the ergonomic most correct posture will become stiff and arduous when kept static. The best countermeasure is to keep the body continuously in movement, preferably in harmony with the music played.

Neither breathing nor blood circulation may be obstructed by unnecessary or protracted tensions in the body because muscles convert oxygen-transported to them with blood—into energy needed to execute contractions, movements.

*Dynamic contraction* means a continuous shifting between contraction and relaxation; by contraction the used blood is carried away from the muscle, by relaxation the fresh one is pumped in.

By *static contraction*, when a permanent tension hampers the blood transport, the muscle consumes energy but has difficulties to generate new one. It gets tired, the movements become heavy and ungainly, failing frequency increases. Unfortunately the player usually parries that by using still more energy and brute force which makes the situation so much the worse. If the muscle is still not allowed to relax and regenerate, lactic acid is created in it, the muscle gets cramp and you feel pain. The pain is the muscle's way to signalize a potential



danger. If you ignore even this and do not relax the muscle it will collapse, inevitably, and an injury will be a fact.

Recommendations: Keep breathing and blood circulation free. Minimize static tension and uncomfortable postures. Use minimum of energy, particularly in movements' initial phase. Take often short rests. Build up your physical strength and stamina.

### **Brain**

One can play with either the brain or the heart, they say. This is correct, only that the 'heart' is to be found in the brain, too.

Every *intentional movement* has to be planned in the brain at first. The brain sets up movement commands regarding the movement's time schedule, intensity and direction, and sends electric signals to respective muscles. When executing the movement reverse signals are continuously sending from the muscles involved to the brain where they are compared with the original program, and if required also rectified; accordingly the brain has a full control of the movement during the whole time. Yet, at a very fast movement neither reverse signals nor any corrections can be managed, a so-called *ballistic movement* takes place; its success depends only on a reliable planning and the 'force of habit'.

The neural system is equipped with memory. This reflexive memory can be a result of a purposeful training but also of an unconscious habit, which means that even a wrong movement will be stored in the memory. Because of that wrong movements should be avoided or at least not repeated at practice.

Movements can be automated in the brain by joining the regulations of individual movements into motoric synergies, a kind of fixed movement patterns. For a movement directed by a synergy the brain gives only one overarching command and does no longer care about any details. To establish such synergies a longer, repeated training is needed. This process may be hastened if you understand coherencies and are able to perceive the movements' homogenous form. Though it seems that consciousness, awareness has to be kept constantly alert, in reality there are just two situations demanding full awareness: You have to be aware of the principles of a movement before you begin to practice it, and you have to be able to find out what is wrong when a problem occurs in order to correct it. In all other situations you actually should not ponder over the movements at all, you only have to execute them. In fact, too much awareness may even disturb, hamper the movements themselves.

Execution of a movement causes an increasing blood stream in certain areas of the brain. But already an *emarginated, perceived movement* has the same effect. The feelings, associated with an emarginated movement, do then influence the movement itself when the movement is actually executed. This is of great importance as well for the technique as for the interpretation, and of course for the practice, too. Movements without any mental, emotional content, that is movements executed only mechanically, remain musically sterile. In

consequence of that, a merely mechanical drill at practicing a piece of music (but even etudes) is wrong because at the end, when a musical expression is expected, the movement cannot be used in the manner in which it had been trained; it needs to be modified then, or even totally changed which might be very difficult because the movement is already automated and integrated in the reflexive memory. Besides, during the wrong practice of that very movement the instrumentalist's ear was accustomed to the sound produced. In that respect his judgment has been influenced and limited.

As a rule, a subjective-auditive perception cannot be verbalized, it can only be emotionally experienced. Most often it occurs intuitively, based on the instrumentalist's earlier auditive and motorical experience. Sometimes we talk about a 'hearing hand' or a 'song's inner presence'.

The *brain's left hemisphere* understands the intellectual substance of the language (whereas the right one registers colour and emotional expression of the voice), and deciphers written codes like text and musical notation. It thinks rationally, analytically, and sequentially, that it works up the matter step by step. It is responsible for conscious actions. It also rules over the right side of the body, and is in charge of the pulse and rhythm.

The *right hemisphere* thinks simultaneously which means that it grasps the situation as a whole, as structures. It makes intuitive, unconscious and very quick decisions. It thinks in pictures (never using words) and hosts emotions, temperament and imagination. It is able to perceive sound, register tone pitch and melody, and is also equipped with auditive memory. It rules over the left side of the body.

Traditionally, in Western world the left hemisphere has been regarded as the most intelligent one. That is wrong. With help of the left sphere we read and analyze music scores, solve problems, which have to be tackled rationally and logically. As this sphere remembers form and harmonic progression, it is useful at memorizing. But if the left hemisphere is allowed to dominate and to repress the right one, the music delivered would sound too mechanically and rather dull. Through its ability to perceive expression, anticipate and influence movements, to activate feelings and employ intuition, the right hemisphere makes the music interpretation more spontaneous and animated.

