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COMPENDIUM OF THE

VIOLA D'AMORE

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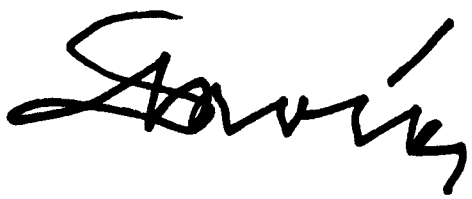

Brno/Praha 1994

COMPENDIUM OF THE

VIOLA D'AMORE

A handbook for all higher-striving viola d'amore players directed to acoustics and the modern performing practice

Brno 1994

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Introduction

There were few inventions in human history that had such a moving fate as the musical instrument called "viola d'amore" (viola of love, Vd'a). Of the great many musical instruments which appeared across the centuries only few have remained in use up to now. We can find most of them in museum collections, condemned to silence.

The viola d'amore is one of those musical instruments that, though not being used in the symphonic orchestra, are still influencing musical life. Moreover, the viola d'amore is attracting more and more players today. The present work is dedicated to those players, who are eager to search all the complexities, mysteries and problems associated with playing the viola d'amore. It represents an attempt to transform the author's experience into a consistent system, which would help a higher-striving player overcome obstacles on his way to excellence.

The history of the origin and development of the viola d'amore is dealt with only briefly here, as there are other sources in this field available (M.Rosenblum, Contributions to the History and Literature of the viola d'amore, New York University, 1976; H.Danks, The Viola d'amore, 1979; Newsletter of the Viola d'amore Society of America, etc.). Nor was a bibliography of the extensive viola d'amore literature included, because the first world-catalogue of viola d'amore literature has appeared recently (Heinz Berck, Viola d'amore-Bibliographie, Bärenreiter,Kassel,1986).

The final goal of every musician's endeavours is to play the studied work before an audience, no matter if it were a family circle or an audience in a concert-hall. One shouldn't dare to do it sooner than when both hands' movements get so mechanized, that the execution will not in the least limit one's concentration on expression. Only then can one win the critics and the audience over to one's way of interpretation. The player's interpretation may either resound or be dissonant with the critic's views. We are trying to help

the player to find such an interpretative style that would be well accepted by both the critics and the audience.

I. HISTORICAL PART

1.1. Chronology of instruments and their makers

1.1.1. The Chronicle

While the 16th century appears to us as a period "per cantare e suonare", i.e. a period of vocal-instrumental dualism, the following century brought an apparent shift to the instrumental style. This shift was supported by the creation of new types of musical instruments and by the perfection of the existing ones. One can hardly distinguish individual stages of this development. The Middle Ages are closely related to the newer periods. One can say that approximately up to the year 1600 musicians used a great many of immature instruments, while later a process of selection and a permanent perfection took place, concerning both the instruments' form and their accessories. As a result, more and more instruments sank into oblivion and the terminology of the remaining ones gradually stabilized.

One can hardly imagine today, how many catastrophies, triumphs, successes and failures occurred in this development and how many instruments disappeared together with their players and makers, only to emerge for a while again in a slightly different form. During the 17th century the bowed stringed instruments began to take on their present form. Typical instruments of this period were various types of viols. They had developed from still older instruments - the vielle and the fidel. These had gradually disappeared along with their players - minnesingers and troubadours.

In their further development, the viols tended to acquire the tonal range and timbre of the human voice. For both the basic types of viols - the viola da braccio (held horizontally, supported by the arm) and the viola da gamba (held

between knees), there were independent instrument families containing instruments of various pitches - the discant, alto, tenor and bass. Instruments were played in the first position only. The discant viol "da braccio" can be regarded as the direct predecessor of the violin.

In the 16th and 17th centuries, there were also instruments equipped with another set of strings appearing among viols - so called sympathetic or bourdon strings - which were usually placed below the normal "playing" strings. It was the viola d´amore among the "da braccio" instruments, and the baryton among the viols da gamba. The baryton´s predecessor was the viola bastarda.

Remark: The baryton had 6-7 playing and 9-32 sympathetic strings. Joseph Haydn wrote more than 100 compositions in various forms for duke Esterházy, who played this instrument. Long since, the baryton can only be seen in museums.

It´s worth mentioning that the first reports about instruments with sympathetic strings came from India. Some of these Indian musical instruments are listed in Tab. 2.

Tab. 2.

Instrument´s name	Number of strings playing	sympathetic	
alabu sarangi	4	7-9	Source:
esrar	4-5	10-15	"Musical instruments
kamancha	3	14	of India", Ministry of
chikara	3	3-6	Information and
sarsanga	5	9	Broadcasting,
sanjogi	4	3-9	New Delhi 1965

In Europe, this kind of instrument first appeared in England at the end of the 17th century. It was during the time, when the East India Company (established in London at the end of 16th century), developed trade with India. The first reliable news about the viola d´amore was left by Michael Praetorius in his well-known work "Syntagma Musicum" which describes all musical instruments of that time (cf.1.2.). In its most graceful form, as a universally satisfying resonance-type instrument, the viola d'amore first appeared in Hamburg (Joachim Thielke, 1670), Absam (Jakobus Steiner, 1672), and Salzburg (David Techler, 1684). Before that, however, the viola d'amore had to undergo a long development resulting in numerous changes which mainly concerned the numbers of both playing and sympathetic strings, which is the main characteristic of the viola d'amore, and the instrument´s form, especially that of its contours.

The original simple form became more complicated as a result of various decorations. It was not the Italians who had the last word in this development, but one of the best Bavarian violin-makers, Paul Alletsee (died in 1738), and the Praguer Jan Oldřich Eberle (1699-1768), cf. 1.1.2. Their master-pieces adorn many world museums. Both of them proved their professional mastery mainly on the English violett (viola angelica), which is a type of Vd´a which has more sympathetic than playing strings. This instrument has rather complicated contours, bent in many places. It is a decorative example rather than a musical instrument.

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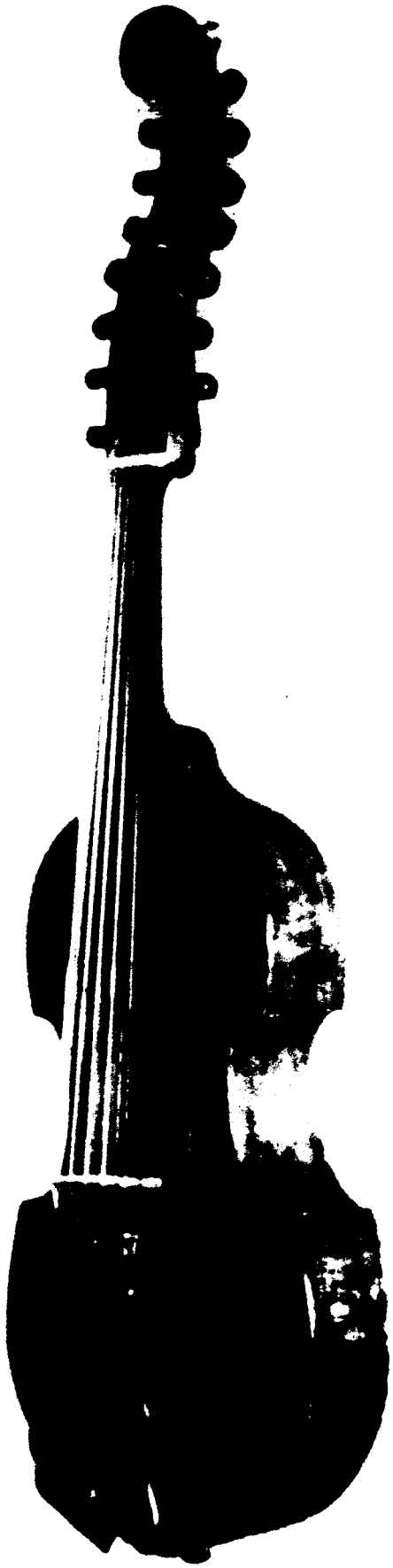

Abb.Nr. A3 "J.U.Eberle fecit Pragae 1756"

1.1.2. Instruments kept in public collections
(instruments without label, re-built ones and those of uncertain origin are not included)

ALLETSEE Paul
Munich, +1738
Always the best wood, light yellow or dark red varnish
1721, 6+6, University of California,Los Angeles
1725, 7+10, Deutsches Museum, Munich
1730, 7+7, Würtemb. Landesmuseum, Stuttgart
1737, 7+10, Deutsches Museum, Munich

AMAN Georg
Augsburg,
1671-1717
light red or dark brown, the back made of one piece of wood
1701, 7+7, Národní museum, Praha
1703, 7+5, University of California, Los Angeles
1703, 7+5, Smithsonian Institution, Washington
1705, 7+7, ditto
1723, 6+6, Univ. Los Angeles
1725, 6+6, Museé du Conservatoire, Paris

BARTL Andre Nikolas
Vienna, 1682-1762
yellow or red greasy varnish
1736, 7+7, University Leipzig

BARTL Michael
Andreas, Vienna
1704-1788
the varnish seems to have darkened, a routine work
1732, 7+7, State collection, Berlin
1746, 7+7, University Leipzig

BAUDIŠ Václav
Praha, Olomouc
sometimes signed inversely "Siduab"
1780, 7+7, Univ. Leipzig

BISTACH Leandro
Milan
1804, 7+4, Musikhistor. Museet, Stockholm
a good contemporary violin-maker
1904, 5+5, Museo degli Strum. Music., Milan

BRAUN Adam
Mark-Neukirchen
1730, 6+6, Händel-Haus, Halle

CARCASSI Lorenzo
Florencie
mostly yellow varnish, few instruments
1767, 6+7, Univ. Leipzig

CASTELLO Paulo
Genos
a nice work, light red varnish
1767, 6+6, University of California, Los Angeles

CASTRO
Venice
unusual model, red varnish
1760, 6+6, Mus. Strum. Musicali, Milan

DEGANI Eugenio	own model with a nice varnish
Venice, 1840-1912	end of 19. cent, 7+7, Mus.Instr.Music., Milan
DELEPLNQUE Gérard	a nice wood, red-yellow varnish
Lille	1790, 6+6, Conservatoire Bruxelles
DORFEL Johann Andreas	1743, 6+6, Staat. Inst. Musikforsch., Berlin
Klingenthal	
DUCLOS Nicolaus	he was using Italian patterns
Barcelona	1766, 7+7, Univ. of California, Los Angeles
EBERLE Johannes	valuable instruments which still serve as a
Udalricus (Jan Oldřich)	model for many instrument-makers
Praha, 1699-1768	1727, 7+14, Národní museum, Praha
	1732, 7+7, ditto
	1739, 7+14, Carl Claudius Samling, Copenhagen
	1743, 7+7, Univ. Leipzig
	1744, 7+7, Národní museum, Praha
	1747, 7+7, ditto
	1755, 7+7, Ringve Museum, Trodheim
	1740, 7+7, Royal College of Music, London
	1758, 7+7, Nár. museum, Praha
EBERLE Tomaso	a clean work, red-brown or brown-yellow varnish
Naples	end of 18.c.,7+7, Univ.of Calif.,Berkeley
ENTZENSBERGER Chrisoph	few instruments, light yellow to dark red
Fussen, +1747	1714, 6+6, Histor. Museum Basle
FICHTL Martin Matthias II	
Vienna 1682-1768	deep red or yellow-brown, an excellent tone
	1736, 7+7, Staatliches Institut, Berlin
HELLMER Jan Jiří	a nice work, soft tone, red-brown oil varnish
Praha, 1687-1770	1728, 7+7, Národní museum Praha
	1738, 7+7, dtto
	1740, 7+7, dtto
	1750, 7+7, Haags Gemeentemuseum
GAGLIANO Ferdinando	a flat vault, vaulted bottom, red-brown or
Naples, 1724-1781	yellow varnish
	1763, 7+5, Blakiston Wilkins Collection, Washington
GEISENHOF Franz	the best Viennese master, extremely precise work
Vienna, 1754-1821	1779, 7+7, Univ. Leipzig
HAVELKA Simon Johann	a clean work, brown varnish

Linz	1763, 7+7, Musikinstrumentenmuseum, Berlin
HELLMER Karel Josef	a flatter vault, brown spirit varnish
Praha, 1739-1811	Národní museum, Praha
HJORTH Andreas Hansen	besides the label a branded mark A.H.H.
Kopenh. 1759-1834	1791, 6+6, Carl Claudius Samling, Copenhagen
HULINSKY Tomáš Ondřej	a nice work, vaulted bottom, red-brown varnish
Praha, 1731-1788	1768, 7+7, Nár. museum Praha
	1782, 7+7, Deutsches Museum, Munich
	1782, 7+7, German. Nationalmus., Nürnberg
	1781, 7+7, Univ. of California, Los Angeles
	1781, 4+5, ditto
JAUCK Johannes	the Steiner model, a thick red varnish
Graz	1735, 7+7, Musée Instrum. Conserv. Paris
KLOTZ Georg I.	an interesting tone, clean work, red-brown varnish
Mittenwald, 1687-1737	1723, 6+7, Univ. Leipzig
KLOTZ Johann Karl	mostly small models, dark brown varnish
Mittenwald, 1709-1790	1735, 6+6, German. Nationalmuseum, Nürnberg
KLOTZ Mathias I.	founder of violin-manufacturing in Mittenwald;
Mittenwald, 1656-1743	a very variant quality of work
	1732, 7+15, Musée Conserv., Paris
	1725, 6+7, Univ. Leipzig
KULÍK Jan	fair work, yellow-brown or red spirit. varnish
Praha, 1800-1872	1830, 7+7, Nár. museum, Praha
LANGER Nikolaus	his own, not very pretty model, brown varnish
Manheim, 1745-1827	1799, 7+7, Metrop. Museum of art, New York
LASKE Josef Antonín	instruments of an extraordinary beauty,red-brown
Praha, 1738-1805	1783, 7+7, Nár. museum, Praha
LEEB Johann Georg II.	not always precise work, red-brown,
Bratislava, 1779-1817	thinly applied varnish
	1807, 7+7, Staat. Mus., Berlin
LOUVET Pierre	a good, but not extraordinary work
Paris	1738, 6+6, Musee Conserv. de Musique, Paris
MANTEGAZZA Pietro	nice wood, masterly work, very darkened varnish
Giovanni, Milan	1757, 6+5, Mus. Instr. Musicali, Milan
MAYR Andreas Ferdinand	a careful work, good sound, dark red-brown
Salzburg	1719, 7+14, Národní museum Praha
	1737, 7+7, Histor. Museum, Basle
MOCKEL Otto	excellent instruments, nice red-brown varnish

Berlin/Dresden	1934, 7+14, Musikinstrumentmuseum, Berlin
1869-1937	a copy of the J.U.Eberle's Engl.violett from 1739
PAULI Jan Karel	good sound, dark brown varnish
Tachov	1730, 6+6, Bad-Haus in Eisenach
PLACHT Jan František	some works are good, made of the best material
Luby (Schonbach)	1785, 7+5, Musikinstrumentmuseum, Berlin
RAUCH Kryštof	original forms, brown-red varnish
Chomutov, 1728-1792	1771, 7+7, Nár. museum v Praze
RAUCH Jakob	an average work, brown-yellow varnish
Manheim	1725, 7+16, Musikhistorisk Museet, Stockholm
RAUCH Šebastián	clean work, black-brown varnish,weak tone
Chomutov/Litoměřice	1776, 7+7, Nár. museum Praha
1711-1801	
RAUCH Tomáš	good work, wood and tone, the varnish darkened
Praha/Wroclaw	1769, 7+7, Nár. museum Praha
1702-1796	1739, 7+7, Händel-Haus, Halle
RESLE Andreas	a masterly work, nice red-brown varnish
Fussen, 1720-1756	1743, 6+6, Würtemb. Landesmuseum, Stuttgart
SALOMON, Jean-	nice instruments with brown spirit vartnish
Baptist-Deshayes	1740, 7+6, Musee Instrum. Conserv., Paris
Paris, +1772	
SHELLE Sebastian	the most outstanding Nürnberger violin-maker
Nürnberg	of his time
	1720/1745, 7+7, Musikwissensch. Inst. Köln
SCHORN Johann Paul	masterly work, distinguished corners, exc.varnish
Innsbruck/Salzburg	1701, 6+6, Mus. Carl. Augusteum, Salzburg
	1711, 6+6, Kunsthistor. Mus., Vienna
	1699, 7+5, ditto
	1698, 7+5, Staat. Instit. Musikforsch., Berlin
	1700, 6+6, Landesmuseum für Kärnten, Klagenfurt
STADLER Caspar	a classical form, good work, dark varnish
Munich	1714, 6+6, German. Nationalmus., Nürnberg
STADLMANN Johann Joseph	a careful work, dark brown varnish,
Vienna 1756-1813	a very good tone
	1751, 7+7, German. Nationalmus. Nürnberg
STADLMANN Michael Ignaz	one of the best Viennese masters,
Vienna 1720-1871	a precise work, nice varnish

7+7, Národní museum, Praha
5+6, Metrop. Museum of Art, New York

STEINER Jakob — the typical "Steiner-form" by the best
Absam, 1621-1683 — German violin-maker
1666, 6+6, Museum C.Augusteum, Salzburg
1672, 7+6, Carl Claudius Samling, Copenhagen

STORCK Johann Fridrich — he may be identical with the Ausburger Storck
Strassbourg — (Lutgendorf). The Steiner model, good wood, dark-brown varnish
1776, 6+6, Histor. Museum, Basle

TECHLER David — a valuable work, full tone
Salzburg/Rome — 1684, 7+7, C.Claudius Samling, Copenhagen
1666-1743

TESTORE Paulo Antonio;an average work and wood, thick varnish, loud tone
Milan, 1690-1760 — 1739, 6+6, Museo degli Strum. Musicali, Milan

THIER Mathias — clean work, brown oil varnish, good sound
Vienna — 1764, 7+14, Kunsthistor. Mus., Vienna
1779, 7+7, ditto
7+7, C.Claudius Samling, Copenhagen

TRUMHARDT Johannes Stephen — a very good work, brown varnish
Straubling, 1749-1817 — 8+8, Würtemb. Landesmuseum, Stuttgart

TIELKE Joachim — a prominent German violin-maker with highly
Hamburg, 1641-1719 — valued instruments
1670, 5+7, Museum of Fine Arts, Boston

WAGNER Benedict — flat, well-built instruments, brown varnish
Durrwangen/Ellwangen — 1723, 7+7, Histor. Museum, Basle

WEIGERT Johann Blausius — masterly work, a wide model, nice varnish
Linz — 1725, 6+6, Kunsthistor. Mus., Vienna
1730, 7+10, Hungarian Nat. Mus. Budapest
17??, 6+6, ditto

WEISS Jakob — about, 1700, 6+6, Mus. C.Augusteum, Salzburg
Salzburg — 1726, 6+6, Bach-Haus, Eisenach
a careful w., red-brown v., nice instruments

WENGER Gregori Ferdinand — a renowned master, original contours
Augsburg — 1718, 7+7, Staat.Instit.Musikforsch.,Berlin
1731, 6+7, Haags Gemeentemuseum, Haag

WILLER Johannes Michael — a noble Eberle model, nice oil varnish,
Praha, 1753-1826 — excellent tone

	1787, 6+6, Národní museum Praha
WOLTERS Jean-Mathias	rare, beautiful instruments
Paris	1749, 7+7, Ringve Museum, Trondheim
ZACHAR Maximilian	a rather wide, but nice woman's head
Wroclaw	1736, 7+7, German. Nationalmus., Nürnberg

1.2. A summary of the most important events in the history of the viola d'amore

1615-1620	Michael Praetorius (1571 - 1621)	The first reference to sympathetic strings (Syntagma musicum, Vol.2."Organographia")
1627	Francis Bacon (1561 - 1621)	More details on sympathetic strings (Natural History)
1644	Marin Marsenne	A report on a music session with resonance-type instruments (Cogitata physico-mathematica)
1661	John Playford	More details on viola d´amore (Music´s recreation on the viola)
1679	John Evelin	"...but above all the viol d´amore for its sweetness and novelty.."(Diary)
1687	Jean Rosseau	Describing the history of viols (Traité de la Viole)
	Daniel Speer	The first mentioning of the viola dämore by a German writer (Grundrichtiger Unterricht, Ulm)
1696	Heinrich Ignaz Franz Biber (1644-1704)	The first edition of his Partita c-minor for two violas d´amore (with 6 strings), and basso continuo
1713	Johann Mattheson (1681 - 1764)	A detailed description of a 5-string instrument with the C-major/c-minor fourth-third tuning (Das Neueröffnete Orchester, Hamburg)
1697	Johann Hugo Wilderer	Use of two violas d'amore in the opera orchestra (Il Giorno di Salute, Düsseldorf)
1728	Attilio Ariosti (1666 - 1740)	The first edition of "Sei Lezioni" for 4-string Vd´a with various tunings

cca 1700 Johann Christoph Weigel	A picture of a viola d'amore with sympathetic strings, a mention of its various tunings (Musikalisches Theater, Nürnberg)
1738 Johann Philipp Eisel	The first practical description of playing the viola d'amore, including note-examples, fingering etc. (Musicus Autodidacticus, Erfurt)
1741 Joseph Majer	A detailed analysis of the potentials of scordatura (Neueröffnete Theoretich- und Praktische Musik-Saal)
Antonio Vivaldi (1678 - 1741)	His 6 concertos for viola d'amore solo represent the summit of this period The tunings vary according to the key of the composition
1782 Louis-Touissamt Milandre	The first French school for the viola d'amore (Méthode Facile pour la viole d'amour)
1789 F.A.Weber	A valuable professional description of the way of playing the viola d'amore (Musikalische Realzeitung, No.31)
1789 Friedrich Wilhelm Rust (1739 - 1796)	He wrote sonatas and chamber works
1789 Carl Stamitz (1745 - 1801)	His concertos, sonatas and other works represent culmination of virtuosity in 18th century
1790 Johann Georg Arbrechtsberger (1736 - 1809, the Beetthoven´s teacher)	A description of the viola d'amore(Gründ-licheAnweisung zur Komposition,Leipzig)
Christian Urhan (1790 - 1845)	A Parisian virtuoso for whom G.Mayerbeer wrote a viola d'amore solo in his opera "Les Huguenots"
1815 Bohumír Dlabač (1758 - 1820)	A valuble source of information on viola d'amore players (Allgemeines historisches Lexikon für Böhmen, Mähren und Schlesien)
1870 Jan Král (1823 - 1912)	He published his still usable tutor (Anleitung zum Spiel der Viola d'amore)

To conclude, let us mention three founders of the modern style in the music for the viola d'amore:
Paul Shirley (1886 - 1984) - author of "The study of the viola d´amore", one concerto and other compositions
Henry Casadesus (1879 - 1947) - author of "Technique de la viole d´amour suivie de 24 Préludes "(Paris 1931) and many other solo and chamber compositions
Paul Hindemith (1895 - 1963) - The greatest personality in the world of the viola d'amore music in the modern period

1.3. A summation of the characteristics of the four development periods
The viola d´amore has originally been devised, like the lute, and later on the guitar, to accompany singing. The same applies to various types od viols which had several strings and a flat bridge, which permitted playing of chords. To the four original strings (Ariosti) the fifth and the sixth were added and Carl Stamitz (see 1.2) has eventually codified the seventh string in his numerous compositions. His arrangement, using the wide D-major tuning (Tab.3), is still in use.
1.3.1. The baroque period is represented by Attilio Ariosti (1666-1740) who was probably the first known viola d'amore virtuoso. After living in Mantova, Berlin and Vienna, he settled in London. He was the director of the London Music Academy, working together with G.F.Haendel. He wrote "Sei Lezioni" for the viola d'amore, which are still considered the foundation-stone of early music for the viola d'amore. These sonatas have 3 or 4 movements each, containing attractive melodies. But there is also the fright for all players - the scordatura, i.e. retuning of all, or some of the strings. It enables the use of easier fingerings and enables playing some chords otherwise unplayable. But these fingerings look very strange for us today .

Rem.3. The first famous composer who used scordatura was H.I.F. Biber (cf.1.2.). He made use of it in his violin sonatas, which are an apparent herald of Sonatas and Partitas for solo violin by J.S.Bach.
Ariosti's "Lezioni" have following tunings: No.1 - E flat major, No.2- A major, No.3.- e minor, No.4 - F major, No.5 - e minor,and No.6 - D major.
In later editions they are transposed into the normal (D-major) tuning.
Rem.: There are several editions of the "Lezioni" available today; some of them respect the first edition from 1728 (e.g.Cor Kint, publisher Günther, Leipzig), the others are completed with cadenzas and flageolettes (e.g. Waefelghem, published by Durand& fils).

Within the giant work of Ariosti's great contemporary Antonio Vivaldi (1678-1741), who wrote 49 operas and more than 400 concertos for almost all instruments, some place was also found for the viola d'amore. In his 6 concertos for viola d'amore solo Vivaldi presumed a six-stringed instrument, basically tuned in the key of the respective piece. In Pincherle's "Vivaldi-Monografie" (2 volumes, 1948) the concertos are denoted as follows:

No. RV 392	D-major	No. RV 395	d-minor
No. RV 393	d-minor	No. RV 396	A-major
No. RV 394	d-minor	No. RV 397	a-minor

REM. 5. For more about playing Vivaldi's concertos see Walter Kolneder, "Aufführungspraxis bei Vivaldi", Breitkopf Hartel, Leipzig 1955.
In "il prete rosso" the baroque period reached its summit. After him, scordatura was gradually discarded while the requirements for technical skills were simultaneously rising.

1.3.2. The Pre-classic Period

It was the last pre-classic virtuoso Carl Stamitz (1745-1801), who established via his numerous compositions the final form of the instrument. There were still others distinguished viola d'amore players in that time:
Carlo Broschi (1705-1782), a prominent singer, is also listed in Charles Burney´s book "Musical Tours in Europe" (Oxford Univ. Press, 1959) as a renowned viola d'amore player. The "Year-book of arts in Praque and Vienna" (1796) mentions R.Genswind (born 1772 in Prague) as a great master of the viola d'amore. He became famous through his concertizing pupils (F.Richter, J.Eberle, Pavlicek) and a number of compositions, of which only one concerto is known today. Compositions by Jan Krumlovský are noted for their sound musicality.His partitas are considered some of the best study materials for beginners. In the period 1719-1763, Krumlovský was living in South Bohemia, but he also worked in Dresden. Another virtuoso performing at the end of the century was L.T.Milandre, who wrote many arrangements for the viola d'amore.

1.3.3. The Period of Temporary Stagnation in the 19th Century

In the 19th century, musicians gradually ceased to play the viola d'amore, and there were only a few isolated attempts to revive this instrument. In the first half of the century, it was the French virtuoso Ch.Urhan, who asserted himself via numerous concert performances. G.Meyerbeer wrote for him a viola d'amore solo in the second act of his opera "Les Huguenots" (1836).

Rem. 6. Soli for the Vd´a have also appeared in some other opera scores:
J.Wildener, "Il Giorno di Salute" (1697); A.Scarlatti, "Il Tigrane" (1715); F.Erkel, "Bank Ban" (1861); Charpentier,"Louise" (1900); Massenet, "Le jongleur de Notre Dame" (1902); Puccini, "Madame Butterfly", (1904); Kienzl, "Kuhreigen" (1911); Pfitzner, "Palestrina" (1917).

In the second half of the century, the viola d'amore was publicized by the soloist Carli Zoeller (1840-1889), who left behind a book "New Method for Viola d'amore. Its Origin and History and the Art of Playing It"(London, 1885) and several little compositions and arrangements. Also, L. van Waefelghem (1840-1908) performed on the instrument and arranged many compositions.

What was the reason why people ceased to play the viola d'amore in the 19th century?

The answer can be looked for in these factors:

1) A lesser tonal power, mainly in its higher registers, in comparison to the violin. As the traditional gut strings were used at that time, the tone was discrete, suited rather for smaller rooms.

2) Limitations for modern harmonies. The characteristic richness of sound of the viola d'amore is limited to its basic key (D-major or d-minor), and the three neighbouring flat or sharp keys of the circle of fifths. The viola d'amore is lacking a uniformity of sound in all keys, demanded by contemporary composers; this requirement can only be met by modern stringed instruments.

3) Technical difficulties with both hands:

- the reduced string-to-string distance requires special physical dispositions (thin fingers) of the player
- due to various intervals between strings one must use four different fingerings for playing the double-stops
- the smaller bow-angle difference between neighbouring strings needs a finer bow control.

3.4. Reviving the Viola d'amore in the 20th Century

At the beginning of the 20th century, when all the viola d'amore's predecessors and contemporaries had long been resting in museum display cases, interest in the viola d'amore among professional musicians, amateurs and composers began to rise. New names of viola d'amore soloists began to

appear in music journals; new organizations of players were established and new compositions were published. The inclusion of viola d'amore studies into the teaching schedules of various schools at various teaching levels was also an indication of its thriving development. It took only a short diversion from his composer's mission for Paul Hindemith to substantially influence the future of the viola d'amore.

While virtuosi of the peak period of viola d'amore playing never left the ground of tonality, and seldom dared to play above the third position, Hindemith broke all these limits and opened new horizons for composers . He confronted both players and instrument-makers with new requirements: the finger-board, bridge, strings etc. had to beadapted for the new style of playing. Since Louis Spohr, Hindemith was the first prominent musician to proceed from instrument to composition.

In the early post-war period, about 1920, an explosive, even provoking aggressiveness appeared in Hindemith's compositions, which echoed the distress of the first post-war years. This tendency was stressed moreover by his fancy for hard forward motion and reckless dissonances. These features dominate in "Kleine Sonate" op. 25.No.2. for viola d'amore and piano (1923). A stubborn rhythm in the opening theme and in the last movement emphasizes his music language, which is full of excitement and sophisticated rhythms. In thr Finale the composer reveals his fondness for imbroglio.

At the beginning of his thirties Hindemith calmed down. He became a modern classicist and wrote a lot of absolute music saturated with modern harmony and polyphony. It was in this period, when he wrote his most important composition for the viola d'amore, Concerto op. 46. It appears to have been carved from a quite different piece of wood than the Sonata op. 25, No.2.

A majestic introduction (wind instruments, of the strings celli and double-basses only) introduces the pregnant theme of the first movement, marked by variable metres (3/2, 4/4); first in accompaniment, while the solo-instrument is decorating it by fast runs up to the 7th position.
This requires the mastery of the top violin-technique.In the slow movement, the composer lets the instrument resound in its nicest registers in several long-breathing melodies. It is again very demanding for the left hand.
For the Finale the composer chose the form of variations, which is not very common. Their theme is introduced by the soloinstrument in chords.
The last part (Coda) is detached from the Variations by a short cadenza.
The main theme appears here again, and dies in pianissimo in the last bars.
It is played by the viola d'amore, accompanied by a single instrument - the bassoon.

The concerto represents a valuable contribution which ensured the prospects of the viola d'amore. One can see from the technical requirements, that Hindemith made a more revolutionary leap here than Paganini did for the violin - for him the way had already been prepared by many predecessors.

France also had an enthusiastic propaganist for the viola d'amore - Henry Casadesus (1876 - 1947), a member of the musical Casadesus family.
He was one of three brothers, all of whom were excellent musicians.
Henri was the conductor of the Zürich Opera. Not only was he a well-known viola d'amore soloist, but he also left behind many interesting compositions. Besides a number of suites, which are seldom played today (his favourite combination was: quinton, viola d'amore, gamba, violone and clavecin), he wrote a tutor "Technique de la viole d'amour suivie de 24 préludes" (Salabert, Paris 1931).In the Préludes he made use of all the keys of the circle of fifths.

In Vienna, the music capitol of the world, one can notice an admirable tradition: in the past hundred years there have appeared three valuable tutors

the viola d'amore. The first one was by Jan Král (1823 - 1912), a Czech violinist in the Viennese Opera's orchestra.
His "Introduction to Playing the Viola d'amore for Violinists" (1870) contains simple excercises for the left hand and little original compositions.
M.L.Goldis had arranged many compositions for the viola d'amore.
His "School for Viola d'amore" op.6 (Weinberger, Vienna 1916) analyzes the fourth-third tuning. The "New School for Viola d'amore" by Karl Stumpf is a well-grounded modern summarization of all viola d'amore playing techniques and an outline of the instrument's development. It also includes modern study materials, the author's own compositions and viola d'amore soli from various operas (Massenet,Meyerbeer, Pfitzner etc). Karl Stumpf is also known by numerous recordings (Ariosti, Vivaldi, Stamitz etc.).

We have already mentioned the distinguished role of Italians in the developments during the viola d'amore baroque period - Ariosti and Vivaldi. In the 20th century it was the soloist and educator Renzo Sabatini who was the teacher of many prominent contemporary soloists. Aurelio Arcidiacono also did his share for the modern playing techniques through his "Etudes-Caprices" and other compositions. The composer and educator Salvatore Sciarrino has dealt in a new way with the instrument's sound potentials (Romanza for viola d'amore and orchestra).

In England, which probably was the birth-place of the viola d'amore, Harry Danks published a book under the title "The Viola d'amore" (1979). It contains general information on the subject and numerous data on instrument's history. Montague Cleeve, the founder of the British Viola d'amore Society, looked for new forms and accessories for the instrument. He used special little bridges for sympathetic strings and substituted for the traditional peg-box a guitar-like one. This facilitates tuning-up, but changes substantially the traditional form of the instrument.

The Viola d´amore Society of America, founded by M. Rosenblum and D. Thomason, is marked for its untiring activity. Its Newsletter publishes the latest results of early music research, brings news about concerts, recordings and instruments. The Society also organizes international congresses.

The number of viola d'amore players is steadily increasing so that they can hardly be counted. It´s their reward that many unjustly forgotten early music works have been brought back to life. This fact is not only proof of the unique past of the viola d´amore, but is also a promise for its even better future.

2. THE THEORETICAL PART

2.1. The specific features of the instrument

2.1.1. The form, dimensions, the measure

The classical form of the Vd'a has developed as a specific form of the "viola da braccio". Its lengthened peg-box contains 14 pegs, and in the case of the "viola angelica" there are as many as 21 pegs. Compared to the viola or violin, the finger-board must be broader due to the increased number of strings. The upper part of the instrument's body ("shoulders") tapers off towards the neck. This documents the viola d'amore's relation to the "gamba" family. Compared to the viola, the body is more voluminous, i.e. it is longer and wider, and particulary the ribs are higher. The greater volume of the enclosed air increases the resonance of the lower strings. Various forms of body contours and sound-holes are depicted in Fig.2.

There were two men who are now considered as the classics in constructing the viola d'amore, and whose instruments are still being imitated. They were Paul Aletsee (died 1738), the best Bavarian violinmaker of the 18th century and the Praguer Jan Oldřich (Johann Udalricus) Eberle (1699-1768). They constructed the simplest instruments, which are at the same time the nicest ones ever created.

The characteristic part of every resonance-type instrument is the sympathetic (bourdon) strings. With the viola d'amore they are fastened near the endpin and led in a complicated way beneath the tailpiece, through little openings in the bridge, and through a cavity in the neck to the peg-box. They are usually tuned to the same tones as the playing strings.

They increase the total pressure of the strings on the bridge, which can add up, depending on the number of strings and their type, and the height of the bridge, to 20-30 kg (200-300 N). This pressure is passed on to the instrument's belly.

The peg-box is terminated with an artistic carving - the scroll, which is sometimes replaced by a woman's or angel's head. Another characteristic feature of the viola d'amore is a flat back, which is sometimes once or twice tapered off to the neck. A vaulted bottom is rare and its effect on the tone is hardly observable. The English violett, which is characterized by its com-plex decorative form, has often served rather for its creator's representation than for concert purposes. Sometimes the forms of the body and the sound-holes of the viola angelica look almost fantastic.

Tab.1. lists dimensions of a number of instruments made by renowned masters. If one excludes the three English violetts, which have atypical dimensions, the average measure is about 360 mm, which are the ideal measure. The extreme measures of the three English violetts - 394, 392 and 411 mm - only prove that these instruments are not suited for practical playing.

Modern music for the viola d'amore, which was so imposingly introduced by Paul Hindemith, requires some adjustments of the instrument to meet its high requirements. While early music made use of the lowest A-string practically only in chords , there are whole passages on it in modern music. One of the necessary adjustments is a depression in the finger-board under the lowest string, which ensures steadiness of finger touches in all positions. This adjustment is a necessity due to the large finger-board width of the viola d'amore. Yet another adjustment is needed for playing in high positions: the fingerboard, which is normally 250 mm long, must be lengthened by cca 10%. Modern music generally imposes a greater load on the left arm, and the instrument's weight plays a more important role here, including that of the lengthened peg-box. A substantial reduction of weight can be attained by hollowing the finger-board. With some instruments, the peg-box has been unnecessarily covered from the top. If all these adaptations are made, the viola

d'amore can meet the contemporary requirements, and enrich the modern instrumentation.
The tone-formation process can be divided, like with other bowed string instruments, into four phases:

1. tone formation
2. transfer of vibrations
3. tone amplification
4. tone refining

We shall discuss them in detail now.

2.1.2. Tone formation

Tone originates when a string is touched by the bow; these two parts are thus first responsible for its quality. One can use five or six, but usually seven playing strings. As to their quality - today they are available in various sorts . For checking the longitudinal homogeneity of their internal structure, one can still use an old method: to make a string, stretched in our hands, vibrate. For old instruments we recommend soft strings only.

Strings should principally be so soft that one can play simultaneously on three strings, but so hard that the bow-hairs will not touch neighbouring strings when playing ff on one string. This requirement is related to the shape of the upper edge of the bridge.We shall analyze it later on.

Analyzing the instrument's function, we shall consider the body and the strings as its two main components connected together by the stretching system. The longitudinal homogeneity of strings influences tonal clarity, while their elasticity is related to sound volume. There must not only be a high quality of individual strings, but their characteristics must also be related to each other. As seen from Tab.2., with the exception of the highest and the lowest string, the difference in thickness between any two neighbouring

strings should not exceed 0.1 mm. It implies using one kind of strings with each instrument.

2.1.3. The transfer of vibrations

The bridge (It. ponticello) is one part of the stretching system.
It has two functions:

- to define the swinging length of the strings, and
- to pass the strings' vibrations on to the belly.

The quality of its wood, its weight (mass), shape, dimensions and location are decisive for tone quality. It is artistically carved of a hard wood. There is a general rule for its thickness: The less wood mass, the stronger the vibrations. For example, if one replaces a bridge 3mm thick on the top and 6mm at the foot with another one with the respective thicknesses of 2 and 5mm, the sound will become much louder. The tone volume also depends on the bridge's height; but there is some limit - according to practical experience, on both sides it should not exceed 35mm . If one increases the bridge's height, its pressure on instrument's belly quickly rises, which must be taken into account, mainly with old instruments.

If one thins the bridge, it also tends to bend towards the peg-box. In practice one must find a trade-off between the static requirements and tone qualities. There are no general rules; therefore each instrument must be treated individually. Skilled hands can e.g. correct a slight forward leaning of the bridge without loosening the strings.

Another specific of the bridge of the viola d'amore are openings for passage of the sympathetic strings in its lower part. This way, the bridge defines swinging lengths of both the playing and the sympathetic strings.

This only applies, however, to the classical arrangement of the sympathetic strings (see 2.1.1.). In this century, two other arangements have appeared. In the first case, there is another low bridge placed behind the ordinary one which serves for the sympathetic strings. There must be a common opening

for the sympathetic strings in the main bridge in this case (Montague Cleeve , London). In this arrangement, the strings' vertical pressure is spread over a larger area and an eventual shift or replacement of the bridge can be done more easily. In the other untraditional arrangement, two auxiliary bridges for sympathetic strings are placed by the sides of the main bridge. This arrangement appeared several times, only in Bohemia .

It has already been mentioned that the bridge also has a static role (see 2.1.1.). But it also defines the strings'spatial distribution (location), i.e. their heights and mutual distances. This must meet the most important requirement of viola d'amore bow-technique: one must be able to play on all seven strings. Complexity of this requirement can be seen from the following considerations.

If one plays on a four-stringed instrument (e.g. the violin), there are four angles of the bow for playing on individual strings, three slopes for double-stops and two for playing on three strings at once. Altogether there are 9 possible angles of the bow. If we consider a viola d'amore with seven playing strings, these numbers will correspondingly be 7, 6, and 5, totalling 18 angles. It follows that the rounding of the bridge must be precisely cut off, and it also imposes high requirements on the player's right hand.

The rounding of the bridge must closely follow the fingerboard's surface; but the distances of individual strings from the latter are not the same. They correspond to the maximum deflection of each respective swinging string. The next table lists these distances for modern spun-round strings.

The string:	D1	A2	F3	D4	A5	D6	A7
String to finger-board distance:	3.0	3-3.5	3.5-4	4-4.5	4.5-5	4.5-5	4.5-5.5

From these unequal distances follows the asymmetry of the bridge.

Rem.8 Many publications repeat the statement that the bridge's top edge follows a symmetrical cycloid. It is not true.

The soundpost, i.e. the post supporting the belly behind the bridge's right leg, serves for unloading the vertical pressure of strings from the belly, and for transferring the bridge's vibrations to the body's back. One can prove its influence on tone characteristics by changing its wood quality, dimensions and location.

With every stringed instrument the soundpost has an optimum post, and any shift - even a millimetre - can substantially influence tone characte-ristics. If we shift it e.g. a little towards the endpin (i.e. away from the bridge), the sound will be a little dampened, especially the tones of the middle three strings, which will become darker, softer and have less carrying power. This is caused by a changed distribution of vibrations in both the belly and the bottom, which are divided by the soundpost into two independently vibrating parts. These changed modes of vibration imply a change in the frequency spectrum of higher harmonics, i.e. a change in tone timbre.

2.1.4. Tone amplification

We have already mentioned that the bridge transfers strings' vibrations to the belly . The belly partly passes its vibrations on to the air enclosed in the body and partly it transfers them to the bottom through the soundpost. The air enclosed in the body, which is connected with the surrounding air via the sound-holes, functions as an amplifier of vibrations. A vibrating body, representing a resonance-box, passes its movements on to a definite volume of air, forming characteristic acoustic waves that can be heard.

One can prove that even a flat back can participate in these vibrations by placing a viola d'amore next to the piano and playing some low note; if one simultaneously touches the back, one can feel the vibrations.

Tone amplification depends on the elastic force of the body's walls. The flat bottom and high ribs of the viola d'amore, which are a carryover from the "gamba family", have different vibration modes compared to the violin-like instruments, causing the different tonal characteristics of the viola d'amore.

2.1.5. Tone refining

We shall treat the refining of tone in the chapter "Physical basis of the tone".

2.1.6. Number of strings and their tuning

Old literary sources and compositions for the viola d'amore document variability as to the number of strings and their tunings used at that time (see 1.2.). In his "Lezioni", Ariosti made use of four strings; Biber and Vivaldi used six, and Stamitz seven strings. All the various tunings used in the 18th century, when the instrument used to be tuned to the key of the given composition, had a common feature: it was the fourth-third quint-chord tuning. The viola d'amore has never had equal intervals between strings and this has always remained its characteristic feature.

Of the 17 different tunings mentioned by Joseph Mayer (Im Musiksaal, 1741), only 6 remain in practical use today. Of these six, the "wide D-major" tuning is the most important one, best exploiting the instrument's sound potentials and corresponding to its character. There have been some opponents of this tuning, who proclaimed that the lowest A7 string, belonging to the great octave, cannot properly resound due to insufficient body volume (e.g. Paul Shirley in "The Study of the Viola d'amore, New York, 1941). But experience shows that this string can sound convincingly enough, if all the main factors - the instrument, string quality and the player - are acting in conjunction. The narrow tuning is still popular (Hindemith: Kleine Sonate, op.25, No.2; F.Martin: Sonata di chiesa). But the instrument is deprived of its

lowest register in this case, and, moreover, one can also play all these compositions without problems in the wide tuning.

Paul Hindemith chose an atypical "wide a-minor tuning with the d2" for his Concerto op.46. The Praguer virtuoso Rudolf Reissing was known for using two instruments in his performances (both by J.O.Eberle): one of them was tuned in the wide D-major, the other to the wide D-flat-major tuning (see Tab.3). The purpose was to give a specific expression to some compositions.

All these tunings have an inherent limitation for modulations. For this reason, most composers have only used a half of the circle of fifths, namely the keys from E-flat major (c minor) to A major (f-sharp minor). Understandably, modern composers don't limit themselves to these harmonic tunings; by changing string-to-string intervals they try to obtain new tone combinations and open new, unbeaten paths.

The unequal string-to-string intervals (in the wide D major tuning there are three fourths, one fifth and two thirds, one thereof being major, the other minor) lead, in contrast to modern stringed instruments, to unsystematic fingerings for individual strings or string combinations(see Tab.7).Thanks to the greater number of strings, the range extends to four-and-half octaves, which is more than that of the viola or violin. The most characterful and easy to play are the first three octaves (A to a2), which can be played in the first position.

One can demonstrate the influence of the specific body shape of the viola d'amore on the tone timbre by a simple experiment: Substitute the four viola strings for the seven strings of the viola d'amore and dampen the sympathetic strings. One can now simply compare the sound of this re-arranged instrument to that of a normal viola.

In the period 1600-1750, composers often used the scordatura, i.e. re-tuning of all, or some of the strings to another pitch. Today "scordatura" means any

tuning which is different from the regular one (i.e. accordatura). Composers made use of scordatura for the following reasons:
- to enhance the brilliance of the solo-instrument over orchestra (Hindemith)
- to match the instrument's basic key to that of the composition (Vivaldi)
- to simplify the playing of some chords (Ariosti)
Scordatura was first used by Italian lutenists
(J.A.Dalza: Intabulatura de Lauto, 1509).

Ariosti, J.V.Stamic and others often made use of the "notation of the violin fingering with mixed signature". This means that the viola d'amore player was playing on four top strings of the viola d'amore in the same way (i.e. using the same reading), as he would play the violin.
In Example No.6, there are the first bars of "Notturno" by J.V.Stamic (1717-1757) for viola d'amore, violin, flute, 2 horns and bassoon. They should be played in such a way as if one had played it on violin strings (i.e. e2,a1,d1, g). But, in reality, there are strings with the fourth-third tuning, so the third string, which is denoted as d1, sounds f-sharp. The reason for this was to facilitate playing the viola d'amore for violinists.

In modern literature, scordatura is rare. One such case is the one used by P.Hindemith in his Concerto op.46 (see Tab.3). It keeps all the A-strings at their original pitch. Nevertheless, even this scordatura is an obstacle to presenting his work. The latest literature uses scordatura even less (Example No.7).

While the tuning of the playing strings had standardized by the end of the 18th century, the tuning of the sympathetic strings has remained inconsistent; in each case it depended on the teacher's or soloist's personal taste. In the 20th century, the identical tuning of both sets of strings has been prevailing. It even emphasizes the bond of the instrument to its basic key. This may be an advantage in the music of the 18th and 19th centuries, but for modern music, which is full of untraditional modulations and irregular harmonic sequences, a

kind of chromatic tuning would be more appropriate (see Example No.9, Casadesus).

In the case of the English violett, which usually has 14 sympathetic strings, the tuning of these strings is either duplicated or they are tuned chromatically. Example No. 9 summarizes the development of tuning of both the playing and the sympathetic strings since the end of the 18th century up to now.

2.1.7. A bow for the viola d'amore

We shall now concentrate on the three fundamental characteristics of the bow: the weight (mass), weight distribution and elasticity of the stick.

The problem of weight is analysed in Tab. 4. If one realizes that the viola d'amore is provided with strings of quite different characteristics, namely with three violin-like, three viola-like and one cello-like string, one should theoretically play it with three different bows. A light viola bow is the best compromise, taking into account all the complex requirements. As to the right hand, the general rule is as follows: less bow and more pressure on the low strings, more bow and less pressure on the high strings. If one however realizes what primitive bows the old violin virtuosi used, all the while leaving their listeners breathless, one shall find the key to their excellence lay in their right hand.

When choosing a bow, we can use these practical criteria:
- a light bow (less than 55g) needs much pressure at the point
- a heavy bow (more than 70g) is difficult to control at the frog
- a soft stick hampers the jumping and thrown strokes
- a hard stick - hampers forming of fine tones

A proper distribution of weight (mass) of the stick is an important precondition for easy control of the bow. A high-quality bow must have its weight-point (mass-centre) 25 cm from the end of the stick at the frog. If one supports the bow with his forefinger at this point, the bow must remain in the

horizontal position. If the mass distribution is not correct, one can observe tiny vibrations of the rod when playing in the middle of the bow. These vibrations may disturb the bow's calmness, eventually its stability. One should not confuse these vibrations with a light trembling of one's arm which is related to one's nervous disposition .

2.2. The physical backround of the tone

2.2.1. Multitude of resonances

The principle of resonance is commonly used in music for the generation of tone . As for the viola d'amore, this applies twice. Resonance means an induction of vibrations in some body (a string, a board) by means of another vibrating body whose frequency is equal, or nearly equal to the intrisic frequency of vibration of the former body. For example, if any two strings are placed next to each other and are tuned to the same pitch, the swinging one of them is passed on to the other; the energy passes through some medium (e.g. the air), which creates a bond between the vibrating strings. If the sympathetic strings are (as usual) tuned to the same pitches as the playing strings, they will resound whenever one plays on the open strings. This is the simplest case of the resonance. There are two bonds between the playing and the sympathetic strings - the air and the wooden mass of the bridge.

We shall now discuss the problem as to which way and to what extent the body of the viola d'amore participates in the resulting tone quality.

The body takes over the vibrations of the strings and passes them on to the air enclosed in its cavity, thus amplifying the tone. It follows that the shape and material qualities of all the parts which participate on this process, especially the bridge and the soundpost, are very important. In this process, the body is by far not only a mediator , but it also participates in forming the tone by its intrinsic swinging modes. Experiments using of substitute

materials (plastics, steel) for constructing the body have shown that one can speak neither about a volume of tone nor a quality of tone in these cases.

The tone of the viola d'amore is thus a complex synthesis of vibrations whose origin is the vibrating string. The string passes its vibrations on, by means of the stretching system, to the air enclosed in the body and the tone is amplified therein. It gains its specific timbre from the individual vibrating parts of the body. But there arises a question here: how can the body resound, if all the intrinsic frequencies of its individual parts lie well above the highest tones played on the viola d'amore?

2.2.2. The aliquot tones (overtones)

To understand the fact that even playing in first position can generate a rich spectrum of the body's vibrations, one must keep in mind the existence of the aliquot tones, which are inseparable constituents of every musical tone.

Rem. 9: M.Mersenne (1588-1648): Harmonie Universelle, 1636 (1500 pages!); J.Sauver (1653-1716), the discovery of frequencies and aliquot tones; J.Ph.Rameau (1683-1764): Traite de l'Harmonie, 1722; G.Tartini (1692-1770): Trattato di Musica, 1754, the discovery of the combination tones; F.Savart (1791-1841): in "Annales de chimie et de physique"; H.Hemholz (1821-1894): Lehre von den Tonempfindungen als physiologische Grundlage für die Theorie der Musik, 1863.

Tone, as perceived by people, contains a series of aliquot tones that determine its timbre. The string does not swing as a whole only (the basic mode, corresponding to the basic tone), but swings also in its fractions: in two halves (the octave), three thirds (the fifth over the octave), e.t.c. It is seen in Tab.9, where the open D6 string is the basic pitch. The series of aliquot tones

is theoretically infinite; in practice only some of them actually resound. The more aliquots, the nicer the tone.

One perceives the tone as a whole. Nevertheless, we can analyze it in its components by several techniques. One of them consists in a graphic representation of sound waves; another uses a frequency filter. Each aliquot tone corresponds to a particular harmonic component of the frequency spectrum, whose frequency is a multiple of the basic tone's frequency. The violin body has e.g. its intristic frequencies within the range 3000-6000 Hz (James Jeans,1960).

The spectral range of frequencies of the viola d'amore lies much lower, causing a softer and less striking tone. The best instruments always have a rich and carrying tone, due to the amplification of the strings' aliquot tones by individual parts of the body that vibrate in various modes, generating a spectrum of characteristic frequencies. A good viola d'amore has a homogenous spectrum of frequencies lying in the higher frequency range, while a bad instrument has an unhogenous spectrum shifted to the lower frequency range.

At this moment, I would like to mention the alleged extraordinary resonating characteristics of the English violett (see 2.1.1.). The increased resonating capacities promised by its interesting body shape are, compared to those of the normal viola d'amore, hardly observable. The classical form of the viola d'amore is rather complicated itself; there is no use to complicate it even more.

One can demonstrate the effect of the sympathetic strings on the instrument's sound characteristics in several ways; if one plays alternatively two different chords, the tone of the sympathetic strings will overlap into the following chord. We can see such a case in Example No.10. The strings D1, D4, D6, A2, F3, A5, having been activated by playing the D major chord, overlap into the B major chord which follows. One would expect an

unbearable overlapping of the A-tones into the B-major chord, but, in reality, one can hear a quite acceptable harmony. This is caused by the fine nature of the sympathetic strings. Their sound is discrete and it can only be heard in the vicinity of the instrument. These strings were originally devised for the enrichment of the tone when playing in the relatively small private rooms of that time.

III. THE PRACTICAL PART

3.1. The function of the left arm

3.1.1. The finger-board, strings and fingers

There are two main reasons why not every violinist or violist can play the viola d'amore:

The first one is the small distance between the strings which requires thin fingers.

The axial distance of the strings at the nut is 4-5 mm. This is not much less than that on the viola, but in practice it turns out to be quite important. On the other hand, this small distance facilitates playing the "quint touch", which is a very important element in viola d'amore fingerings.

Rem.: The term "quint-touch" (fifth fingering) is taken from instruments tuned in fifths; it naturally doesn't sound as a fifth with the fourth-third tuning.

It should be noted that the finger's position during the "quint-touch" contradicts the physiology of tone formation on bowed stringed instruments. It is due to the fact that one must shorten two neighbouring strings with the same finger at once and by exactly the same length in this case. If the strings are too far from each other, these three conditions are difficult to meet simultaneously due to the actual shape of the finger-tips and their actual positions on the fingerboard.

Secondly, it is the extreme width of the finger-board (35-40mm), which may cause overloading of the thumb, causing it pain. This may primarily happen to beginners. The thumb must always ensure a proper position of the hand relative to the instrument while reducing its pressure on the neck as much as possible. The distance of the outer strings amounts to 30-36 mm, in contrast to 16-20 mm on the viola. To master playing on the lowest (A7)

string, the fingers must thus perform large lateral movements. In such difficult executions, one can hardly keep the optimum position of the fingers. One must place the shorter fingers down flat on their pads , which however needn't cause deterioration of the tone quality. The rule stating that the forefinger must touch the neck at its base, which is commonly used for the violin and viola, applies here twice. This position of the hand leaves the greatest freedom for fingers' movements. One must avoid excessive finger pressure, which might cause excessive stress to the finger-tips (no, or tiny grooves from strings).