The two hemispheres can function simultaneously but separately, each one dealing with its own particular task. But they are not capable to work together on the same problem at the same time, because in that case they disturb each other, or also is one of them beaten out. However, a trained musician's hemispheres can learn to cooperate, each one going into the process just to fulfil its own partial and specific role.

### **Technique**

Students' most common mistakes regarding the playing technique is either to

degrade instrumental technique only to finger mechanics or speed, or to peerage it to the goal of the practice, or to separate it from the music.

But technique is not a goal, it is a mean, a comprehensive set of tools; at practice you learn to understand, to use, and to control these tools. All the time when practicing technique, the most important thing to keep in mind is that at the end all this technique will be used in a musical context. The technique's quality and extend, its richness and flexibility determine whether it will satisfy the music's all and various demands or not.

Even though a lot of technical skills can be trained directly on musical pieces, exercises and etudes is an efficial way to improve or maintain an instrumentalist's technical level. (However, it might be mentioned here that etude has been 'invented' as late as in the very end of the 18th Century; Bach as well as Mozart practiced their technique skills on suitable music pieces.)

*Finger exercises* are short movement patterns dealing mostly with finger mechanics and tone production matters, with the intention to explore and to understand various technical elements in their most simple shape, and to lay a basis of fundamental-and for the particular instrument often characteristic-technique. Finger exercises also may function as warming-ups.

*Etudes.* Quite often etudes exploit the same patterns as finger exercises but on a larger scale, and with the aim to automate the particular movements. Here the technical elements are trained extensively, in various situations such as different keys, positions, rhythms, etc. In an etude also several patterns can be combined.

When practicing an etude you must know exactly why and how it should be practiced; otherwise you might acquire a useless or even a wrong technique. Choose a tempo enabling you a full control, and speed it up then cautiously step by step; never stress the tempo because it would result in a very unstable und unreliable technique. Avoid a merely mechanical drill. The metronome, when its use is motivated, should serve only as help, temporarily; a continuous use may cause musical stiffness. Do not tolerate and first and foremost do not repeat any inaccuracies or faults; you would automate them, which would be rather difficult to correct afterwards. Instead of striving to learn an etude as soon as possible endeavour to gain as much experience as possible from it. Try to imagine in which musical situations the technique practiced might appear and accommodate your efforts to those future needs. Keep in mind that the ultimate goal is not to master an etude but to train a skill, which finally will be incorporated in your total technical capacity.

## **Music**

The study of a piece of music has four stages.

### *Stage 1- Orientation*

At first, procure all information about that piece of music necessary for its interpretation. Use a reliable edition. Listening to a recordings might inspire but

there is always a risk that you, though unconsciously, will imitate the recorded interpretation. Do always try to find your own approach to the music.

Make an inventory of musical and technical difficulties involved in the piece. At this stage you certainly play the piece but—and this is of great importance—you do not practice or 'fix' anything, you just carefully examine the music and the score, create your ideas of its interpretation, and consider the following practice.

#### *Stage 2 - Practice*

Split the piece into smaller and musically demarcated parts; determinate then how and in which order you will practice these fractions.

Check the fingerings, they have to be in accordance with your musical intentions. Do not practice any phrase before the ultimate fingerings has been established; otherwise you would automate a mistake.

Choose always a comfortable tempo at first, enabling you to maintain a full control. Move your hands/fingers smoothly without any unnecessary physical or mental stress, leading to stiffness, tiredness, and faults.

Even when playing a short phrase and in a slower tempo, do it always with equivalent, intended musical output.

Do not repeat a part (or the whole piece) again and again, mechanically, with all eventual defects. Practice always fully concentrated; listen, observe, experiment. Without that you cannot improve your performance. When your concentration decreases or you begin to feel tired, take a rest. Never ever practice till you get exhausted.

#### *Stage 3 - Synthesis*

When all problems are solved and mastered and you are in full control of every part of the piece, put the parts together and balance the piece as a whole; this you can do even without your instrument. Quite often adjustments are needed, e.g. concerning tempi, expression. Now you can also memorize the piece if you wish to. In fact, at this point the practice itself is actually completed.

#### *Stage 4 - Liberation*

Forget all those hours of practicing, wrestling with fingers, searching ways to the right sound, adequate phrasing and true expression. Now the instrumental handy craft is to be raised to the 'art of music'. In order to achieve that, you have to identify yourself with the music you are interpreting. In some way it is no longer e.g. Bach's music you are playing, it is your own music, and you create it here and now, in front of your (though imagined) audience. It is the best way—if not the only one—to reach, convince and affect the listener. That's the music is about, and that has to be the primary reason as well as the ultimate goal for your practice.