Compared to the viola or violin, there is a much greater difference between thicknesses of the outer strings - 0,2mm (D1)/1,2mm(A7); fingers' pressure must vary correspondingly.

The technique of changing position on the same string (the longitudinal technique) is fully identical with that of the violin or viola; we thus have a lot of study materials for it. But the lateral technique (that for changing strings in the same position) is quite different here. This results from the different tuning of the viola d'amore. To control it, we recommend practising the A Major, B^{flat} Major, and B Major diatonic scales over three octaves; at first in a fast tempo, then slowly in order to correct the intonation by means of open strings (see the Tabelar School by the author).

3.1.2. Intonation

The term "correct" or "clean" intonation has no absolute meaning; it is not possible to play absolutely correctly in the physical sense of the word on a bowed stringed instrument. The frequency data used in the last chapter were used for general considerations as to certain acoustic principles and cannot be used for practical playing. In practice, intonation is a permanent compromise; for an instrumentalist, intonation is not a physical problem, but a matter of feel. One is trying to gain a feeling of "clean playing", which depends on two factors: on player's hearing and his ability to correct any aberations

instantaneously (in a fraction of second) . This correction is closely related to the vibrato.

Rem. 10: More in Carl Flesch, Die Kunst des Violinspiels, Peters, Leipzig 1929

Intonation also depends on the harmonic development of the melody. The seventh step of both major and minor scales leads strongly to the Tonic, which must follow. For example, in the key of a minor, the g-sharp is followed by the Tonic a, which means that the g-sharp should be played as high as possible. On the other hand, in the key of F Major, one plays the B^{flat} a little lower, as it pulls down toward the third step of the scale, which is the a.

Intonation can properly be checked and corrected in a slow tempo only; in a faster tempo one cannot find all the mistakes. All difficult places should be practised in a slow tempo without vibrato using open strings - see Ex.No.13. This is a slow, analytic study of the Preludium No.21 by Henri Casadeus (see 1.3.4.). For checking intonation, we recommend using a tape-recorder with two speeds; record at the higher speed and replay at the lower one. It tells us what no critic would tell.

3.1.3. Fingering

Fingering means the directions for playing: it determines the positions of the fingers on the finger-board. It should not only facilitate playing, but a properly chosen fingering should also help us be expressive.

In Schott's Edition of Sonata op.25,No.2 by P.Hindemith, one can find a sign "o" above the third quarter in the second bar of the slow movement. It denotes a flageolett played with the fourth finger (Ex.No.14). I am persuaded that this sign was not written by the composer. The dramatic atmosphere of this movement can only be expressed by a solid tone played by the third finger; the flageolet sounds cold and deadly here. In slow, melodic

passages one should avoid both the flageolets and the open strings at all times; they are lacking any tension.

There are no universal fingerings for particular compositions, they must be chosen according to the technical level and personal taste of a player. On the viola d'amore, moreover, one can play most notes in many different ways, i.e. on various strings (much more than on the violin). This offers a wide and diverse variety of fingerings. For example, the note "a1", on the open A2 string, can be played on six different strings. (Ex.No.38).

If one plays double-stops on pairs of strings with an interval of a third (i.e. the pair D4-F3, having the major third and F3-A2, having the minor third), one can often take advantage of using the "quint-touch" (see 3.1.3, Ex.No.16). For playing sixths we can seldom use the F3-string; one of these rare cases is in Ex.No.17. We should also not forget playing octaves: the only interval of a fifth on the viola d'amore, A5-D6, enables playing a number of octave dyads that may be included in both diatonic and chromatic excercises.

Ex.No.18 shows fast position changes in a sequence of thirds. In Ex. No.19 one can see two possible fingerings, the upper being wrong. In Tab.7. the fingering of the A-major scale begins with 0,1,2 on the A7-string and continues by 0,1,2,3 on D6. The F-major scale of thirds begins with a major third played with 2 on D6 and the open A5 string. The following third is played with 3 on D6 and 1 on A5 (see Tab.7.).

3.1.4. The trill

As the trill was frequently used in early music, one should practise it several minutes a day to attain brilliance. The speed of the trill depends on the finger's lifting height. The general rule says that excessive finger lifting causes time loss, making the trill slow. Only if the basic note is an open string, must one lift the finger higher, as the string is lifted by the height of the nut.

Endeavours directed at speeding up the trill must not lead to its undesireable elasticity, which implies a latent risk of a cramped trill. One should also avoid an excessive pressure of the main finger which lies on the string . Advanced violists and violinists study the trill in the Capriccio No.6 by Paganini, whose benefits are well known. The existing gap in the viola d'amore literature can be filled up with the author's "Double Trill Capriccio" (see Appendix).

Even experienced viola d'amore players may gain from practising the "Geminiani touch" (Ex.No.20). It substantially enhances the independent mobility of the fingers. While performing the excercise, one is shifting the hand stepwise by half-tones. The point is that there are always three fingers lying on the string while the fourth is performing the trill.

3.1.5. Chordal playing

In the literature for the viola d'amore, chords are a quite common means of expression. This is related to the fact, that the "flat" bridge of the viola d'amore (small bow-angle differentials) enables playing three tones at once, i.e. playing of unbroken chords. To play, however, one must properly choose the bow/string contact site, which depends on the length of the stroke (cf.3.2.5.).

Playing at the bridge ensures a better control as to striking the proper string without touching the others. This is related to the fact that the strings' spacial distribution is exactly defined by the bridge here (cf. 2.3.1. and 3.2.). For simultaneous playing on three strings, however,an increased pressure of the bow is necessary, which often generates rustle (or scrape). Due to the arc-like distribution of the strings, there is unequal pressure of the bow-hairs on them, the highest pressure being on the middle one. There may not be any harmful effect from this difference in pressure, if one plays short strokes, as in Ex.No.21 (Hindemith). Longer strokes must be played further onto the finger-board, as the greater pressure, needed for playing at the bridge, would cause

the tone quality to deteriorate. When playing slow movements, the breaking of the chords helps to check intonation.

The three-voice chords (triads) in Ex.No.23 require a light, but solid arm, as all three tones must be heard simultaneously without any scratchiness. Playing four-voice chords is even more difficult; it requires a very swift arm to break the chords swiftly but gently. Ex.No.24. brings a case where four-voice chords regularly merge into double-stops (Slavík).

3.1.6. The flageolets (harmonics)

The esthetic value of flageolets has been questionable throughout their history (Locatelli, Kreutzer, Paganini etc.). Sometimes they misled composers into technical trifles; later on Stravinski and Schoenberg strictly defined their use in modern music. The great number of strings of the viola d'amore, its fourth-third tuning and the richness of tone allow for the attainment of such brilliant flageolettes, even in double stops, that every viola d'amore player should practice them, at least in their simpler forms .

Tab.8. depicts the natural flageolets on the D4-string. One plays them by touching the string lightly at a particular spot. The artificial flageolets are played by shortening the string with the first finger with a firm touch while touching it lightly with the fourth one (Ex.No.25).

While playing the flageolett thirds on the violin,one needs 3 or 4 fingers touching two strings, one can enjoy playing the same flageolets on the viola d'amore using relatively simple and comfortable fingerings, as can be seen in Ex.No.26. Playing the theme needs altogether only eight touches, six thereof being natural and two artificial flageolettes played with two fingers.

To conclude, let us mention the general rule for playing flageolets:
play them as close to the bridge as possible, using a long, fast stroke with a sharp pressure on the bow!

3.2. The function of the right arm

While the left arm may determine the tone pitch, and participates in the production of tone quality, the right arm determines its volume and duration. In this sense, I am speaking about shaping the tone with the right arm, and those who have actually mastered the bow, will understand me. In Chapter 2.1.3. I mentioned the existence of 18 angles of the bow when playing a 7-stringed viola d'amore. I am going to analyze this problem in detail in the following considerations.

3.2.1. The bow-angle difference *(alpha)*

If one plays the violin, the difference of the two extreme angles of the bow, i.e. that on the E and on the G-string, is about 50-60 degrees. We shall denote this angle by *alpha(t)* (total). It consists of three partial angle differences: *alpha(1)*, *alpha(2)*, *alpha(3)* between the E/A, A/D, and D/G strings, respectively. If one (theoretically) presumes that these differences are the same, i.e. *alpha(1)* = *alpha(2)* = *alpha(3)*, then the bow-angle difference will be about:

$$alpha(m) = 55 : 3 = 18{,}3^{o}$$

which is a mean value of *alpha*.

As for the 7-stringed viola d'amore, there are analogously six bow-angle differences: *alpha(1)* to *alpha(6)* (Fig.12). If one wished to play the viola d'amore with the same comfort as the violin, without the risk of catching a neighbouring string, the total angle *alpha(t)* would be:

$$alpha(t) = 6 \times 18{,}3^{o} = 110^{o}$$

which is double that compared to the violin. Such a wide range of bow-angles would cause insurmountable problems as to the right arm's movements and the shaping of the instrument's body (the inner bouts).

Rem.11. This is why the instruments made by the Swiss violin-maker F.Delpy have broadly opened bouts compared to those on the classical form of the viola d'amore.

It is clear that the angle-differences must be reduced. This reduction facilitates simultaneous playing on two or three strings, while playing on one string only becomes more difficult, especially in f. The angle difference a has stabilized on a practical value *alpha* = 12^{o} from which follows the total angle range

alpha(t) = 6 x 12^{o} = 72^{o}.

Modern literature for the viola d'amore requires the same expession accuracy and tone quality as that for the violin. It can only be with metal strings (but not on the old instruments!) and a thin bridge (not necessarily). It strongly depends on the particular instrument's characteristics and the player's control of the bow (the pressure, elasticity). To become aware of the bow-angle differences, it is suggested to slowly practice Ex.No.27.

Fast changes of strings should be done in the middle of the bow, where a uniform, flawless transition is easier to attain. According to the physiology of arm movements, one should play a rising scale downbow, and the descending scale upbow (Ex.No.28).

3.2.2. Tension of the bow-hair

The most important characteristic of the bow-stick is its elasticity, i.e. its capacity to return to its original shape after ceasing an external action (force). It follows that the higher the bow-hair tension, the less elasticity the stick will produce. A lower tension also facilitates playing fine nuances, i.e. fine control of the bow. This is even more important with an instrument having a smaller bow-angle difference; such an instrument needs more sensitivity in the right arm.

But there is also a lower limit to the hairs' tension: it must be high enough that the hair will not touch the stick when playing f.

3.2.3. The bow technique at the frog

There is a principle in bow-technique, which some may not accept, but I have enough evidence for it: "Whoever has mastered the frog, has mastered the bow!" Have you met a player who could play perfectly at the frog but had problems at the tip? Surely not, rather the opposite. The right arm's movements at the frog are much more complex than elsewhere due to its particular position. It is why older artists must devote a relatively greater part of their daily studies to practicing the bow technique at the frog.

We should daily observe our wrist and finger movements in the mirror while playing at the frog. It is even more important with the viola d'amore due to its increased number of strings. We suggest practicing the wrist movements by playing either shorter strokes (1 cm) in a fast tempo (*a quarter note = 120, sixteenth notes*), or longer strokes (3 cm) in a slower tempo (*a quarter note = 90*). Only after having mastered these strokes at the frog we can recommend that you study the highly valuable Etude No.9 in F Major by Kreutzer; practice it using both denoted bowings. For viola d'amore players its value is still greater, as it can also be played an octave lower on the viola d'amore. If one plays it in a fast tempo on the low strings at the frog, it may appear rather exhausting at first, but regular practicing for a longer period will substantially improve mobility in both hands (see Example No.30).

3.2.4. Bow pressure

The pressure of the bow on the string is closely related to the speed of the bow; with the viola d'amore, the problems concerned with the bow pressure are quite specific. We have already spoken (2.1.2.) about the specific characteristics of the strings used for the viola d'amore, especially mentioning the large differences in thickness (Tab.2). As we are only using one bow for all these various strings, we must compensate for the differences by changing the pressure and speed of the bow. Mechanical characteristics of the lowest

strings require to two-fold or more the pressure while slowing down the stroke; on the highest strings we must do just the opposite: a long stroke with low pressure (Fig.13).

3.2.5. The bow/string contact site

Properly choosing the point where the bow-hair touches the string is another requirement of playing the viola d'amore. We have mentioned that the bow-angle difference *alpha* is about half that of the violin. This angle difference is greater at the bridge because the point where a string passes over the bridge is the highest point of the whole string (cf.3.1.5.). For this reason viola d'amore players play mostly near the bridge. But the contact-site also depends on the duration of the tone and on the bow pressure. Violists and violinists have more freedom in choosing the contact site, as there isn't the limitation caused by the small bow-angle difference. If one plays long tones (which must be practised separately!), one must premanently observe the contact-site, so that it does not shift.

If one plays unbroken three- and four-voice chords, a proper choice of contact-site is very important; it depends on the arc of each individual bridge (see 2.3.1.).

3.2.6.The pressure accent

The pressure accent can be counted as one of the basic strokes. If one plays early music without accents and dynamic contrasts, it is like eating a dinner without salt and spices. One can perform an accent in two different ways: either by an instantaneous speeding up the stroke, or by suddenly pressing on the bow. If one compares them in practice, one will find that it is the bow pressure, which is more suited for the viola d'amore. It can be used even with dyads and triads; when playing the latter, one must strictly economize the bow.

The pressure accent is most frequently done at the beginning of a tone, but it can also be placed elsewhere. The main factor here is the forefinger, which must instantaneously press the hair against the stick. This action doesn't seem too difficult at first sight; but a proper accent must be heard softly, sonorously and cleanly, without squeaking. The accent is most difficult to perform at both ends of the bow.

3.3. Interpretation, accent hierarchy, infradynamics

3.3.1. Interpretation

The richer is an interpreter's spirit, the more he seeks and finds. This is what determines the interpreter's general standard, i.e. his conception of the work and his ability to become its co-author. Few people realize, how long and thorny the path is from technical perfection to real mastery. The life of an interpreter is a life of constant self-education; this is the only way an actual artistic personality can mature. Paradoxically, an interpreter must find his artistic spirit through an apparent depersonification. *"Concertare"* (lat.) - to fight - a performing artist undertakes a permanent fight, primarily that with himself.

There are no visible forms in the interpreter's world - it is merged into spirit. At the first sight, it may appear that it would suffice to be in sympathy (resound) with the listener. But this parable is false, like any, when one tries to apply a physical analogy to real life. Every interpretation is a creative phenomenon originating in the artist's personality. There are many interpreters who lost their artist's personality at the very moment when they began to place themselves ahead of the music. This may happen due to a weakening of self-criticism, especially when accompanied by an arrogant attitude toward the work being performed. In such a case the interpreter's personality distorts so far as he himself emphasizes. An actual artist primarily obeys the requirements imposed by the composer's desires contained in the idea of the work, and

decides according to his taste and intelligence what to add from himself.

For as long as music exists, there will always be disputes over the authenticity of an interpretation. This especially applies to early music played on original instruments. One often forgets that the interpretation was subject to changes during history. Not solely compositions, but also interpretations are marked by a certain style. The resulting impression is created by the relationship between these styles.

As a most glaring disharmony, let us mention the playing of J.S.Bach in jazz arrangements. But as this is an extreme aimed at spiting the people, it also has its fans. What would one, however, say if a viola d'amore soloist performed the "Fantaisie pour dessus de Viole" by Louis Couperin with an exaggerated expression, instead of devoting himself to its calmness and dignity? One resents a bad understanding of style much more with the viola d'amore than with a modern instrument.

We have already mentioned that both compositions and their interpretations are subject to changes during time. Each interpretation is related to the society of that time. People don't search for composer's desires only, but also for those of their society. A historically faithful interpretation is a dream, not a reality - not just because we don't have the technical prerequisites for it, but also because early music was created for quite a different society living in a different age. What are the original instruments for, if we don't have the "original hands" with their skills?

It begins to appear now that the efforts aimed at the "historically faithful interpretation" are not even useful, because the response of the audience changes with the life-style. Every work of music is an inexhaustible source of interpretative potentials and can live in an endless variety of different interpretations. What one can hear when listening to various interpretations of the same work, is always the same work, but seen from different view-points at different hights.

The interpreter's main effort is directed toward the internal structure of the work. Contemporary requirements regarding the discipline of interpretation need to consider thoroughly any dynamic or time changes. Interpretational style develops in parallel with the development of society. One should achieve the widest possible reception of the work; one can only succeede if there is a harmony between both the composition's and interpretational styles.

To concentrate fully on the expressive reeds of the work, one must liberate his musical ideas from the components associated with playing technique and particular hand movements. The existence of many violin etudes shows that many composers were trying to overcome some technical problems with the help of musical expression. They were e.g. Gaviniés and Fiorillo for the violin, in the viola d'amore literature there was H.Casadesus with his Praeludii. But the inexhaustible literature devoted exclusively to technical problems proves that one must study them separately. The technical mastering of a particular composition represents the construction stones, that can be used by the artist to build his ideas. Reason takes hold of the score, but fantasy, intuition and an artist's talent breathe a soul into the work.

The contemporary view of the functioning of the interpreter's "soul-computer" consists in three steps:

1. Loading of information from the score or from memory
2. Information processing in the brain-centre
3. Passing the results on to both arms for realization.

This represents a short theoretical scheme of a process resulting in the realization of a composition. The last step must however include the interpreter´s emotional condition, as the listener would immediately recognize its absence.

It is a well-known fact that one can only successfully perform mainly contemporary compositions. If one goes back in history, the interpretation becomes more and more difficult.

The tempo should not be chosen according to the player´s technical standard only - one must keep a rhythmic discipline. Today it is not rare to hear last movements of the string quartets by Haydn in the style of a "Motto perpetuo".

3.3.2. The accent hierarchy

When you read these lines, it may seem to you, that I am overestimating the role of accents in the interpretation of early music. But one should not forget that there is only a narrow space reserved for harmony in early music. Its attractiveness must therefore be shown off in its melody and rhythm.

In contemporary music, there is an increasing variety of expression crafts, and the listener´s ears are accustomed to them. This imposes higher requirements on all the gendres of music. The dynamics offer almost inexhaustible potentials for expression, but these cannot be fully exploited if the music is reproduced by average-quality gramophones and tape-recorders. We can rarely hear the viola d'amore playing pianissimo, although this dynamic level is a precondition of an impressive crescendo.

Ex.No.34 is the Courante from Suite No VI. by J.S.Bach, which was written for the viola pomposa. It shows how a simple motive can be revivified by means of the "Casal's articulation". The metric accent at the beginnig of the bar should not influence the steadiness of tempo and should be performed as a pressure accent (see 3.2.6.). Although metric accents can easily be seen in every melody, it's not uncommon for mistakes to be made in this regard. For example, in Ex.No.36, the wrong accents have been caused by an awkward bowing. If artists had prepared such a detailed analysis of the works performed, many of today's recordings would not be so dull.

3.3.3. The infradynamics

The infradynamics are the dynamics within individual tones: they play an important role in interpretation. Infradynamics are inevitable for compositions of certain style periods, but it is not acceptable for some others.

At the very beginning of the well-known composition "Sonata da chiesa" by F.Martin, the composer begins a lyrical line on the viola d'amore with a long "a". The character of the composition requires a gradation in tension here, which can be achieved either by *a crescendo* or by *a crescendo and decrescendo* supported by a prolonged vibrato on the adjacent string.

In contrast to the piano and plucked instruments (i.e.guitar), the tone of the viola d'amore can be modulated, which must be taken into account if one plays with the piano; as a result of the different natures of both these instruments, a disharmony in infradynamics may appear, mainly on longer tones. This may especially happen if one plays with the "sigh". Infradynamics is a valuable enrichment and enlivening of the tone of the viola d'amore, if they are used properly.

The baroque "swell" (or "sigh",*messa di voce*) is a bad habit of many stringed instrument players; it is fortunaly not so frequent among viola d'amore players. It means that the tone is begun very softly, gradually raised in volume and then lowered again. If one plays this way on the viola d'amore with accompaniment of the piano, the sound of the piano will dominate at the beginning of each tone, while the tone of the viola d'amore will overweight it in the middle (Fig.14). It is obvious that it is the viola d'amore player who must change his infradynamics in this case.

3.4. Tone-colour, harmony

3.4.1. Tone-colour (timbre)

A good instrument in experienced hands is almost an inexhaustible source of tone-colours' combinations. In chapter 2.2.2. we have mentioned the importance of the aliquot tones (overtones) for the timbre of the viola d'amore. It is also well known that we can change the timbre of a tone by playing it on a different string (Ex.No.38).

We can demonstrate the richness of tone of the viola d'amore by playing a melody first on the lower strings and then on the higher strings. We could hardly find such a contrast in sound on any other bowed stringed instrument; this is related to the body´s shape, especially the height of its ribs. One says that the instrument has several registers.

As a result of the small bow-angle difference, a viola d'amore player has fewer possibilities of influencing the timbre by changing the bow-string contact site (cf.3.2.5.) On the other hand, one can multiply the effect of timbre differences by a fine control of the bow pressure with one's forefinger. One can say that the dynamics are controlled by the right arm, while the left arm substantially participates in the resulting tone quality; by this I mean the vibrato, which is a natural manifestation of one´s mind.

Vibrato can be counted as one of the spiritual components of playing. It can

be influenced by one's will only to a limited extent, for it originates in one's personality and represents one of the characteristic marks of each artist. It appears that tone-colour is a complex phenomenon, which involves not only both hands, but even the soul, only with whose cooperation can the hand's action melt into an art.

3.4.2. Harmony as a factor in interpretation

In contrast to the violin or viola, the viola d'amore enables chordal playing on its 7 strings that obeys the rules of either classic, or modern harmony. For this reason, the harmonic component of music is more important here. If one excludes homophony and church singing, every simple tune only achieves its effect after harmonization.

In early music, harmonies are limited to the basic chords. For this reason, we understand it quite well with one hearing (Ex.No.39). One perceives the harmony on the basis of tonality, each deviation from the tonic inducing a certain degree of tension. One must respond to every harmonic modulation by an adequate change in dynamic or tempo. For exemple, in the Heaven's Song in the Sarabanda by J.S.Bach (Ex.No.40), at the beginning of its second part, after the divine calm of the melody in D-major, a d-sharp suddenly appears as part of the diminished chord, inducing a strong tension. This tension is only released by the following chord.

These changes of harmony must be accompanied by discrete changes in tempo and dynamics. The complicated harmonies of many modern compositions can only be understood after repeated studies (see Ex.No.41). At first sight, they appear chaotic and one can only understand the composer's desires later on. While teaching about melodic intervals may seem rather trivial, chordal playing requires at least a basic knowledge of harmony.

3.5. Educational aspects of studying the viola d'amore

3.5.1. Technical aspects

The specific features of the instrument and the requirements for playing the viola d'amore have lead us to considerations as to which ways the study of the viola d'amore can enrich or deepen the studies of other bowed stringed instruments. The left arm 's technical problems are related to the greater number of strings, a wider finger-board and the multitude of possible fingerings . As to the right arm, the problems consist in gradation of the bow pressure and speed of the stroke. All this results in an increased sensitivity in both arms.

Let's play the A-major scale over three octaves in first position, which is the simplest left-hand technique. The fingers used just before passing to the adjacent string are the following (cf. Tab.7):

Finger index

string	upwards:	downwards:
A7	2	3
D6	3	4
A5	2	3
D4	1	2
F3	1	2
A2	2	3

On the violin, one always plays the rising scale using three fingers (1,2,3) and an open string (0), while the descending scale is played by all four fingers. One performs this quite automatically. In contrast, if one plays a diatonic scale on the viola d'amore, the fingerings change, and the higher tempo, the more one must concentrate to playing. This is a kind of mental training.

The famous violin virtuoso Eugene Ysaye (1858-1931) was knonwn for also playing his repertoire on the viola. In this way he achieved a relaxation of his fingers as a result of their adaptation to a greater load. We can also obtain a similar effect by practicing on the viola d'amore, but there are several latent risks in it.

Due to the larger dimensions and the weight of the instrument, the muscles in the left arm are more strained and one must be careful about their relaxation. Prolonged neglect on this point may cause pains and cramps. Through a detailed analysis, one can trace four sources of potential tensions:

1) The higher ribs of the viola d'amore require a lower chin-rest and a higher pressure of the chin, which presses the instrument against the collar-bone. The greater demands on the left arm set by Hindemith changed the earlier view-point, that the instrument must be supported by arm. To meet the requirements of modern playing techniques, one must be able to hold the instrument without this support while not feeling any excessive tension or cramping.

2) The left hand's thumb may be another focus of tension due to the extraordinary width of the neck. We can check the thumb's relaxation while playing by moving it off the neck for several seconds .

3) One can also check the pressure of the fingers on the strings - one should only see little or no imprints of strings on the finger-tips. Lightness and independence of finger movements must be trained daily using the exercise No.43. One must first get rid of all heaviness by repeating the corresponding movements, and then one must repeat several times the whole exercise in vivace.

4) The right arm must be relaxed as well. One can use any exercise from the rich violin literature (13).

As suitable study-material for bow-technique in viola d'amore literature, one can take the last variation in the Menuetto of the Sonata in D-major by K.Stamitz (Ex.No.44). It pays off to practice it *detaché* at first, with a very short stroke at the frog, then in the middle and at the tip. In the end, one should play it spiccato in the middle, and legato with the *quarter note* ranging from 80 to 140. Many passages suitable for the study of bow-technique can also be found in the concerti by Vivaldi. For example, bars 56-63 in the Concerto in Re-maggiore are a good exercise for changing strokes (Ex.No.45).

While daily studies of the violin or viola consist in mechanizing both hands´ movements, the study of the viola d'amore stimulates thinking about general anatomic and physiological aspects of playing a bowed stringed instrument.

This can contribute much to the development of a musician´s or educator´s personality. The 7-strings' technique, the lessened bow-angle differences and different tuning, represent a challenge that seems to be predestined for education.

Rem. 13. A.Casorti, op.50, Die Bogentechnik, Peters

H.Marteau, op.14, Bogenstudien, Simrock

L.J.Meerts, Le méchanisme de l´archet, etc.

3.5.2. Importance of the musical style

A sense of style and the esthetics of interpretation are other educational aspects with which the viola d'amore can help. Even nowadays one can hear many problematic performances in this respect. Studies of playing on historical instruments in "*stile antico*", i.e. in a simple style based on rich dynamic contrasts and stripped of the romantic deposits, certainly are a good means for developing one's sense of style.

One can hardly imagine something more simple than the tune by Woita in Ex.No.46. But it will turn out to be not so simple if one starts to consider its expressive potentials. The composition was written in 1680 and the dynamic

signs are not original; they come from a romantic concession. Gradations in dynamics were not known until the Mannheim School. If one played the Woita in the historical style, it would sound rather monotonous for our ears today. We suggest playing it with discrete dynamics.

A faithful (authentic) interpretation is an attempt to play the work taking into account the character of the era and the composer's style. As for baroque compositions, their slow movements should be played with dignity, emphasized by rich, but disciplined dynamics, while one must carefully choose the tempo for the dance movements (Courante, Sarabande, Gigue, Gavotte) and maintain it meticulously.

Rococo implies a fresh, vivid style with precise articulation.

Romantic style relishes the emotional aspects of the work, which includes greater rhythmic freedom.

The performance of a modern composition represents a specific message in which the author´s desires should prevail.

Leoš Janáček wrote a magnificent duo for the viola d'amore and soprano in his "Danube" Symphony (Ex.No.48). It suggests a feeling that the composer wanted to share his heart with other people.

The soloistic style is the opposite of chamber style. It permits the interpreter to display his own merits. Nevertheless, one must also respect the above mentioned principles here. If one plays a Vivaldi concerto, one must be more disciplined, while one must put more tension and passion in the Concerto by P.Hindemith.

IV. PRACTICAL STUDIES

4.1. Study Rules

The process of study can be divided into three steps:

1) The search for our weak points
2) Their analysis, correction and study (fingering, bowing)
3) Mechanising of all movements

To find out our "weak points", we suggest using a double-speed casette-recorder, recording at the higher speed and replaying at the slower one. This will show us all our weaknesses.

Simple repetition is not practice. Our technical problems manifest themselves either in bad intonation, or in an unclear sound. A profound study involves alterations of bowing, rhythm, tempo and dynamics. It pays off to work out a short etude for each group of technical problems. Difficult strokes should first be practised on open strings, so that one can fully concentrate on bow movements.

After repeatedly and consciously playing the difficult passages, which should be a part of one´s daily studies, all the movements transform themselves into an automated complex. One can then replay a whole passage faultlessly without thinking about it. This liberates us from thinking about technical problems, enabling us to concentrate to the expressiveness. If we don't track and eliminate all weaknesses, we would be on our way to dilettantism. This approach may be acceptable at music sessionsin the home, but not in concert performances.

When beginning to study an unknown composition, listening to gramophone recordings can provide an example of how the composition can be interpreted. One can study the tempo, cadences, articulation, dynamics and the style. But one should never simulate the interpretation!

The use of the tape-recorder may have another benefit for us: As any recor-

ding is usually accompanied with an increased psychic tension, it can be a good test for our nervous system.

Although the viola d'amore is primarily a solo instrument, a viola d'amore player should regularly play in a chamber ensemble, or in a duo with another instrument.

4.2. Study materials

4.2.1. The tutors

We shall only comment on the tutors that have been either widely used or those, which represent a substantial contribution to the further development of the viola d'amore. All these tutors presume that the student has mastered the violin or viola. It has also been generally accepted that the right arm requires specific training. From the view-point of musicology, these schools represent an enormous contribution to our knowledge of the whole development of viola d'amore playing , from its simple beginnings in the 18th century up to the master-level of Hindemith.

The first comprehensive work of this kind was the Louis Milandre´s *"Méthode facile pour la Viola d'amour"* op. 5, Boyer, Paris 1782. It displays author's profound knowledge of the field. In the introduction he writes, among other things, that the viola d'amore is suited for ladies to entertain themselves. He mentions the existence of trios, quartets and concertos by various composers. His opinion as to tuning is also interesting (Ex.No.9). Many extensive explanations are illustrated by examples of playing techniques. The work close with adaptations of works by Rameau, Gossec etc.

The tutor by Jan Král:*"Anleitung zum Spiel der Viola d'amore"* (A theoretical and practical textbook for violinists regarding self-study), Cranz, Vienna 1870, contains concise information on playing techniques; it is

usable even today. The student finds himself directly *"in medias res"*). The author systematically proceeds through the matter, starting with simple exercises through scales and double-stops, up to his original little compositions for viola d'amore solo.

Karl Zoeller, in his work *"A new method for the Viola d'amore"* (its origin and history and art of playing it), Lafleur, London, 1885, treats its history in detail; in several examples he demonstrates the specific of the instrument. The author also presents some of his compositions and adaptations.

The *"Die Schule für die Viola d'amore"* by M.L.Goldis, op.6, Weiberger, Wien 1916, starts with its history. In the study sections there are many interval-exercises on individual strings, scales, double-stops, flageolets and bow exercises. It is concluded with several compositions by the author.

Being an experienced soloist, Paul Shirley begins *"The Study of the Viola d'amore"*, Carl Fischer, N.Y.,1920, with a systematic sequence of finger-exercises aimed at adapting fingers to the unusual string distribution. There are also exercises for changing strings and positions, and the necessary scales. There is also a review of viola d'amore literature at the end. It can be considered as the first modern tutor for the viola d'amore.

A.Corras, in *"La Métode de la Viole d'amour"*, Senart, Paris, 1924, after some general considerations as to the development and characteristics of the instrument, presents a comprehensive review of scales, chords and strokes with methodical directives. There are also several of the author's adaptations and the solo for viola d'amore from "Les Huguenots".

The *"Technique de la Viole d'amour suivie de 24 Préludes"* by Henri Casadesus, Salabert, Paris, 1931, is an important contribution to the viola d'amore playing technique. After preliminary exercises, a series of 24

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*)in the thick of it

preludes follows, which includes all the 24 major and minor keys. In this way the composer wanted to demonstrate the possibility of a universal use of the viola d'amore in contemporary music.

The tutor by Karl Stumpf: *"Neue Schule für Viola d'amore"*, Österreich. Bundesverlag, Wien, 1952, contains all necessary data on the history and the state-of-art of the instrument - its development, technical data, tuning and literature. The choice of exercises guides the player from easy beginnings to the three-and four-voice chordal playing and modern atonal harmonies. Besides several of the author's solo-compositions there are also the viola d'amore soli from some operas (Pfitzner, Massenet, Meyerbeer) and from the St.John Passion by J.S.Bach.

4.2.2. Some recommended etudes

The study material of an instrumentalist consists of three parts: technical exercises, etudes and the compositions for performances.

Exercises made of difficult excerpts of the compositions to be studied, now often substitute for etudes, mainly for use of talented students (cf.4.1.). In this way one can not only study a difficult place of the composition, but such a pseudo-etude may also be adapted for some technical problem involving either the left or right arm. These exercises can be modified in infinitely many ways as to their rhythm, bowing and dynamics, which is not possible in most etudes.

The following review of violin etudes that have proved just as convenient for the viola d'amore are denoted by their technical level, I through IV. Their fingering must naturally be adjusted for the viola d'amore.

F.Wohlfahrt: *70 elementary etudes*, op.45 and op.54: the No.2/C-major, No.22/c-major, 24/d-major, No.50/c-major (level I)

R.Kreutzer: *42 etudes for violin*; most important is etude No.9, which is highly recommended for daily studies (level II). It should be played by

memory, both in the original pitch and one octave lower. We recommend these strokes:

a) legato over 4 bars, *a quarter note* =116, in the original pitch

b) detaché at the frog, played by the wrist, *a quarter note* =108, one octave lower

c) sautillé in the middle of the bow, *a quarter note* =120, in the original pitch

d) the Paganini stroke (Ex.No.50)

Etude No.13/A-major is used for achieving a fine stroke; bars 5-21 should be played one octave lower.

Dancla, *Etuden*, op.77; No.13/D-major, last eight bars, should be played one octave lower (level III).

Etude No.2 by Jakob Dont *Gradus ad Parnasus*, which is much appreciated by violinists, can be used by viola d'amore players as a preliminary finger-exercise for Caprices by Paganini (level III). It is not easy to find a suitable fingering for it, but if one practices it by memory in a quick tempo for several months, it will produce considerable results.

For those who have already attained the master-level (Concerto by P.Hindemith), the *Caprices* by N.Paganini are irreplaceable study material (level IV). What Etude No.9 by Kreutzer represents for the intermediate level, Capriccio No.9 is for the master-level. Naturally, the beginning and the end (the arpeggio over 4 octaves) should be played one octave lower, but in the original tempo. The ultimate goal is a flawless reproduction of the whole piece at *a quarter note* =152. This requires several months of daily study.

There are still very few original etudes for the viola d'amore that would meet the contemporary technical requirements. Of the highly interesting "*24 Preludes*" by H.Casadesus (cf.4.2.1.), which are written with a piano accompaniment, several are suited for daily study (level III).

The *Etudes-Caprices* for viola d'amore solo by the Italian soloist and composer Aurelio Arcidiacono (Editioni Musicali Mercurio Roma) are marked

by atonal harmony and a demanding playing technique.

The three "*Concert Preludes*" by František Slavík (see Appendix), especially the Double Trill Prelude, try to utilize the instrument's upper registers and the less-known instrument's capacity for short concert pieces.

Finally, it should be mentioned that there are very few study materials among the works published lately for the viola d'amore. The increased technical demands placed on the player of the 20th century music, a standard set by P.Hindemith, require an extension of the study-literature via new publications, as in the case of the violin.

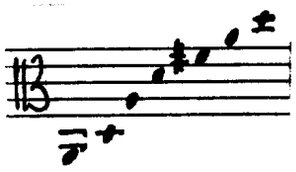
Some data for composers

Should one have to find out, how many chords and chord combinations can be played on the viola d'amore, it would be a computer-programming task. The abundance of chords follows from the large number of strings, while the complexity of the chords is related to the strings' unconventional tuning.

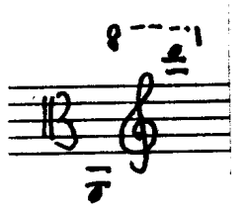
According to Berck's monograph, the literature for the viola d'amore comprises more than one thousand works. This is an evivence that the viola d'amore - not being icluded in the symphonic orchestra - has still been attracting considerable attention during the centuries, and is attracting it even today.

The following lines should facilitate composers' understanding of the complex variety of potentials the viola d'amore is offering.

The basic tuning:



The tone range:



The *una voce* technique of both is roughly the same as that for the violin or viola. As to the modulation limits, most sonorous keys are the ones which are close to the basic tuning :

major -A,D,G,C,F,B

minor - f-*sharp*, b, e, a, d, g.

Example No.51, shows various double-stop and chord combinations. The slanted line represents any tone of the chromatic scale. Much practical data can be excerpted from published compositions (e.g. Hindemith's *Kleine Sonate*, Frank Martin's *Sonata da chiesa* and Arcidiacono's *Due Movimenti per Viola d'amore e Viola* etc.).

To conclude, let me mention an experience of mine. Soon after the Second World War, I wrote to Bohuslav Martinů, a Czech composer living in Basle at that time, asking him to write something for the viola d'amore. His reply was friendly, but negative. "As you know," wrote he, "every author in the field of the arts is trying to disseminate his works as much as possible. Who would play my composition for the viola d´amore?"

Now, 30 years later, this argument would not be valid any more. Every composition written for this instrument is followed with excited interest by musicians, not only in Europe, but also in the USA. And this tendency is not at its end!

THE EPILOGUE

A decalogue of a viola d´amore player:

1. It is better to take a rest than to practise thoughtlessly
2. If you must concentrate on the execution, you haven´t finished your studies of the work yet
3. Constantly pay attention to intonation!
4. Any tension in any body part is harmful
5. Elasticity of the left hand´s fingers is more important than their pressure
6. As you are getting on in years, you must devote more time to the bow-technique
7. You should keep bow noise (rustle) down by observing the bow/string contact site
8. Play by memory all the studied material, not only the works intended for performance!
9. The fuller your fortissimos and the finer pianissimos, the stronger will be the impression on the audience
10. Autosuggestion is the best means against stage-fright.

Dear colleagues, dear viola d´amore lovers!
Taking my leave, I would heartily like to pronounce this wish:
May the noblest musical instrument in history provide you with a reliable shield against all life´s distress: one must devote lots of work into playing the viola d´amore, but this work may transform itself into huge mental power.

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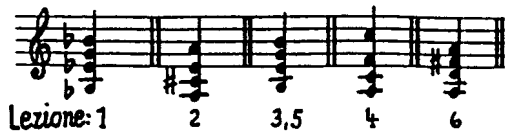
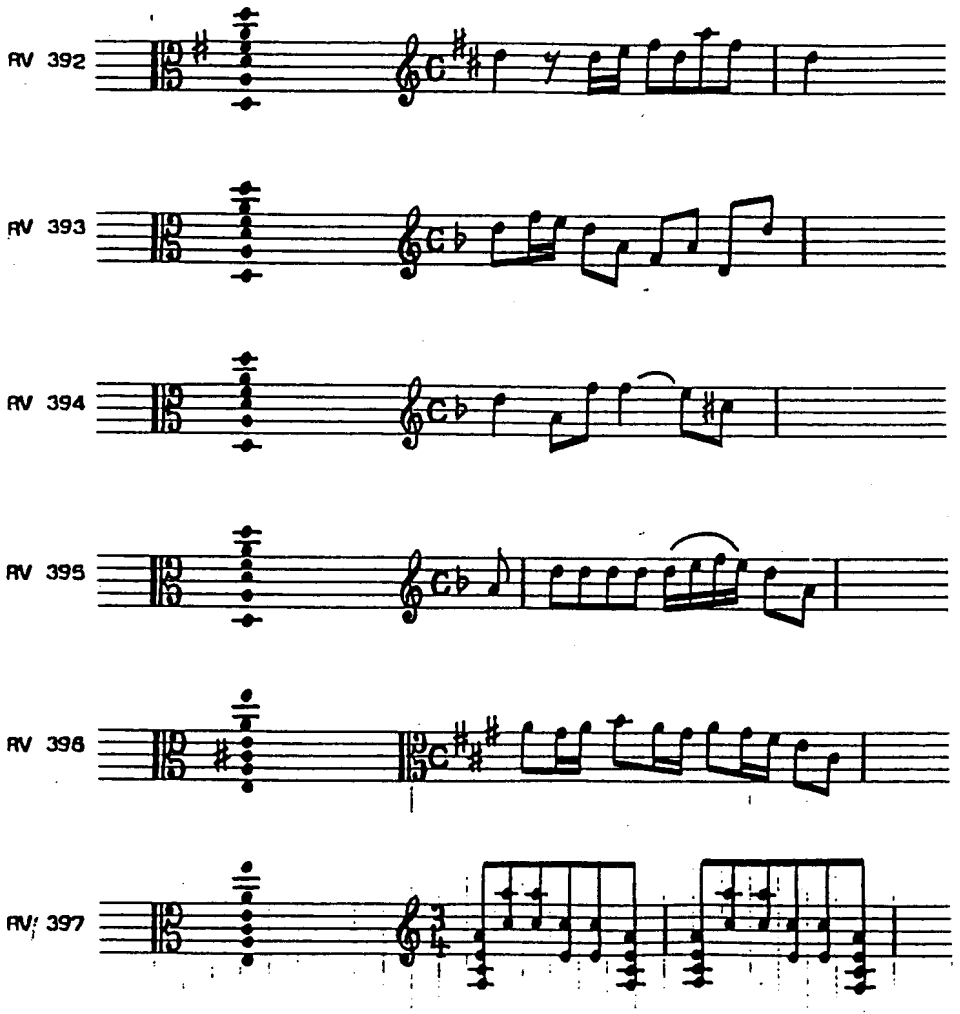
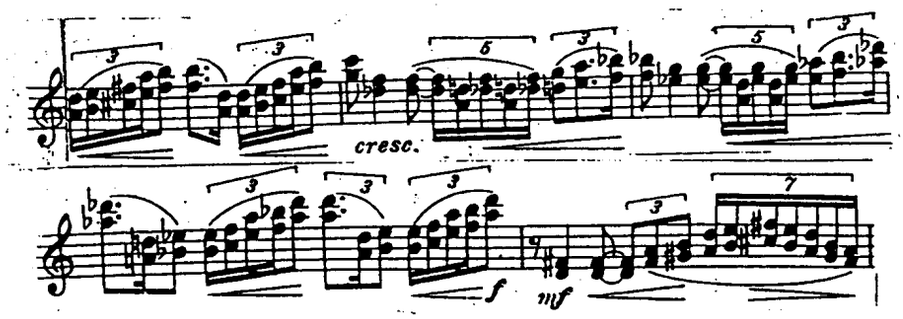
MUSICAL EXAMPLES



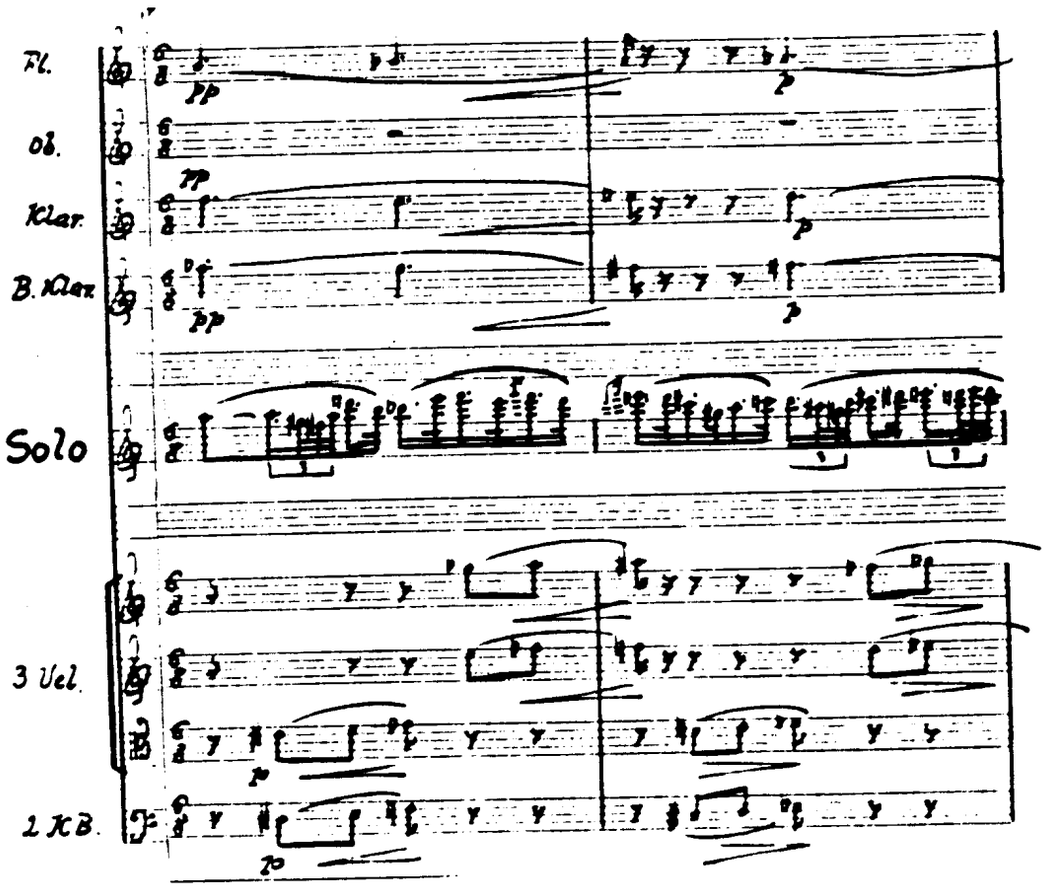
No.1. Ariosti´s tunings (*Sei Lezioni*)



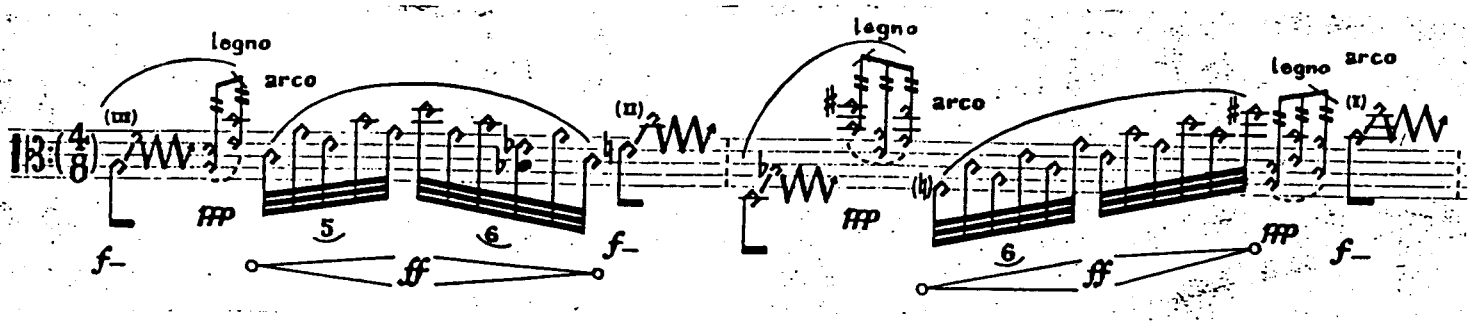
No.2. A.Vivaldi: Concertos for the six-stringed viola d'amore



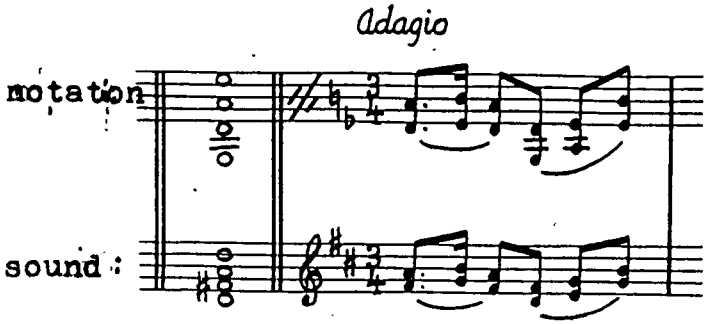
No.3.An extract from the "Kleine Sonate"op.25, No.2 by Paul Hindemith



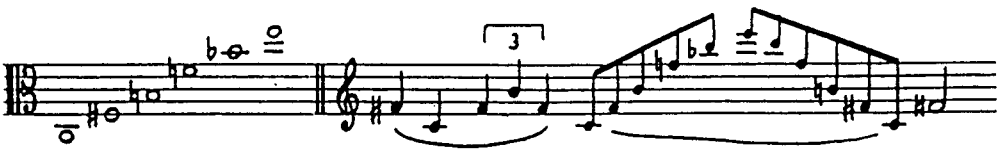
No.4. An extract from the Concerto op.46,No.1,Kammermusik No.6 by P.Hindemith



No.5.An excerpt of a composition by S. Sciarrino

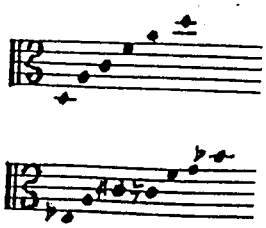


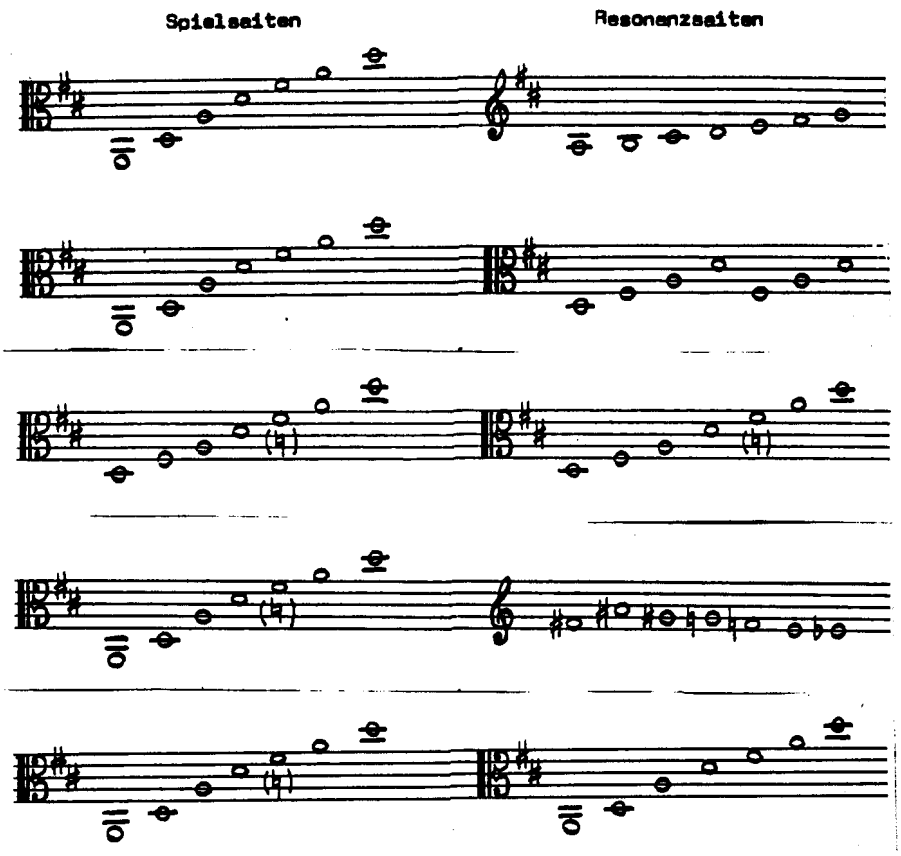
No.6. J.V.Stamic: Notturno for viola d'amore and winds
(the notation of the violin fingering with mixed signature)



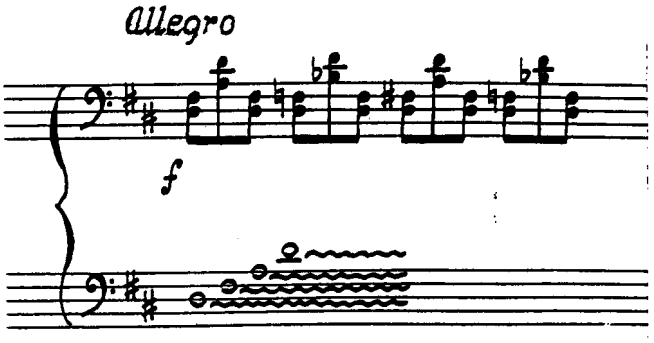
No.7. H.Brant: "Quombex". An example of scordatura in modern literature.

No.8. O.G.Blarr:"Threnos II".
An example of modern tuning of playing
and sympathetic strings (1984)

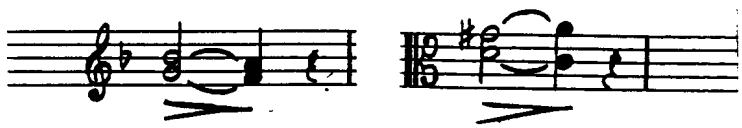




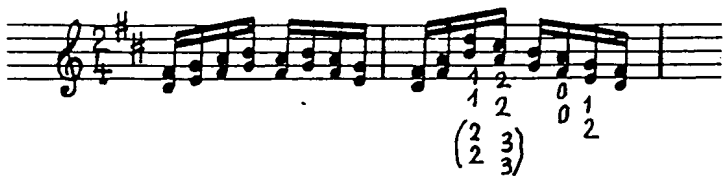
No.9. The development of tuning since the end of the 18th century



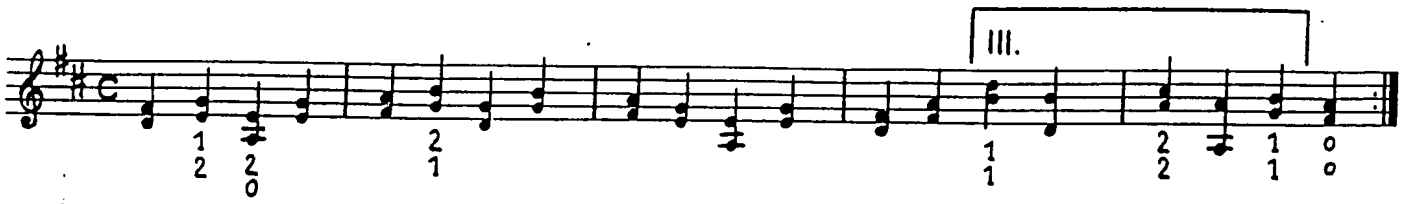
No.10.An apparent dissonance-effect of the sympathetic strings



No.11. Intonation during the dominant-tonic transition of double-stops.
In the descending minor second, the "*B-flat*" must be as low as possible, while in the rising minor second the *G-sharp* should be as high as possible.

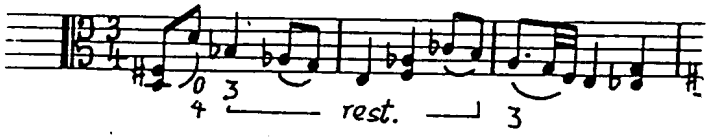


No.12. H.Casadesus: Praeludium No.XXI, the beginning

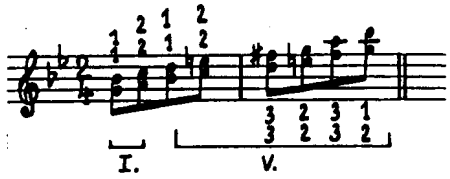


No.13. An intonation excercise for the foregoing example

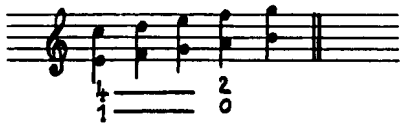
No.14. P.Hindemith:Sonata op.25,No.2, the slow movement. A bad fingering.



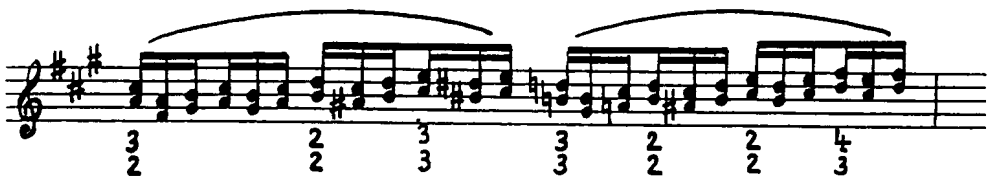
No.15. Miloš Štědroň: Five villanels for viola d'amore and dulcimer
The same fingering (flageolet) as in No.14. is correctly used here.



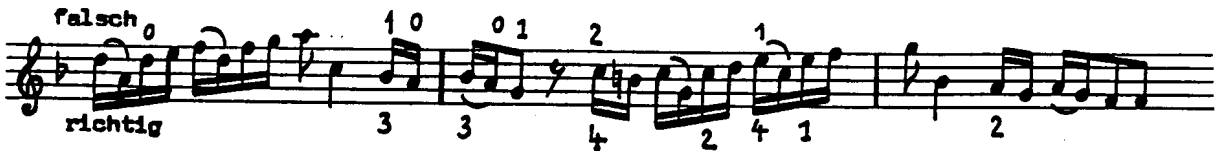
No.16.
The fingering for a scale of thirds



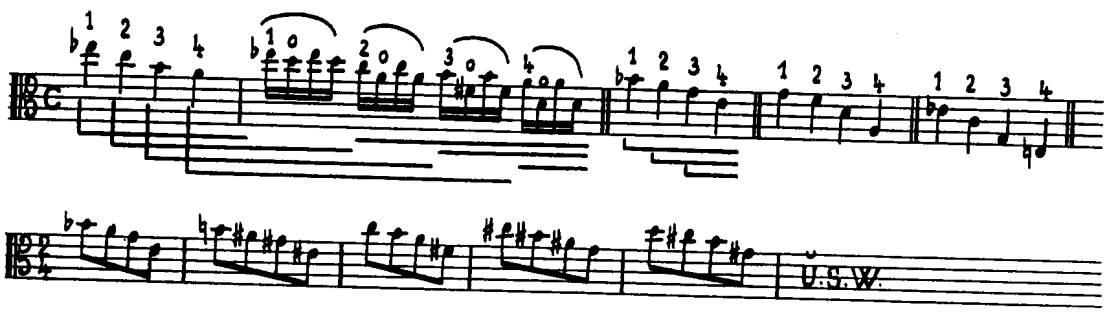
No.17.
The fingering for a scale of sixths



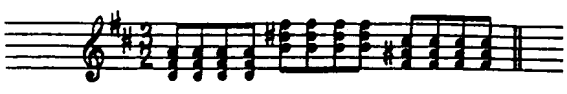
No.18. Thirds with fast changing of position (Slavík)



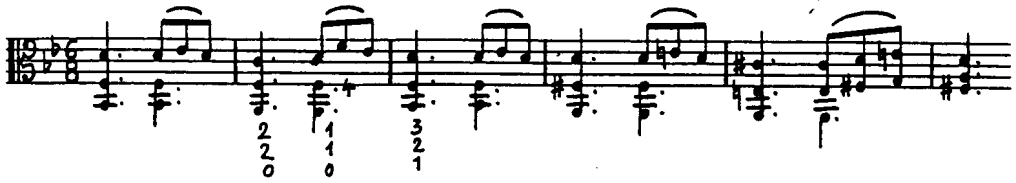
No.19.Fingering in the 1st position: above incorrect, below correct
(Vivaldi, Concerto d-minor)



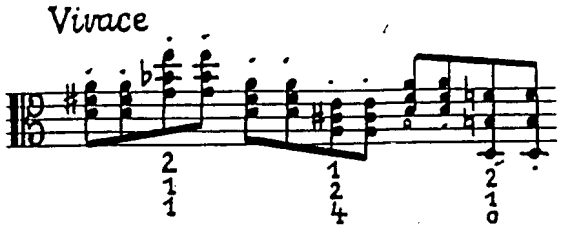
No.20. Geminiani's fingering



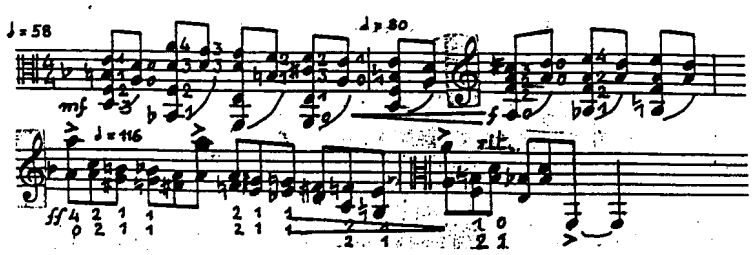
No.21.
P.Hindemith, Sonata op.25, No.2,
the last movement - triads



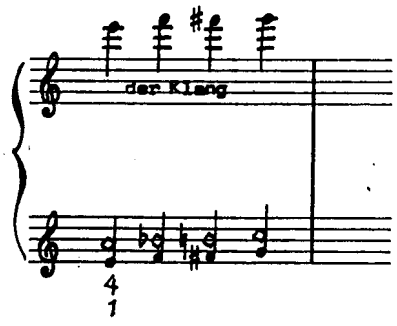
No.22.F.Slavík: Preludium a tré. An example of 3-voice chordal playing.



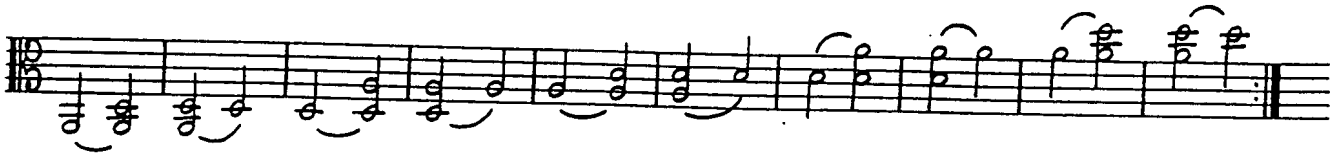
No.23. J.Novák: Sonata. Triads in a fast tempo.



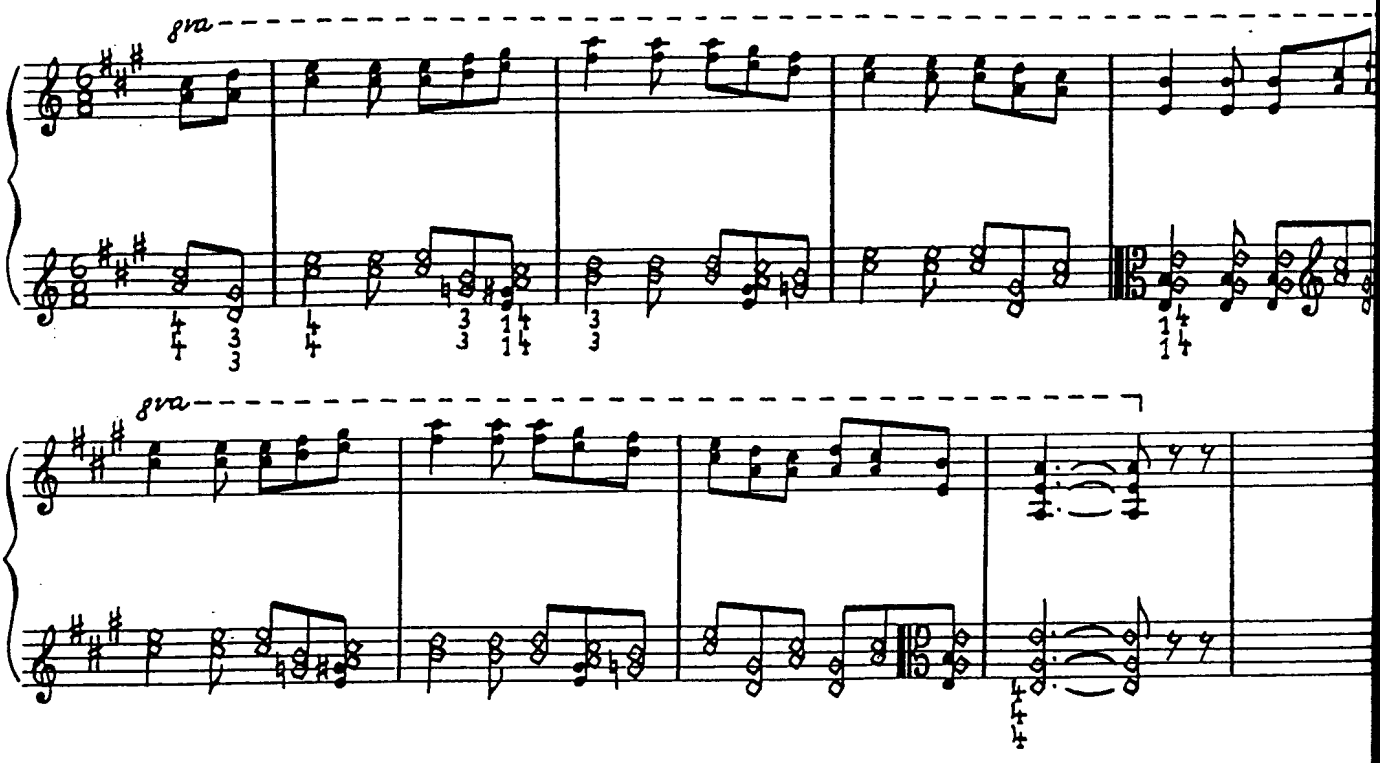
No.24. F.Slavík: Variace na téma Františka Bendy.
Four-voice chords merging into double-stops.



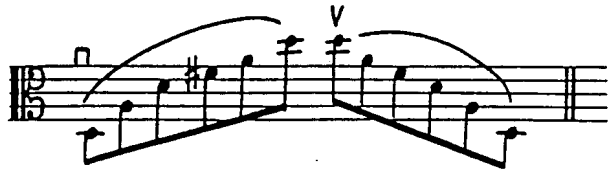
No.25.
Artificial flageolets -
the sound and the notation



No.27. An exercise developing an awareness of the bow position

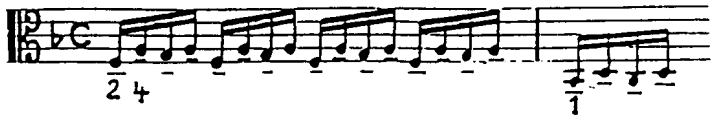


No.26. N.Paganini: Rondo from the Sonata No. XII. Flageolets.

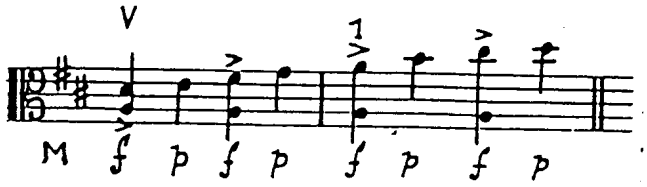


No.28. The bowing for a rising and a descending sequence of notes

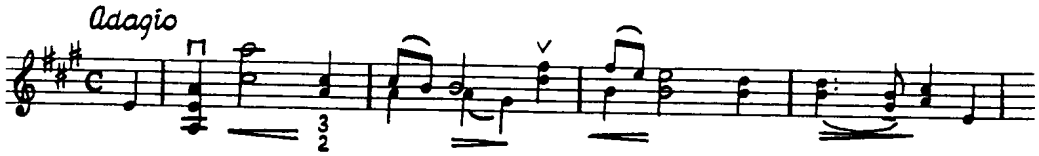
No.29. Short, fast notes played at the frog (R.Kreutzer)



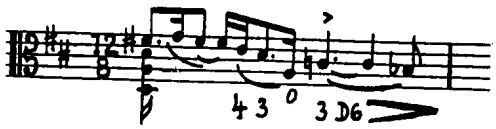
No.30. R.Kreutzer: Etude No.9. Playing with the wrist at the frog.



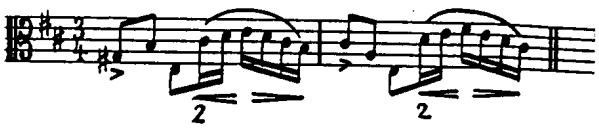
No.31. The accented up-stroke in forte



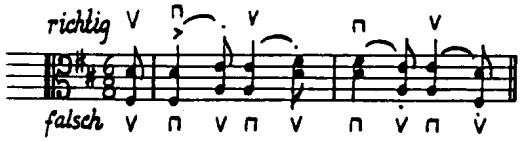
No.32. Václav Stamic: String quartet for the viola d'amore, violin, viola and violoncello,the slow movement. Preclassic music contains a lot of sophisticated melodies



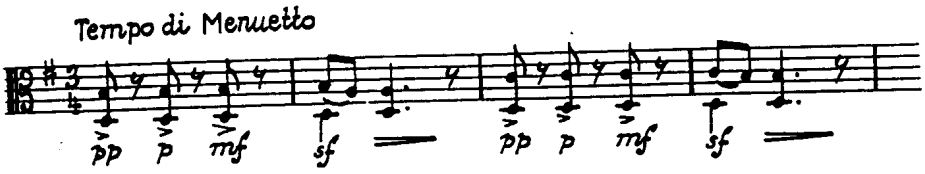
No.33. Vítězslav Novák: Melancholická serenáda. The 3rd finger on D6 stresses the dramatic character of the melody



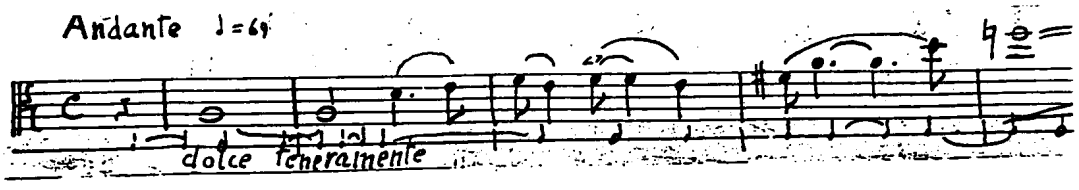
No.34. J.S.Bach: Courate from the Suite No.VI. for the viola pomposa. Dynamic used to emphasize the melodic line.



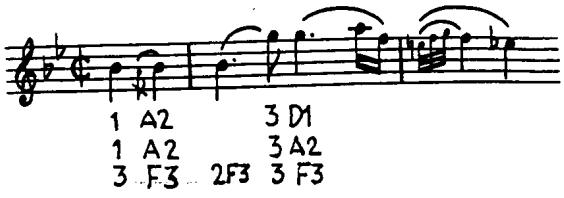
No.35. C.Stamitz: Concerto No.1. Various possible ways of accenting (above - correctly, below - incorrectly)



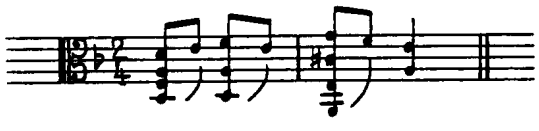
No.36. J.Haydn: String trio. Graduating the impression by means of an hierarchy of accents



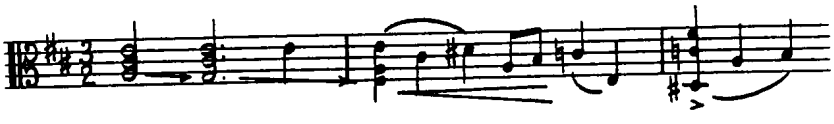
No.37.F.Martin: Sonata da chiesa, the beginning. The importance of infra-dynamics on the opening tone.



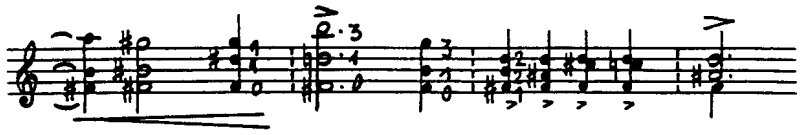
No.38. W.A.Mozart: Sonata for violin No.10, the slow movement. Three different fingerings change the tone-colour



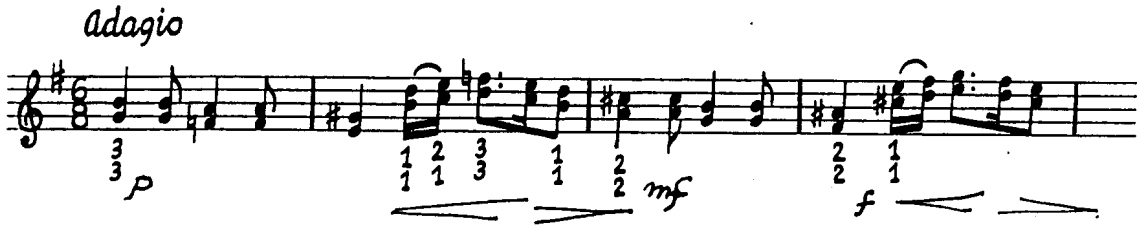
No.39. Jan Král: Česká lidová píseň (a Bohemian folk-song), the opening. A sequence of chords in a simple harmony.



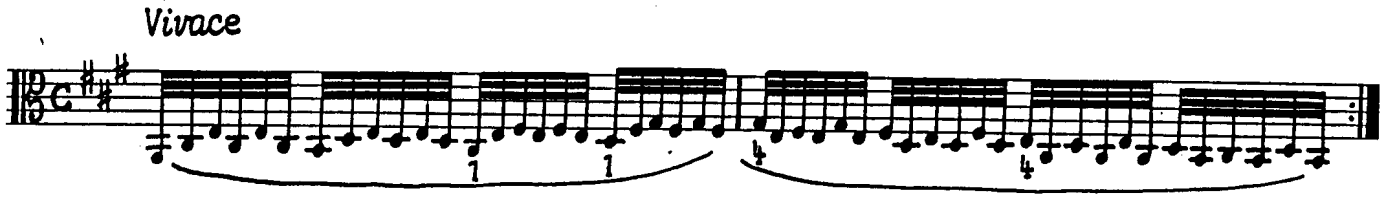
No.40. J.S.Bach: Sarabanda from the Suite No.VI. for the viola pomposa. Dynamic support of the harmonic tension.



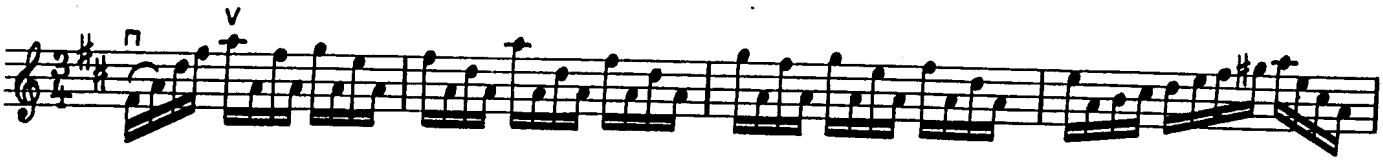
No.41. F.Martin: Sonata da chiesa, cadenza. A complicated harmony built on the open F#3-string



No.42. J.V.Stamitz: Trio for viola d'amore, viola da gamba and bass. The harmony induces tension.

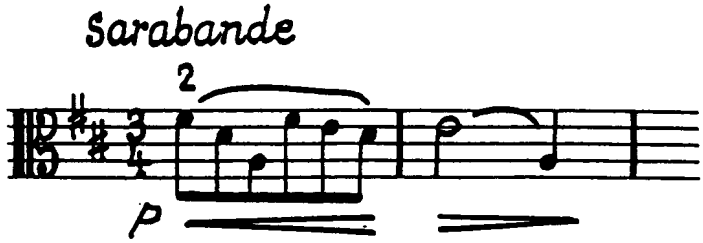


No.43. Laxity and lightness of fingers

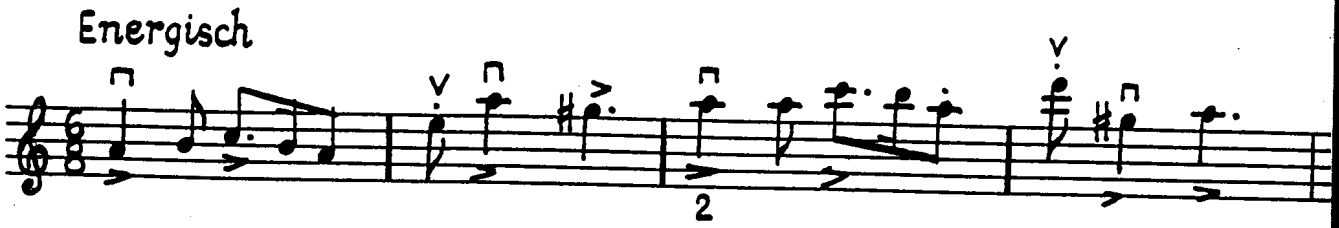


No.44. C.Stamitz, Sonata in D, Menuet, the last variation.
String-to-string transitions.

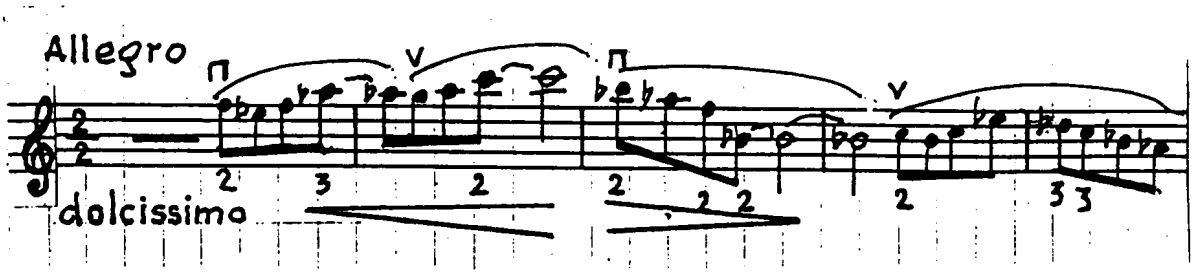
No.45. Vivaldi: Concerto D major. Transitions over three strings.



No.46. D.Woita: Parthia amabilis (viola pardessus, viola d'amore, viola da gamba, bass). Moving melodies in old master's compositions, especially in their slow movements.

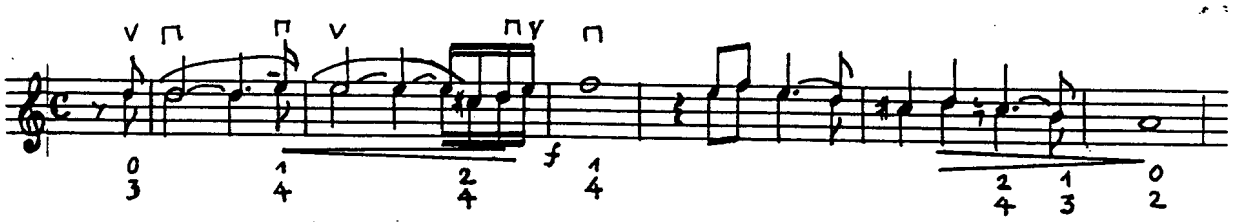


No.47. G.Vitali-Borisovski: Suite (two violas d'amore, harp, viola da gamba, bass). A spontaneous eruption into a dancing mood.

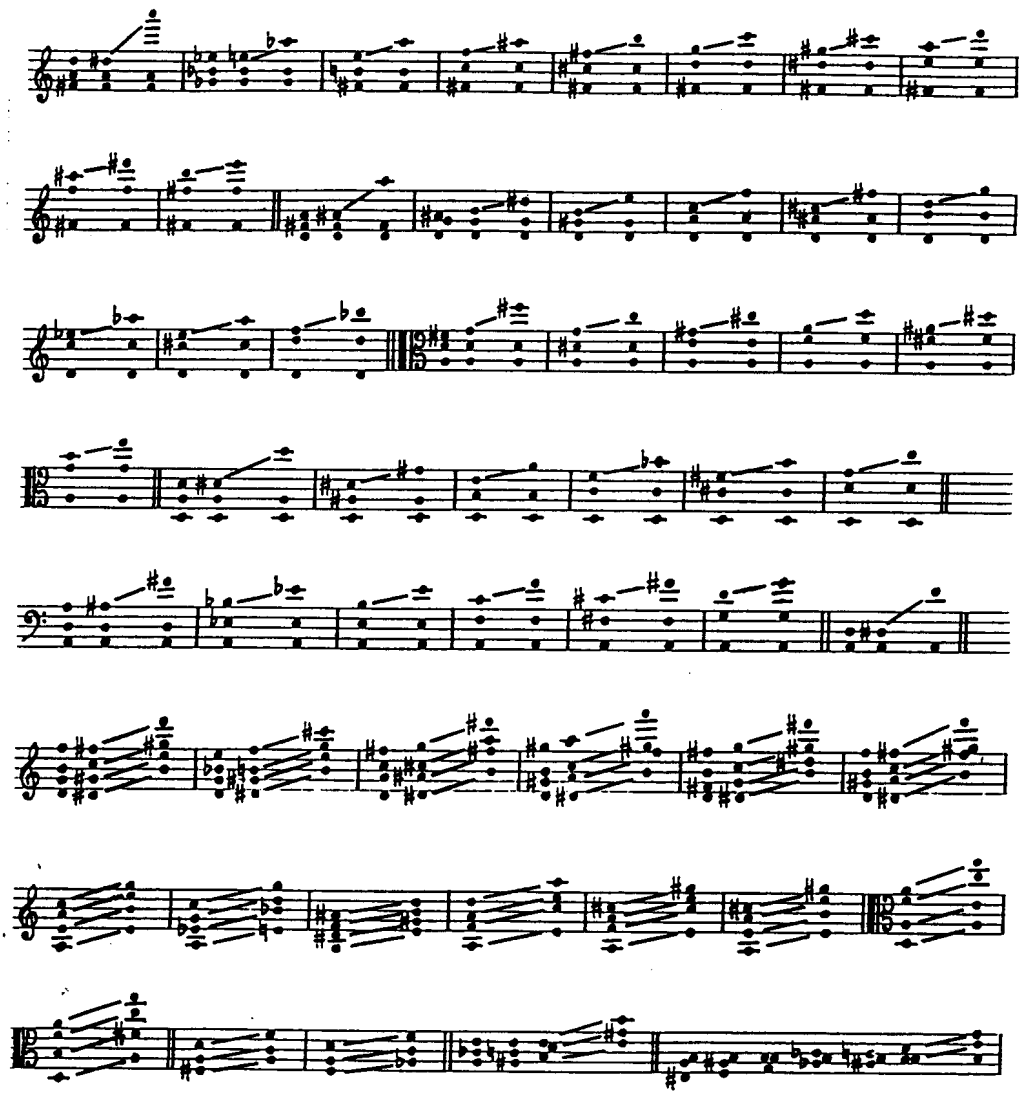


No.48. L.Janáček, Symphony "Danube", duo for soprano and viola d'amore. An unlimited inwardness.

No.49. R.Kreutzer, etude No.9. Paganini's bow-stroke.



No.50. L.Couperin: Trois Fantaisies pour dessus de Viole.
The unisono double-stops emphasize the melody.



No.51. The three and 4-voice chords that can be played on the viola d´amore (information for composers)

FIGURES AND TABLES

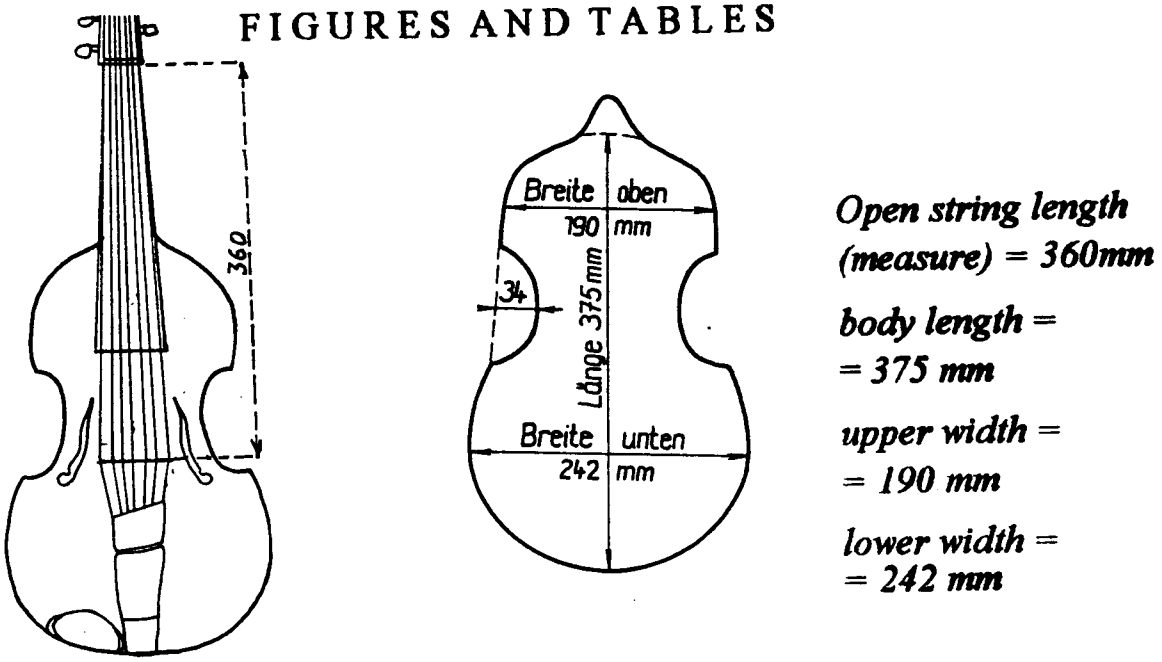


Fig.1.The main dimensions of classical instruments

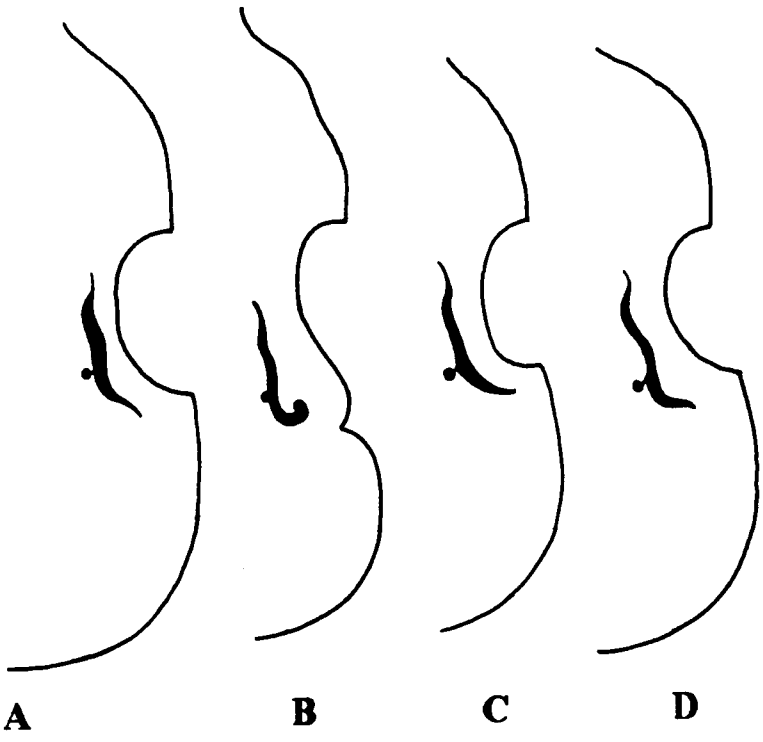


Fig.2.Characteristic shapes of violas d'amore
A- Italy 18th century B- Germany 17th century C- Bohemia 18th century
D- France 18th century

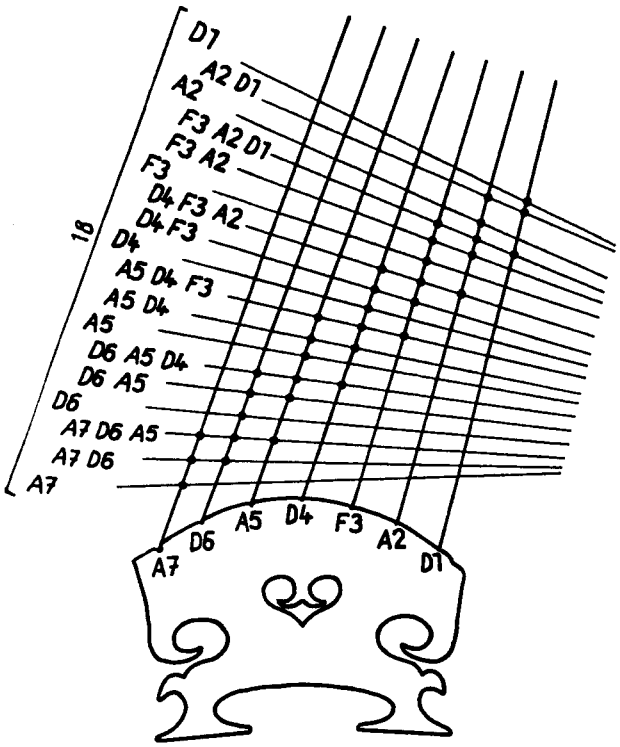


Fig.9. Eighteen angles of the bow

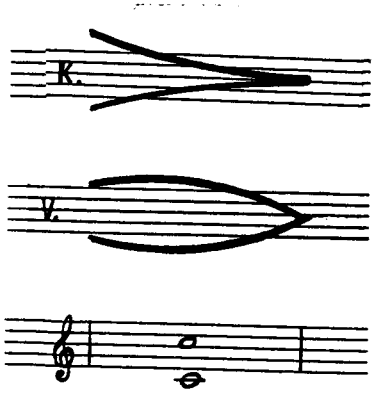


Fig.14. Infradynamics of the piano and the viola d'amore; only the latter can be modulated

black - bow pressure

white - stroke length

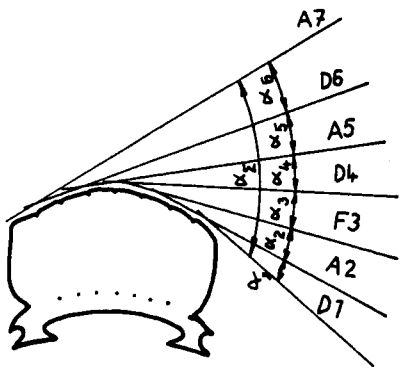


Fig.12. The bow-angle differences

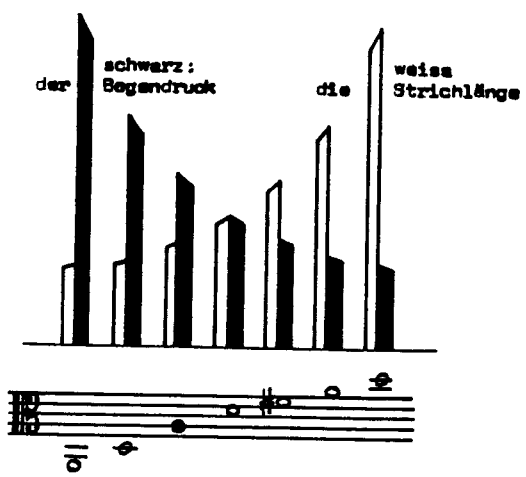


Fig.13.
Bow pressure and speed
(stroke length) on individual strings

Tab.1. **Dimensions of some typical instruments** [mm]; *EV-Engl.violett*

	STRINGS		LENGTH		WIDTH		RIB		M
	play.	*symp.*	*total*	*body*	*low*	*high*	*low*	*high*	*open str.l.*
AMAN Georg									
Augsburg, 1701	7	7	755	377	230	175	50	50	349
EBERLE, Jan Oldřich									
Praha, 1727, *EV*	7	14	910	444	280	224	58	46	394
Praha, 1732	7	7	787	408	241	187	53	43	359
Praha, 1744	7	7	760	407	240	188	52	45	359
Praha, 1747	7	7	770	412	240	187	53	47	368
Praha, 1758	7	7	785	425	241	193	54	44	370
HELLMER, Jan Jiří									
Praha, 1728	7	7	410	242	190	190	47	47	360
Praha, 1738	7	7	805	415	241	192	55	47	358
Praha, 1740	7	7	766	405	239	186	48	46	355
Hellmer, Karel Josef									
Praha, 1768	7	7	775	412	212	191	50	53	373
MAYR, Andreas Ferdinand									
Salzburg,1719 *EV*	7	14	900	465	267	214	56	51	392
STADLMANN, Michael Ignaz									
Vienna, 1717	7	7	780	400	224	171	53	48	359
RAUCH, Sebastian									
Litoměřice,1776	7	7	753	397	232	184	52	44	348
RAUCH, Christoph									
Chomutov, 1771	7	7	765	415	239	190	50	46	366
HULÍNSKÝ, Tomáš Andreas									
Praha, 1769	7	7	780	410	240	184	56	51	350
LASKE, Josef Antonín									
Praha, 1783	7	7	760	405	239	186	61	46	360
WILLER, Jan Michael									
Praha, 1787	6	6	715	381	224	172	60	38	333
KULÍK, Jan									
Praha, 1830	7	7	764	410	238	183	58	52	355
DVOŘÁK, Karel B.									
Praha,about 1890	7	7	815	418	231	191	60	51	392
Dtto, *EV*	7	14	920	440	282	214	59	51	411

Tab.5. A comparison of tone formation in a common-type (violin, viola) and a resonance-type instrument (viola d'amore, baryton)

	Common type	Resonance type
Tone origin:	Agitating a playing string with the bow	Agitating a playing string with the bow
Tone amplification:	As acoustic waves in the air contained in the instrument's body	The same, with the additional effect of the resounding of the sypathetic strings
Tone refining:	A consonance of overtones generated by the vibration of the individual parts of the body	The sympathetic strings act as an additional source of body vibrations, making their spectrum richer

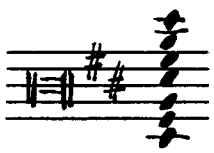
Tab.6. Axial distances of strings and the fingerboard width

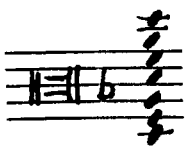
		Viola	Viola d'amore
String distance:	*at the nut*	5.5 - 6	4.5 - 5.5
	at the bridge	12 - 13	10 - 10.5
Fingerboard width:	*at the nut*	25 - 28	35 - 40
	at the edge	45 - 50	52 - 60

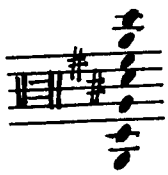
Tab.2. **Strings' diameters** [mm]

String: *symbol*	*pitch*	**Trade mark:** *DOMINANT - SUPERFLEXIBLE - LANOSTRA* *(Vienna)*	*(Vienna)*	*(Ostrava)*
D1	d^2	0.2	0.25	0.25
A2	a^1	0.55	0.35	0.35
F3	f^1-sharp	0.6	0.47	0.4
D4	d^1	0.7	0.55	0.6
A5	a	0.75	0.56	0.65
D6	d	0.85	0.87	0.9
A7	A	1.15	1.20	1.15

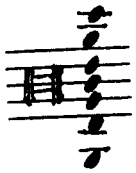
Tab.3. The playing strings' tunings used today:

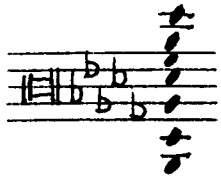
Narrow D-major: 

Narrow d-minor: 

Wide D-major: 

Wide d-minor: 

Wide a-minor (Hindemith): 

Wide D-flat major (Reissig): 

Tab.7. **Fingerings used in diatonic scales**

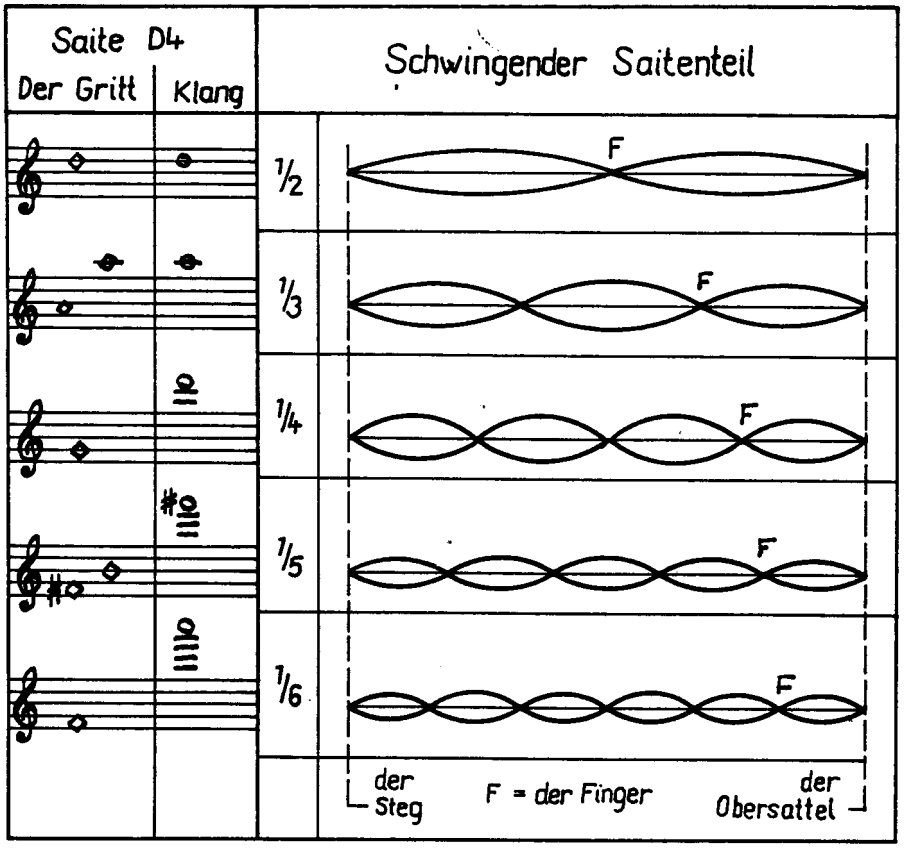
The A-major scale over three octaves:	The F-major scale of thirds:
D1.....12312344	
A2.....0123123	1224124
F3.....01	121213123
D4.....01	01222
A5.....012	.012123
D6.....0123	.234
A7.012	

The underlined fingerings are quint-touches.

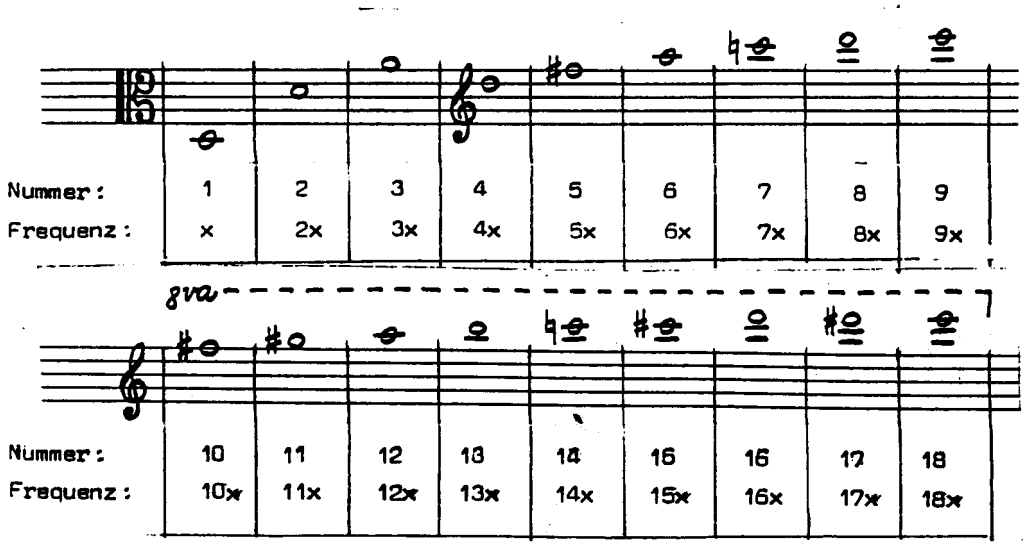
Tab.4. **Optimum bow characteristics**

	Weight [g]	Width of the hairs [mm]
Higher strings	55 - 60	11 - 11.5
Middle strings	60 - 70	11.5 - 12.5
Lower strings	70	12.5
A reasonable trade-off:	**60 - 65**	**11.5 - 12**

Tab. 8. The overtones and swinging modes of the natural flageolettes which can be played on the D4 string
(fingering, the tone, swinging mode; F- finger position)



Tab.9. Overtones of the D6 string *(harmonic's order, frequency multiple)*



THREE CAPRICES

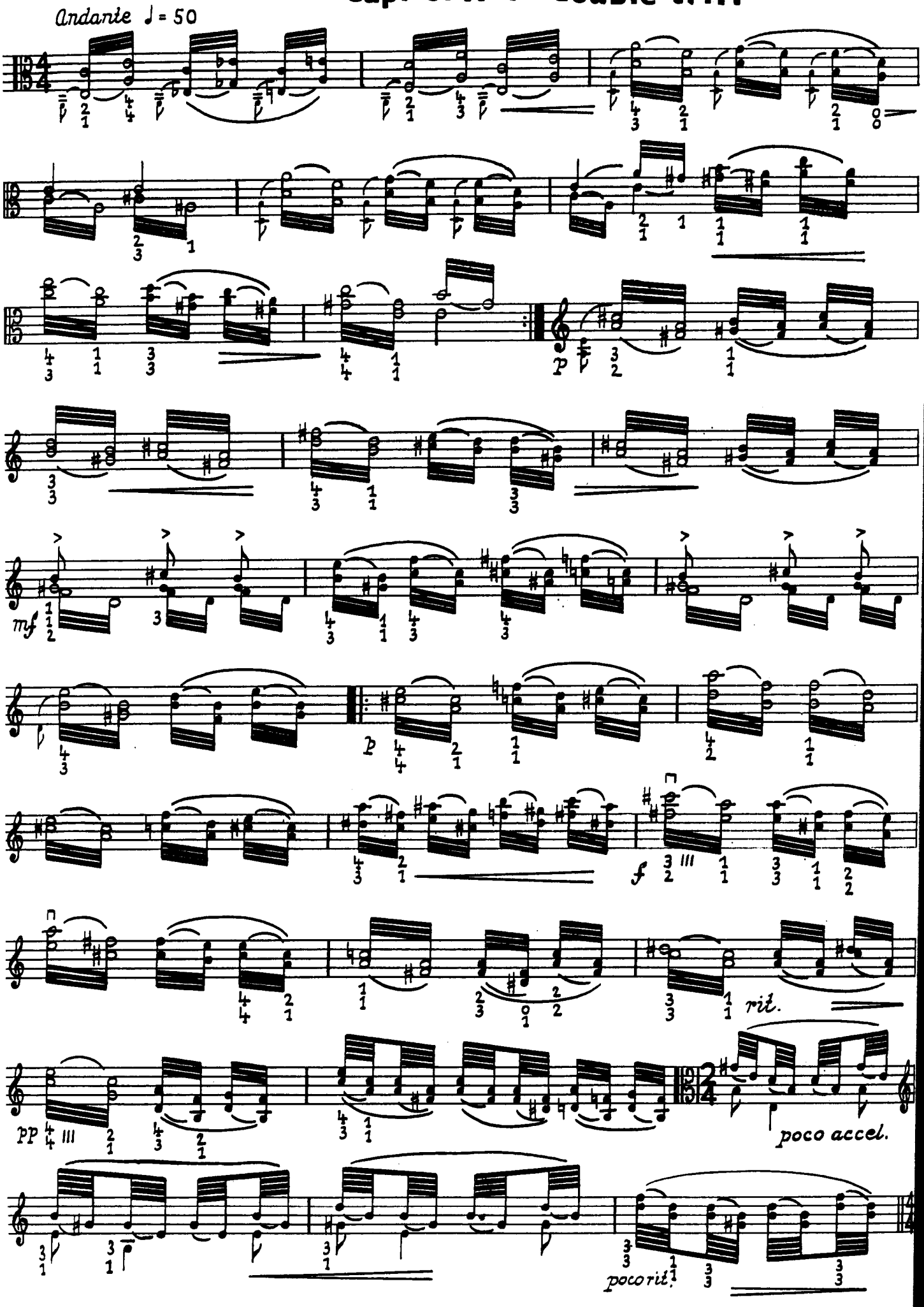
FOR VIOLA D'AMORE SOLO

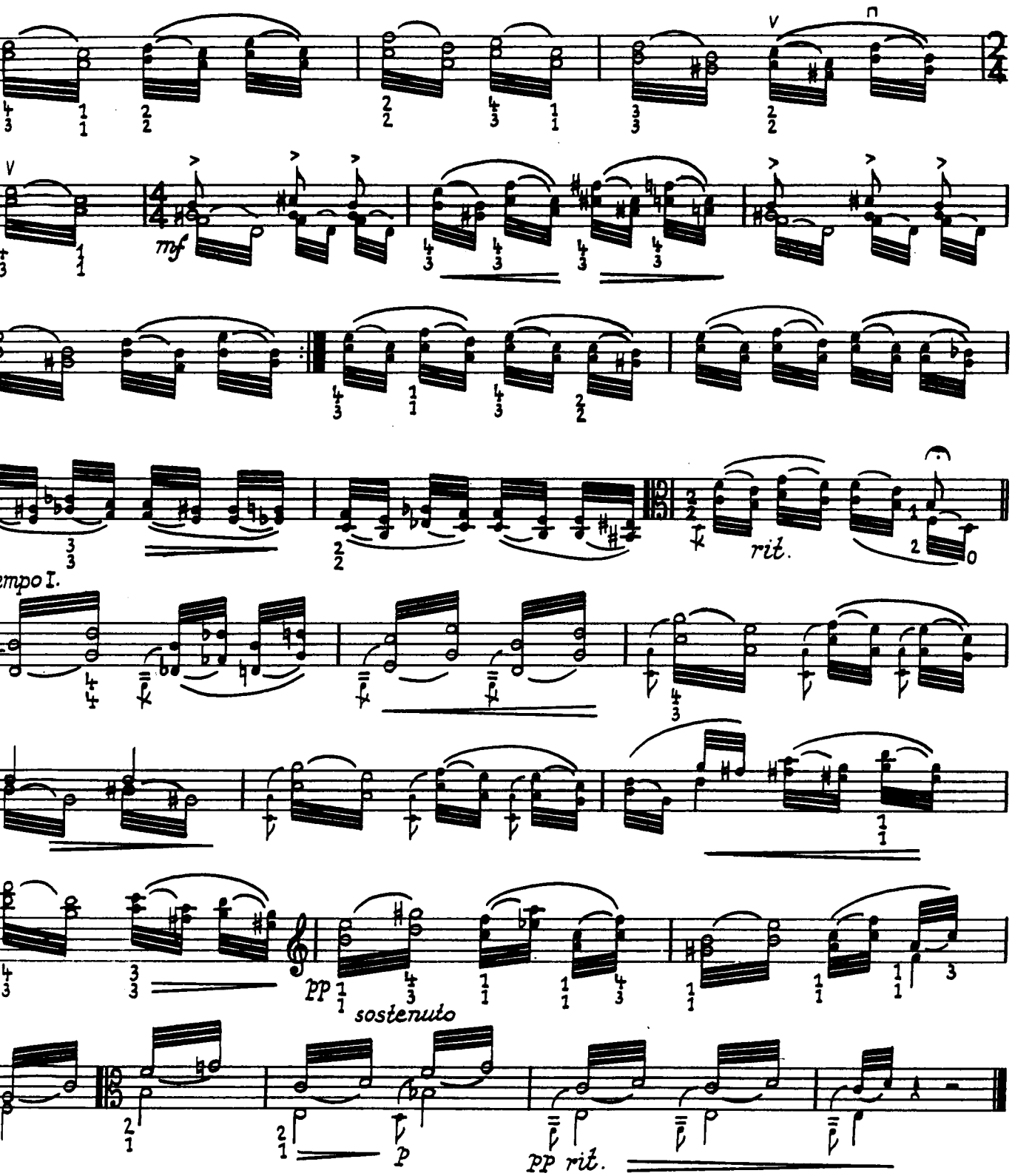
Op 8a

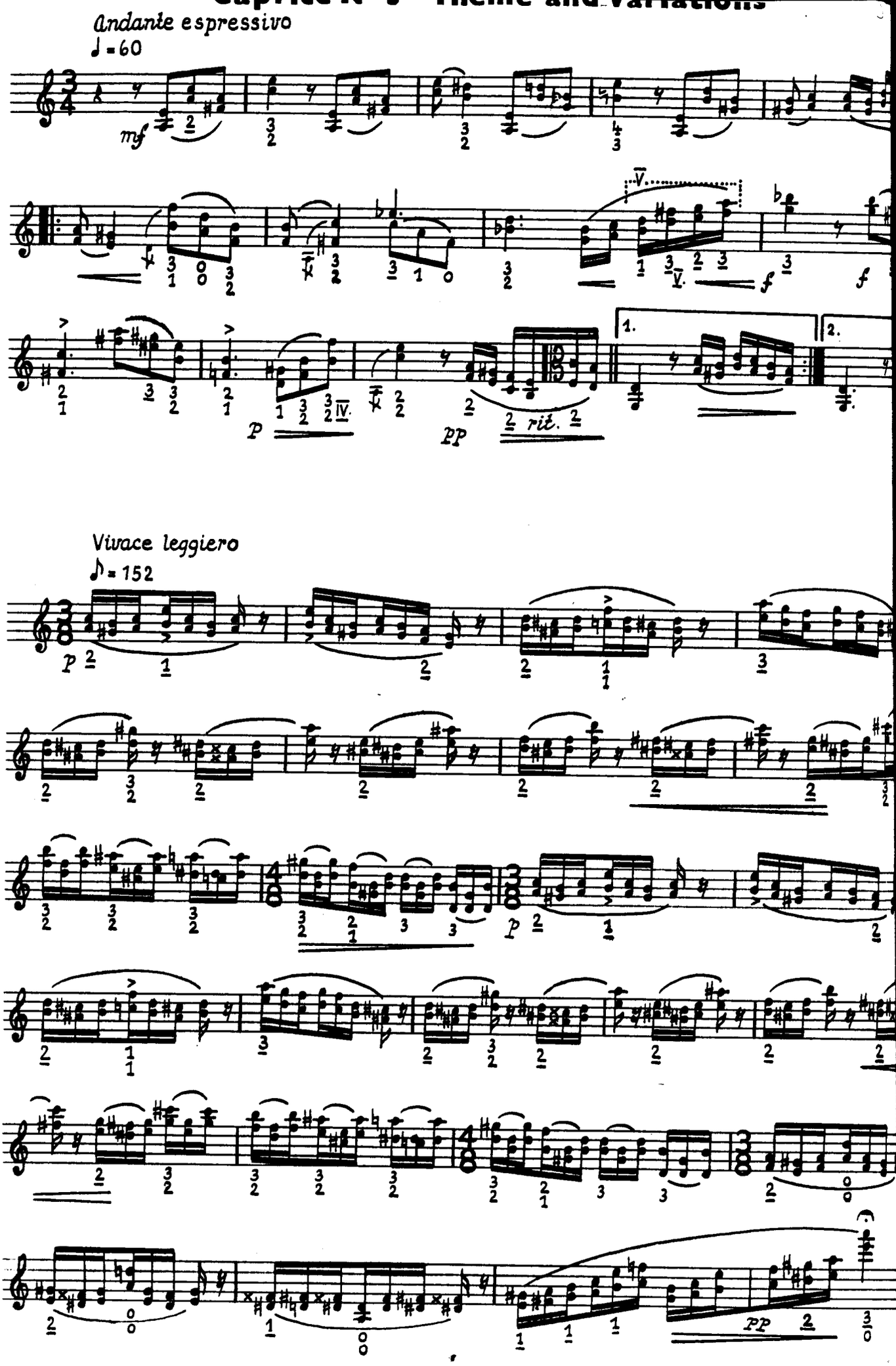
BY FRAN SLAVÍK

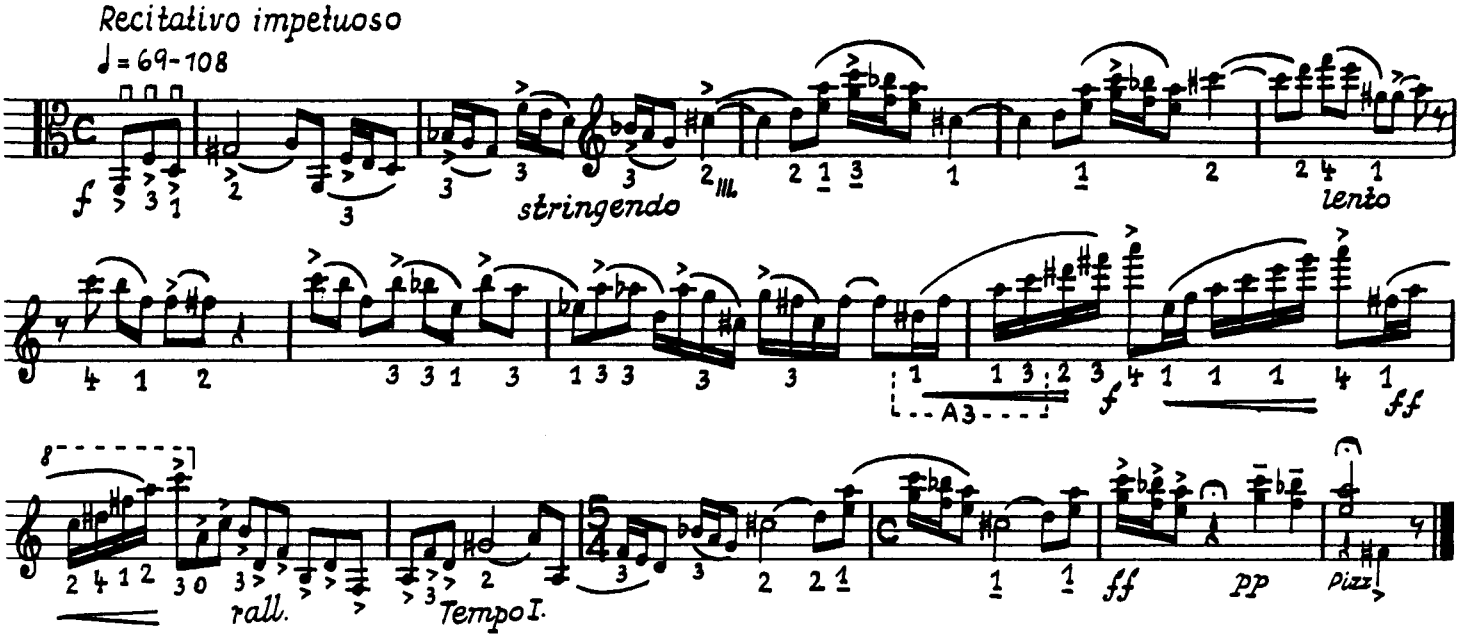
Brno 1987

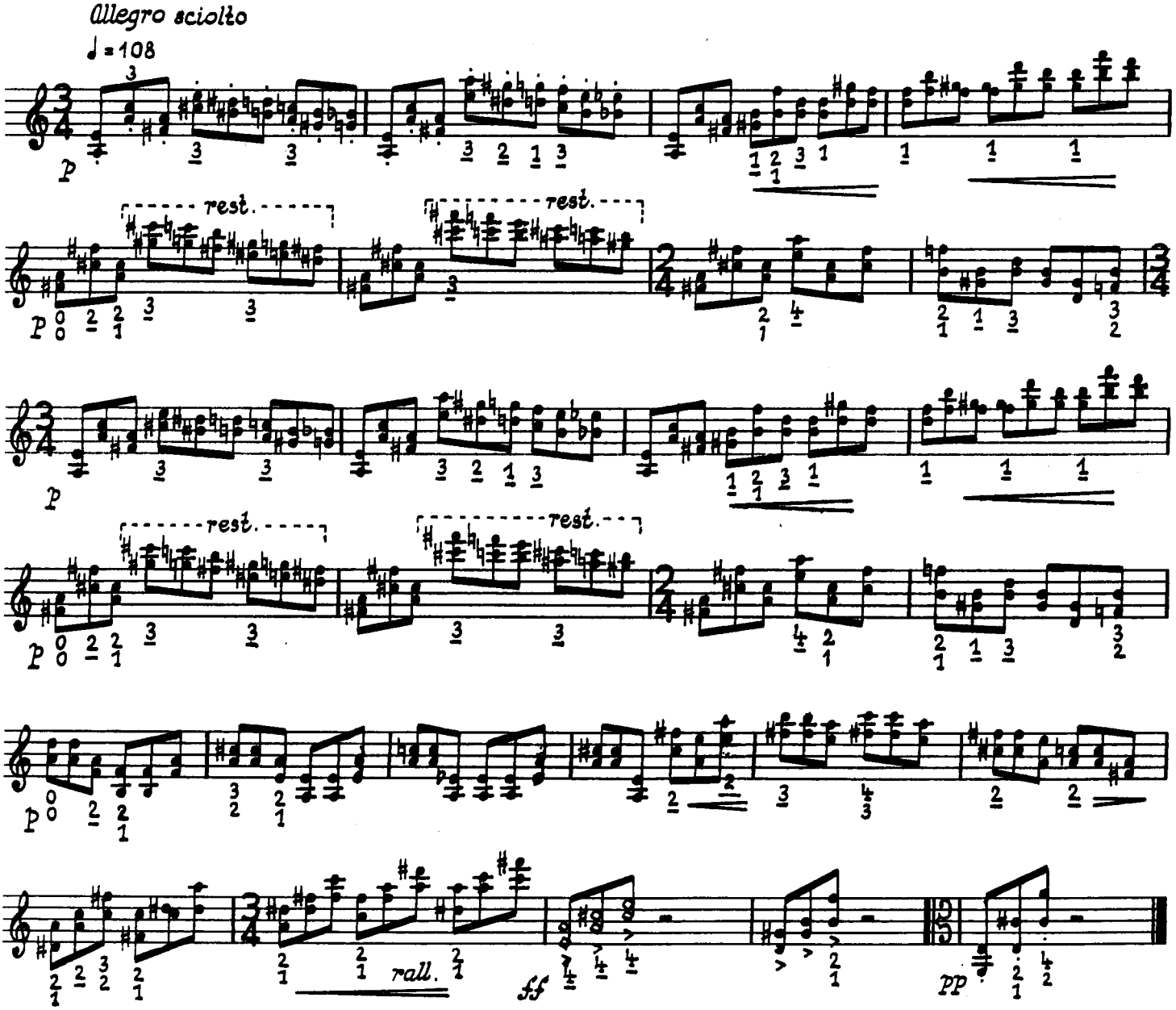
Caprice No 1 - double trill



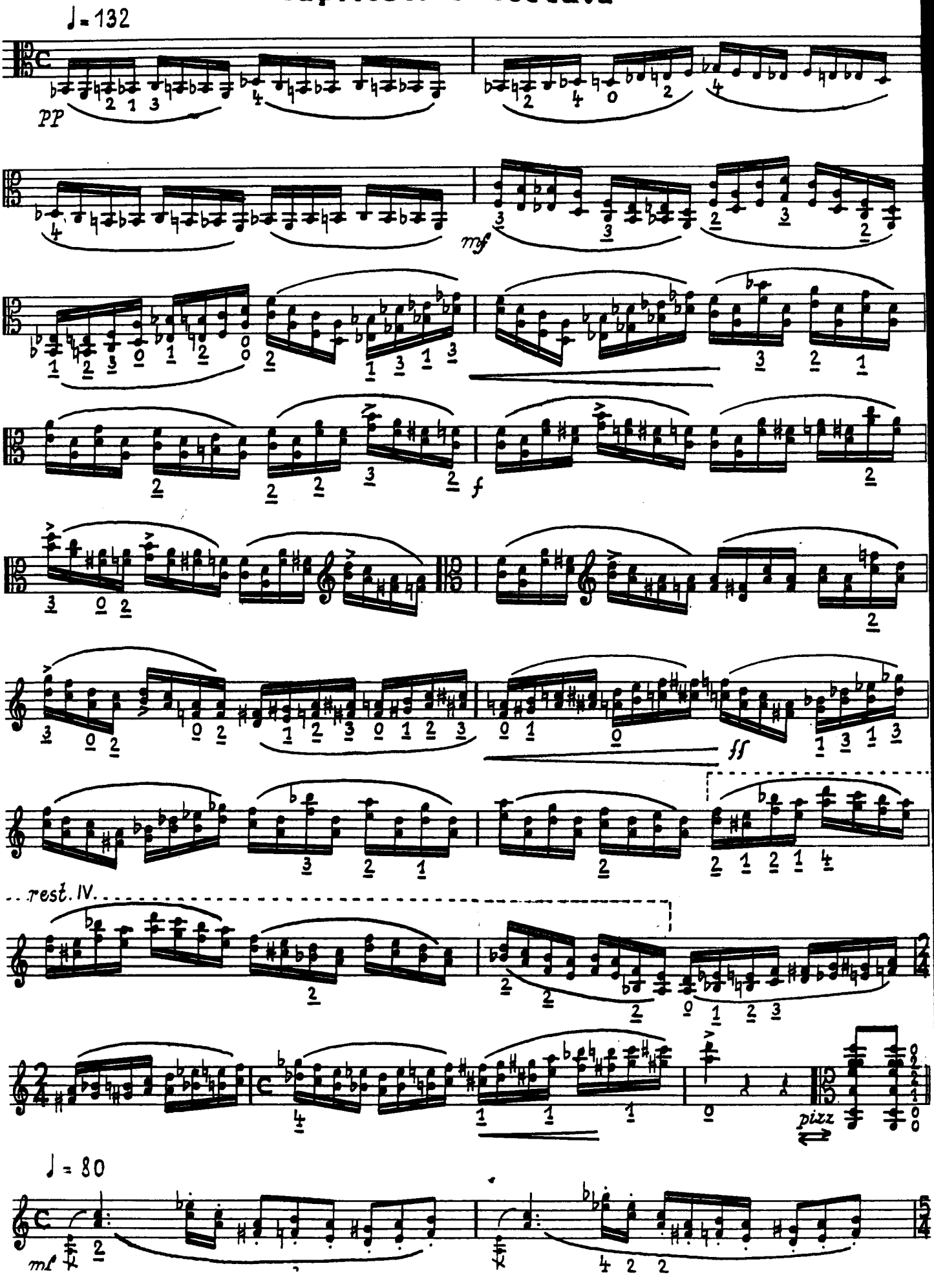

mf
rit.
mpo I.
pp
sostenuto
p
pp rit.

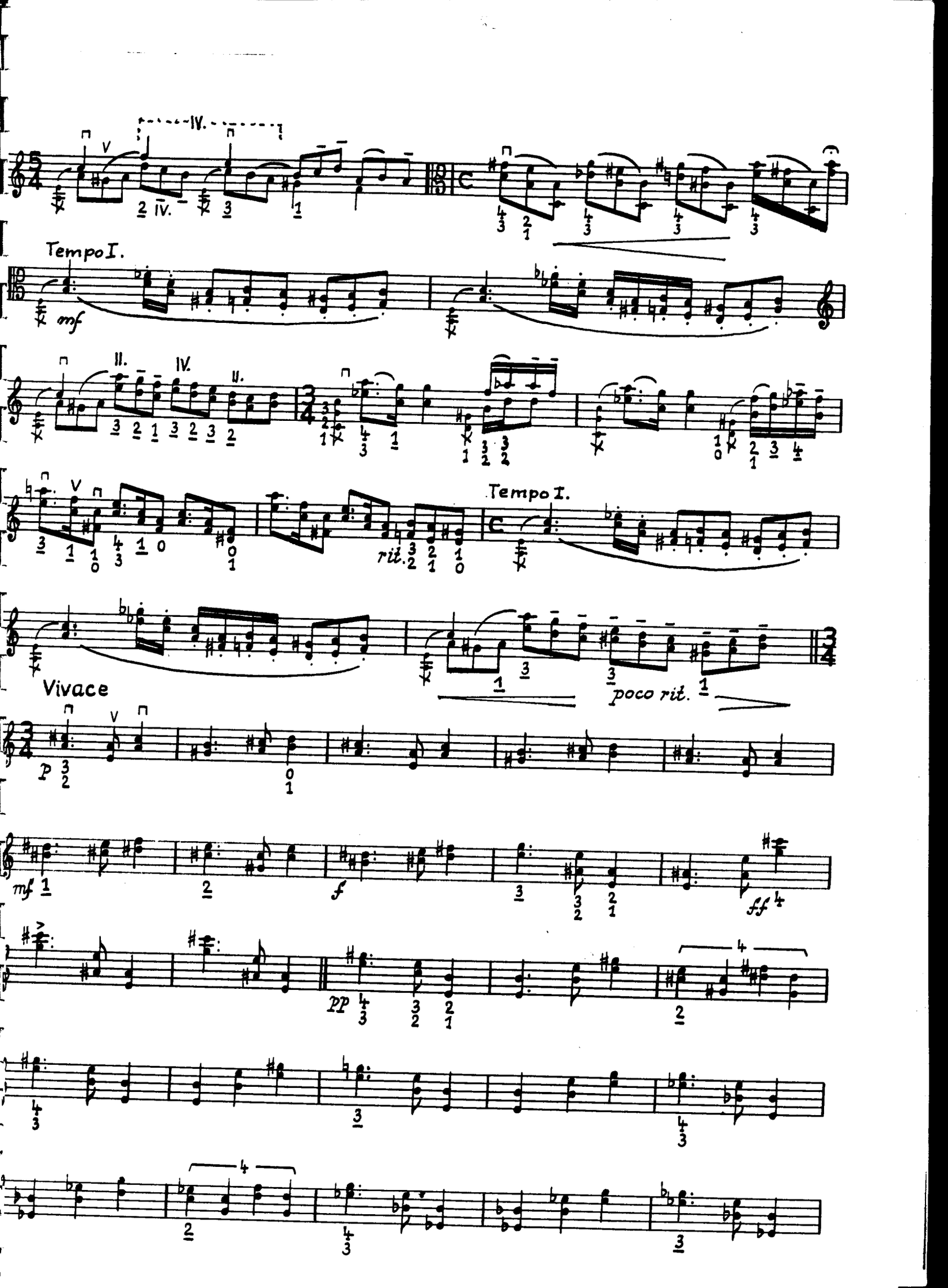

Andante espressivo
♩ = 60
mf
V.
f
1.
2.
p
pp
2 rit. 2
Vivace leggiero
♪ = 152
p
pp

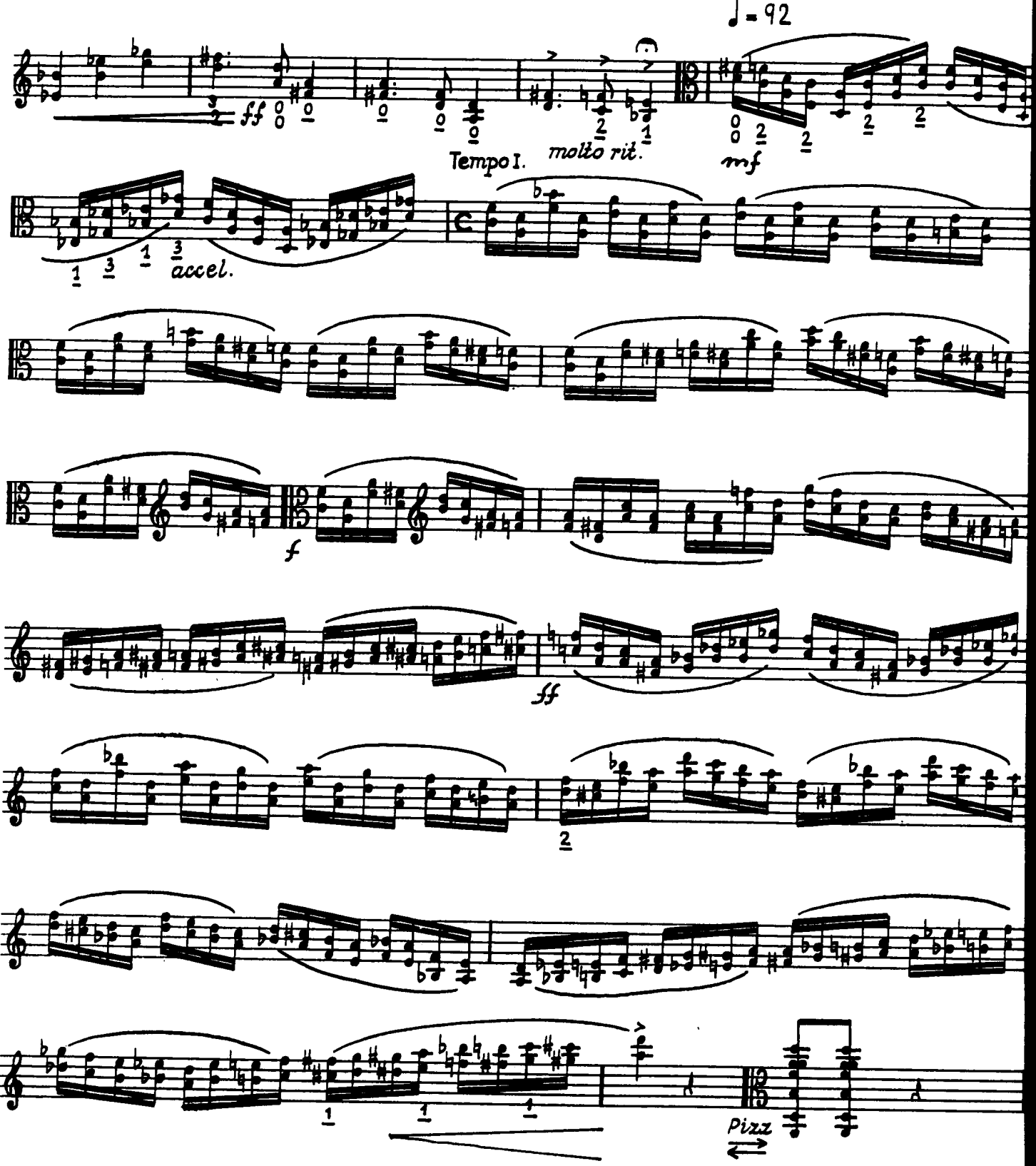

Recitativo impetuoso
♩= 69-108
f
stringendo
lento
A3
f
ff
rall.
Tempo I.
ff
pp
pizz.

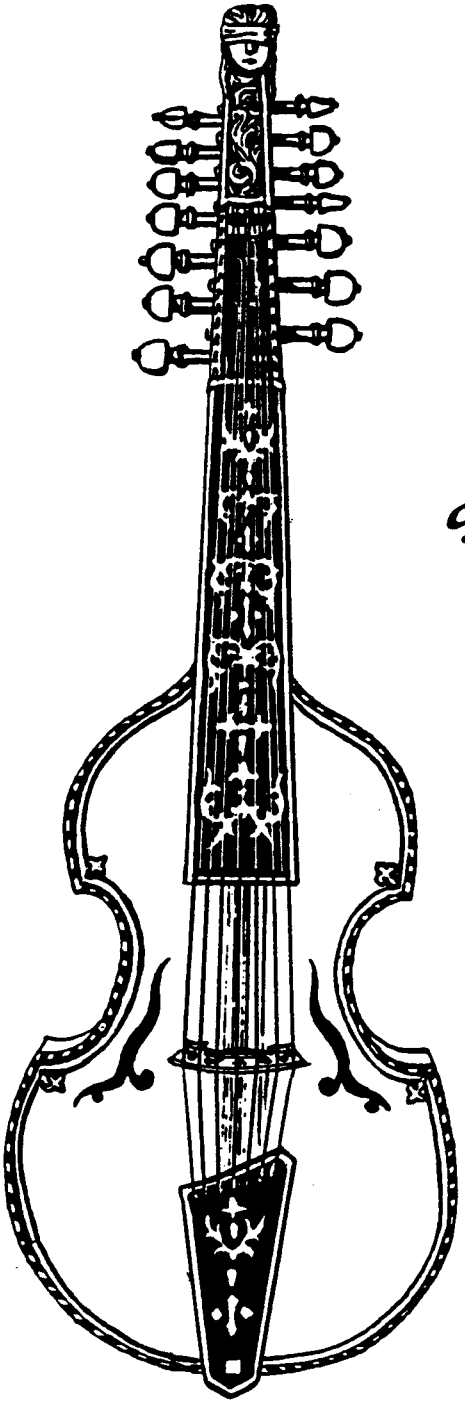

Allegro sciolto
♩= 108
p
rest.
rest.
p
rest.
rest.
p
p
rall.
ff
pp

Caprice No 5 - Toccata

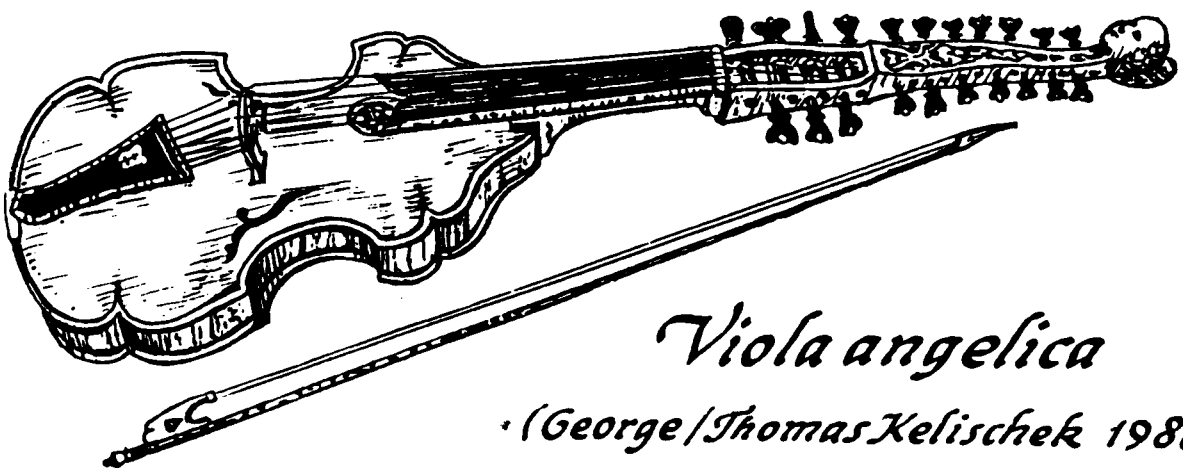



Tempo I.
mf
Tempo I.
rit.
Vivace
P
poco rit.
mf
f
ff
pp

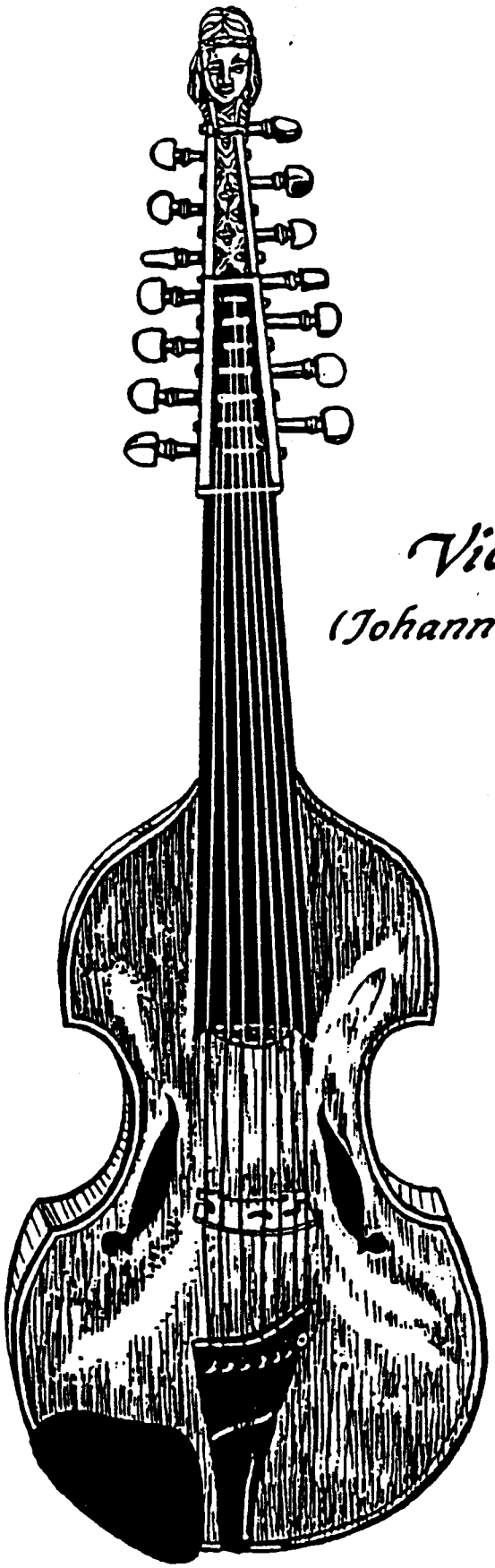

♩= 92
ff
Tempo I.
molto rit.
mf
accel.
f
ff
Pizz



The classical form
of the Viola d'amore
(Paul Dörfel, 1933)



Viola angelica
(George/Thomas Kelischek 1988)



Viola d'amore

(Johann Michael Stirtzer

1731)

~*~

"Savoir travailler, c'est un talent"
F.Mazas

STUDY TABLES
of viola d'amore playing techniques
by František Slavík

This short summary of viola d'amore playing techniques is intended for students, advanced viola d'amore players and soloists for their daily studies. It should economize their time, still accenting the specific features of viola d'amore playing techniques, and inspire them for further intensive studies.

It is never useless to emphasize once again that mechanical repeating is very harmful. Only concentrated, purposive work can lead us to success. Steady discontent with one's own intonation, tone quality, and the bowing is for every player a continuous driving force, because *"vita brevis, ars longa"*.

Denotation of the tables:

Technical level		Object studied	
I	elementary	A	general information
II	intermediate	L	left arm
III	advanced	R	right arm
IV	masterly	G	combined exercise

Example:
I/L/06 - an elementary exercise for the left arm, table No.6.

Comments on individual exercises

I/A/01 The resounding pattern of the sympathehtic strings
- according to the key of given composition

Using this diagram, one can deduce that in the case of *D major* key, all of the sympathetic strings resound when one plays tonica, all the *A*-strings resound with dominanta, and all the *D*-strings resound with subdominanta.

On the other hand, in the case of *E-flat minor*, solely *F#3*-string resounds with tonica, all the *D*-strings resound with dominanta, but no sympathetic string resounds with subdominanta.

I/A/02 Fingerings for playing thirds in the 1st position

The lowest third *B flat- d*, which is depicted in the upper left corner in the upper diagram, can be played on the open *D6* string and with the first finger on the *A7* string.

I/L/03 Stability of finger-positions, 1.-5. position

This exercise should always be played slowly. It is suited for beginners and for those, who haven't held the instrument for longer than one week. " You must completely change yourself over into an ear," one famous school-master said, explaining the principle of intonation.

I/L/04 Broken chords in the first position

The orientation (the sense of location) of fingers on the finger-board can not only be practiced on scales, but also by playing broken chords. This table brings the simpliest forms of such chords; more complex ones can be found in table **IV/L/19.**

Contemporary players on bowed stringed instruments (except the doule-bass) know a solely string-to-string interval - the fifth. This simplicity facilitates mechanizing of the left hand's movements connected with changing strings. But the viola d'amore belong's to the instrument family with the third-fourth tuning, and there are 4 different string-to-string intervals on it: the fourth (3x), the fifth (1x), the major and the minor thirds (both 1x). To help the mechanizing of finger movements, we have included excercises **(I-III)/L/05-08.**

I-II/L/05 Exercises on the string-pairs with fourth's intervals

The upper fingering is for beginners, the lower one for advanced players. there are four such couples: *D1-A2, D4-A5, D6-A7.* It should be played in rhythmic and bowing variations.

I/L/06 Exercises on the string-pairs with third's intervals I.

The combination of open strings with the first/second finger is simple and utility. Repeat each couple of bars!

I/L/07 Exercises on the string-pairs with third's intervals II.

The viola d'amore is the only instrument capable of playing the double-stops in unisono. This playing mode is not only an effective expression means, but it also fixates one's intonation.

III/L/08 Exercises on the string-pairs with third's intervals III.

This exercise supports finger lightness in playing thirds. Like the other exercises, we start playing them slowly, as an intonation exercise, but, step by step, we finally play them *vivace* as an exercise for finger proficiency.

~*~

II/L/09 Finger proficiency - the lateral technique

This is the most important exercise for all cathegories of players. It ensures continuous improvement of finger's mobility. Most of the players who tried to play this exercise, have included it in their daily studies.

The exercice is specified up to the 3rd position, but advanced players will benefit from playing it even higher.

II/R/10 Changing the string

Carl Flesch, the immortal pope of all violinists,recommended to avoid any unnecessarily wide movements while changing the string.*) Viola d'amore players needn't concern about that - the bow-angle difference between neighbouring strings is so small on the viola d'amore, that any eccessive motion of the bow would lead to a disturbing touch of the other string. The exercise should be played by memory.

Some earlier tutors state that any practicing of scales on the viola d'amore is inadequate, because "the instrument is suited for playing melodies in thirds and arpeggios".**) But the times change and a contemporary player of the viola d'amore must be able to play these tables like alphabet.

III/L/11 Simple diatonic scales over 4 and 3 octaves

Each note in the table represents some change of position when playing a scale (the finger which makes the change). In the 7th line, there is the *C major* scale, represented by d^2 played with the 1st finger in the third position, c^3 played in the 6th, and f^3 played in the 9th position. In the descending scale, one will shift the 3rd finger to the sixth position on e^3, and once again the 3rd finger to the third position on b^2, and finally the 2nd finger to the 1st position on *c*.

II/L/12 Diatonic scales in thirds

On the violin or viola, which are tuned in fifths, these scales are played by changing two shapes, 1.+3., and 2.+4. The third-fourth tuning requires a complex fingering, as seen in the table. Here also applies the general rule that only a slow, assidous study leads to the goal.

III/L/13 Diatonic scales in sixths

Some of the scales, namely *F major, G minor, F# minor,* and *G minor,* are limited to the first position; they suited to start with.

---

*)Carl Flesh, "Kunst der Violinspiels"

**)*"Scales can never be quite as fluid and rapid as on the violin..."*
Paul Shirley in Newsletter, Vol.8.No.1.

~*~

II/L/14 Chromatic scales - preliminary studies

In this exercise, one uses open strings for checking intonation, wherever it is possible.

IV/L/15 Chromatic glissando in third's shapes

An example of analytical study of chromatic glissando, which is the basic stone for attaining solidity and reliability in the fingerboard technique.

IV/L/16 The chromatic scale over 3 octaves in the 1st position

Even those, who are able to play this scale in a fast tempo, are not out of the wood yet; the casette-recorder will reveal all tones that cannot be clearly heard.

II/R/17 Calming down the right arm

Absolute calmness of one's right arm, even with the stage-fright, is the precondition of a perfect performance. At the same time, we are always trying to utilize the whole length of the bow, even in pianissimo - this is the mark of a real master. *"The bow, the bow, and again the bow!"* was the basic principle of both the Pariser and the Belgian violin schools, which have brought up the greatest violin virtuosi. The playing of long strokes in pianissimo is the more difficult, the closer one plays to the frog.

At first, we shall try to play the first line within 24 seconds. The length of the bow will be divided into 8 equal parts, marked with chalk; each part must be thus passed through during 3 seconds. We shall use the tape-recorder, following the movement of the bow in the mirror. The tone must always be high-quality, uninterrupted. The following two exercises (the whole bow in 32, and 48 sec.) step up the requirements.

But this doesn't exhaust all the potentials hidden in the table; for further studies one can make use of the 1st line in tab. **II/L/09**, whose metric value is 6 quarters. We shall thus divide the bow into 6 parts and try to pass through one quarter's segment of the exercise with one part of the bow. A masterly feat is to play whole the line twice with one bow. If you can do that, congratulations!

II/L/18 Independence of fingers

In the last of these exercises, even those, who are persuaded that they have mastered all-out their left-hand fingers, will be sweating. Repeat every two bars!

IV/L/19 Broken chords on single string

Two demanding exercises concerned with the longitudinal fingerboard technique. They enhance mobility and laxity of the left hand; it should be practiced on all strings except *A7*.

~*~

IV/G/20 The Double-trill Preludium (F.Slavík)*)

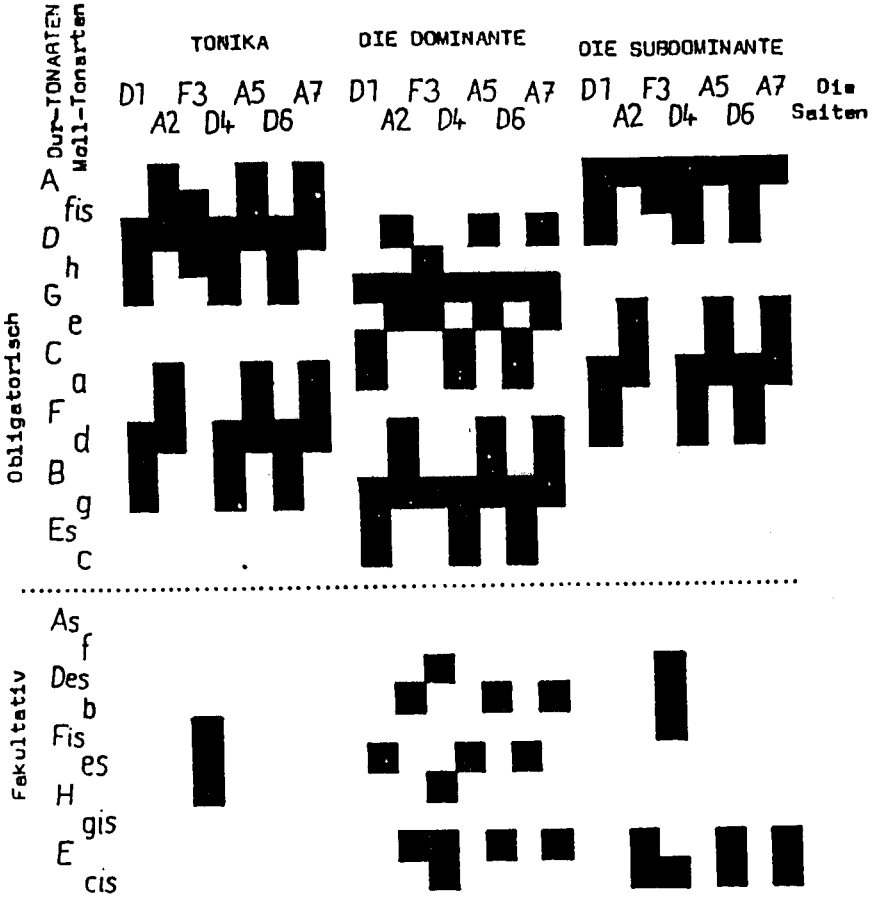
A composition for viola d'amore solo, whose daily study provides a high standard of the left-hand technique in a minimum of time. For advanced viola d'amore players, this composition can be a substitute for the highly useful Capriccio No.6. by N.Paganini for violin. It is also suited as a concert encore.

The Preludium is not as difficult as it looks. One should practice the intonation of individual double-stops without tremolo at first, repeating closed groups (e.g. two lines). Only then one can start with a slow movement, with permanent care about intonation.

Translation: Jan Matys
August 21, 1996

*)see Compendium of the Viola d'amore by F.Slavík, Appendix

I°/A/01 Übersicht der mitklingenden Resonanzsaiten in verschiedenen Tonarten



I°/A/02 F I N G E R D I A G R A M M

der grossen (A) und kleinen (B) Terzen in der ersten Lage in chromatischer Folge

A

Halbton-Lage	Fingernummer 1.Lage	Saite A7	D6	A5	D4	Fis3	A2	D1
1	1	b	dis	b	dis	g	b	dis
2	1,2	h	e	h	e	gis	h	e
3	2	c	f	c	f	a	c	f
4	2,3	cis	fis	cis	fis	b	cis	fis
5	3	d	g	d	g	h	d	g
6	3,4	dis	gis	dis	gis	c	dis	gis
7	4	e	a	e	a	eis	e	a

— Obersattel

Saitenintervall....Qua. Qui. Qua. grT. klT. Qua.

B

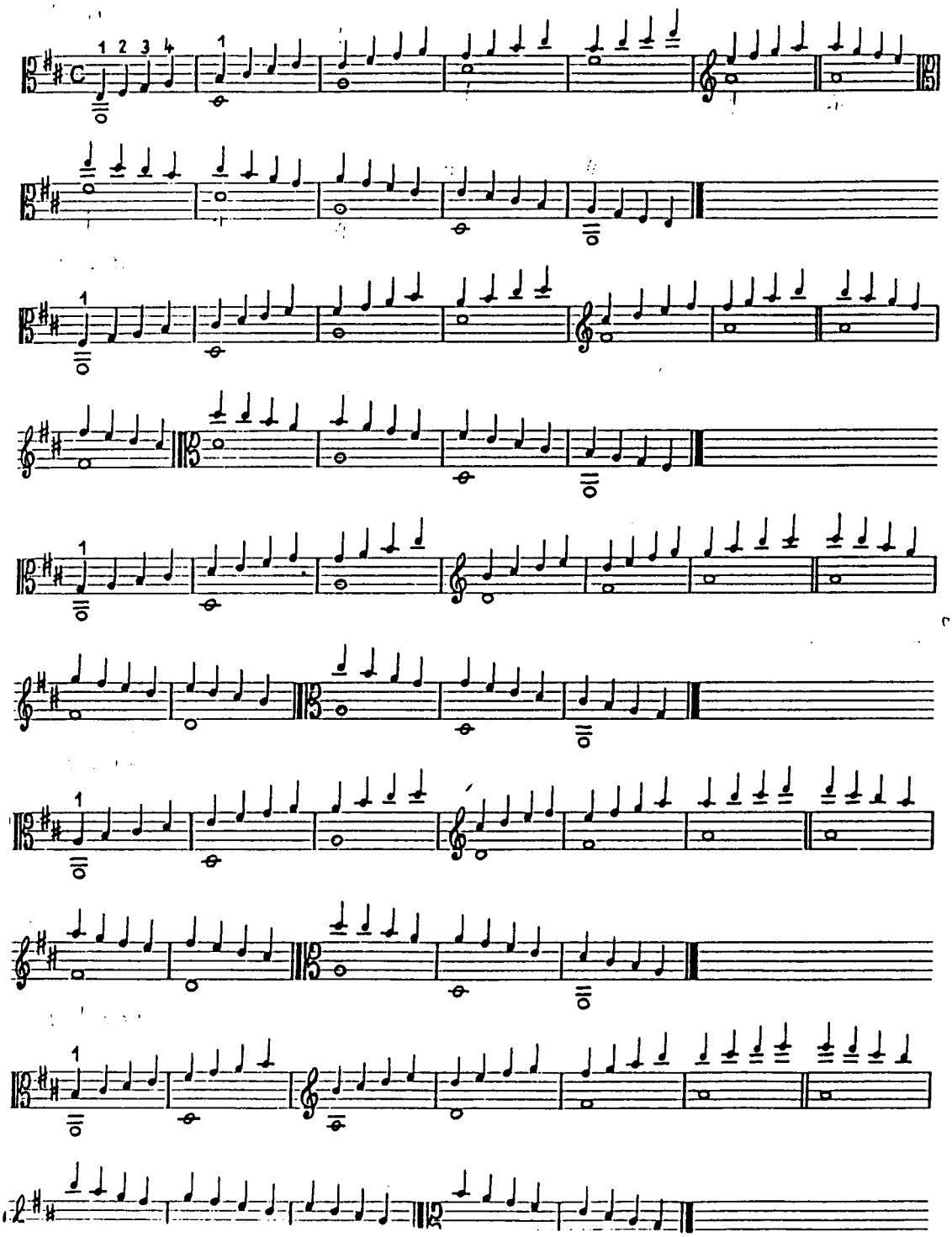
Halbton-lage	Fingernummer 1.Lage	Saite A7	D6	A5	D4	Fis3	A2	D1
1	1	b	dis	b	dis	g	b	dis
2	1,2	h	e	h	e	gis	h	e
3	2	c	f	c	f	a	c	f
4	2,3	cis	fis	cis	fis	b	cis	fis
5	3	d	g	d	g	h	d	g
6	3,4	dis	gis	dis	gis	c	dis	gis
7	4	e	a	e	a	cis	e	a

— Obersattel

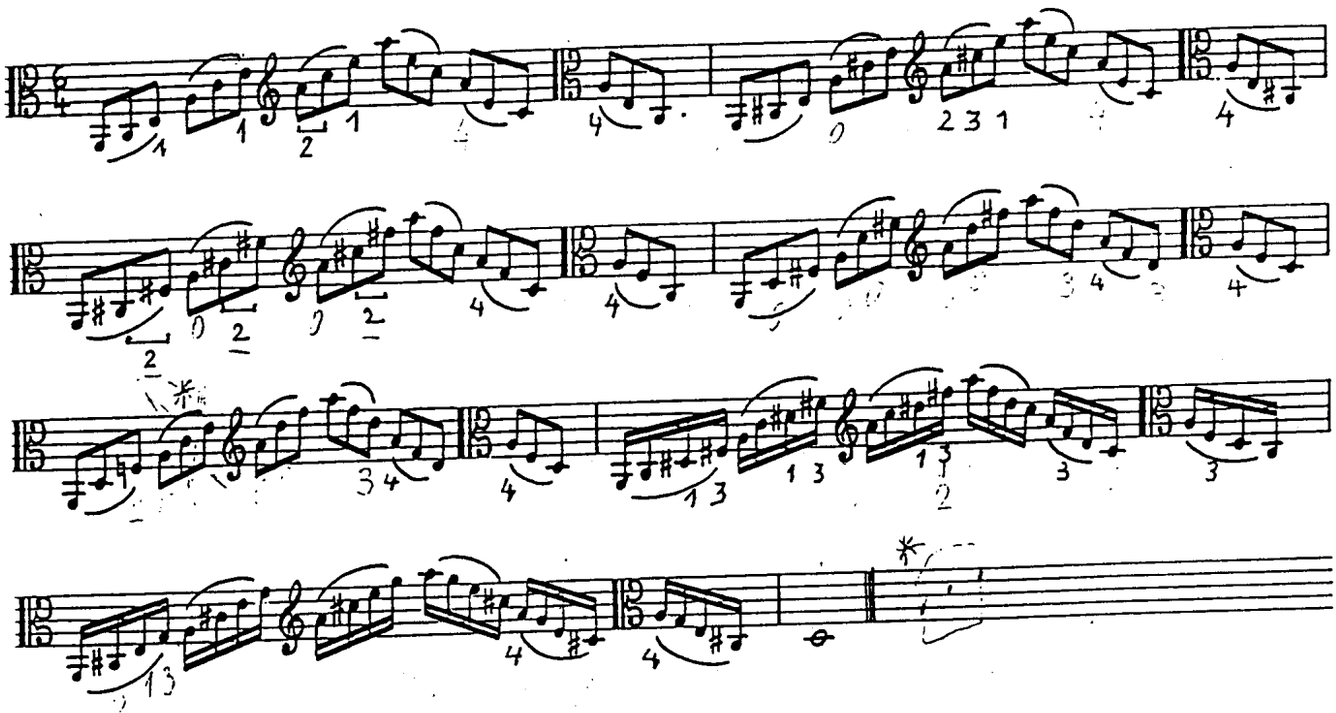
Saitenintervall....Qua. Qui. Qua. grT. klT. Qua.

I°/L/03 ·. STABILISIERUNG DER FINGERLAGE IN DER 1.bis V.LAGE in D-Dur

Die Kontrole der Intonation durch leere Saiten

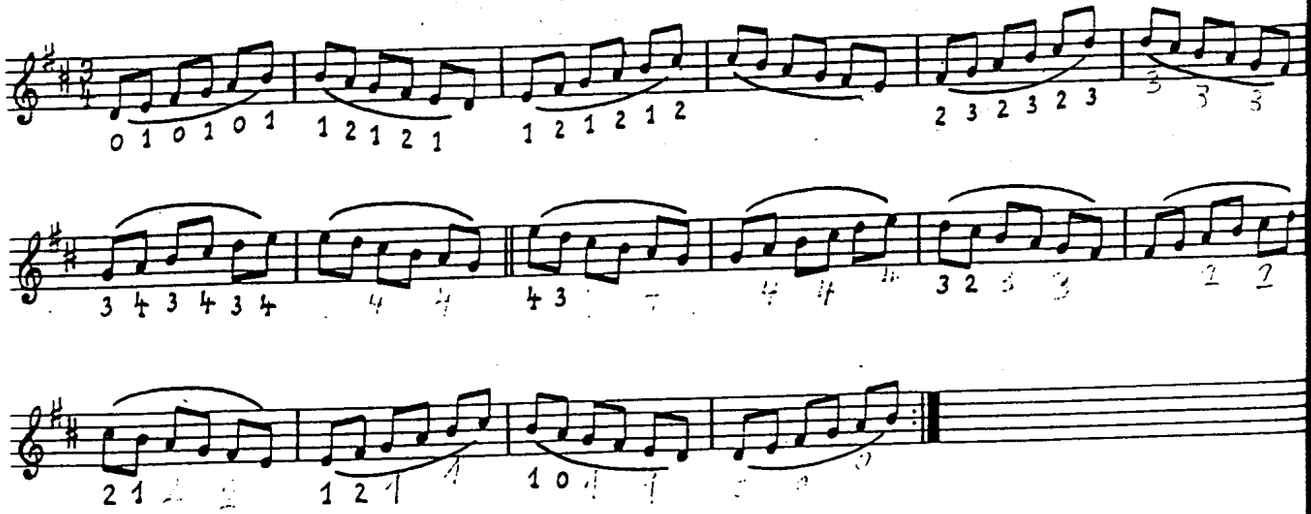


I°/L/04 . Zerlegte Quintakkorde in der ersten Lage



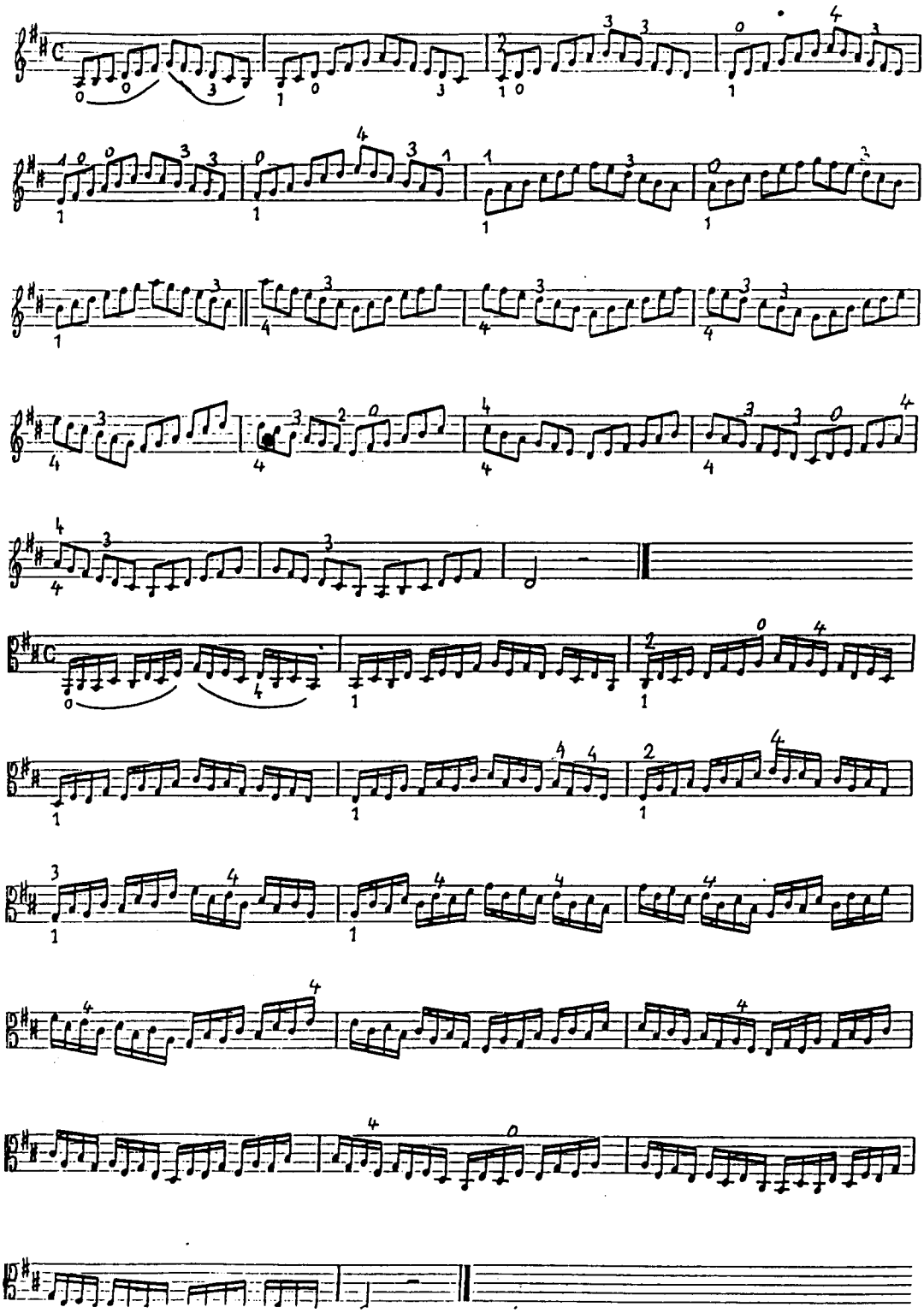
I°/L/06. ÜBUNGEN AUF SAITENPAAREN IM TERZINTERVALL 1.

Elementare Studie zur Beherrschung der Intonation auf Saitenpaaren im Terzintervall auf den Saiten D4, F3 und A2.



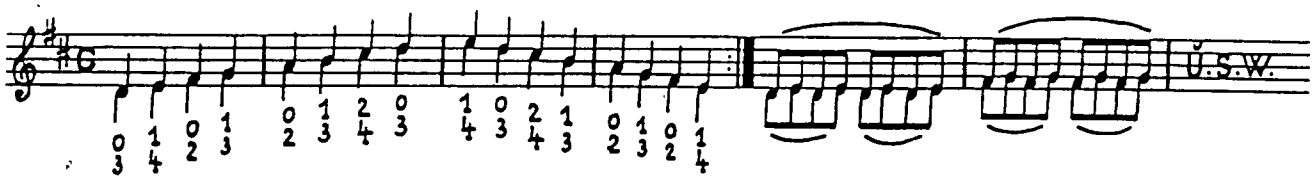
I-II/L/05

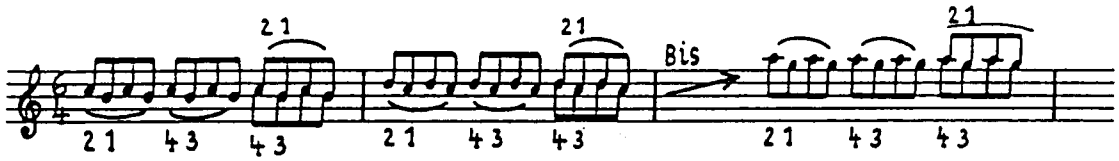
b) I.-VIII. Lage (der untere Fingersatz)



II°/L/07 ÜBUNGEN AUF SAITENPAAREN IM TERZINTERVALL II.

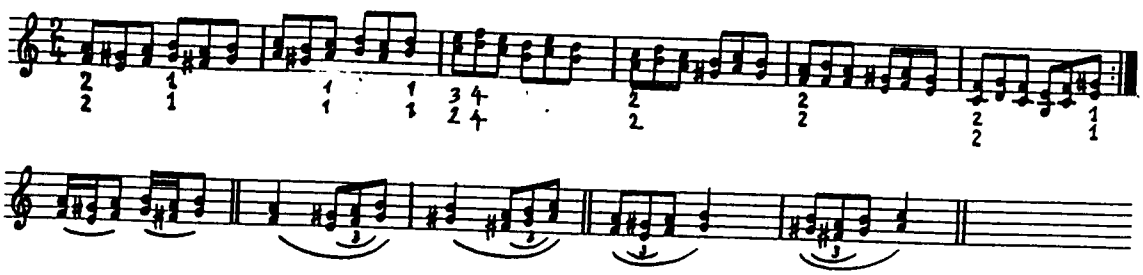
Unisonospiel auf zwei Saiten. Jeden falschen Zusammenklang SOFORT korrigieren





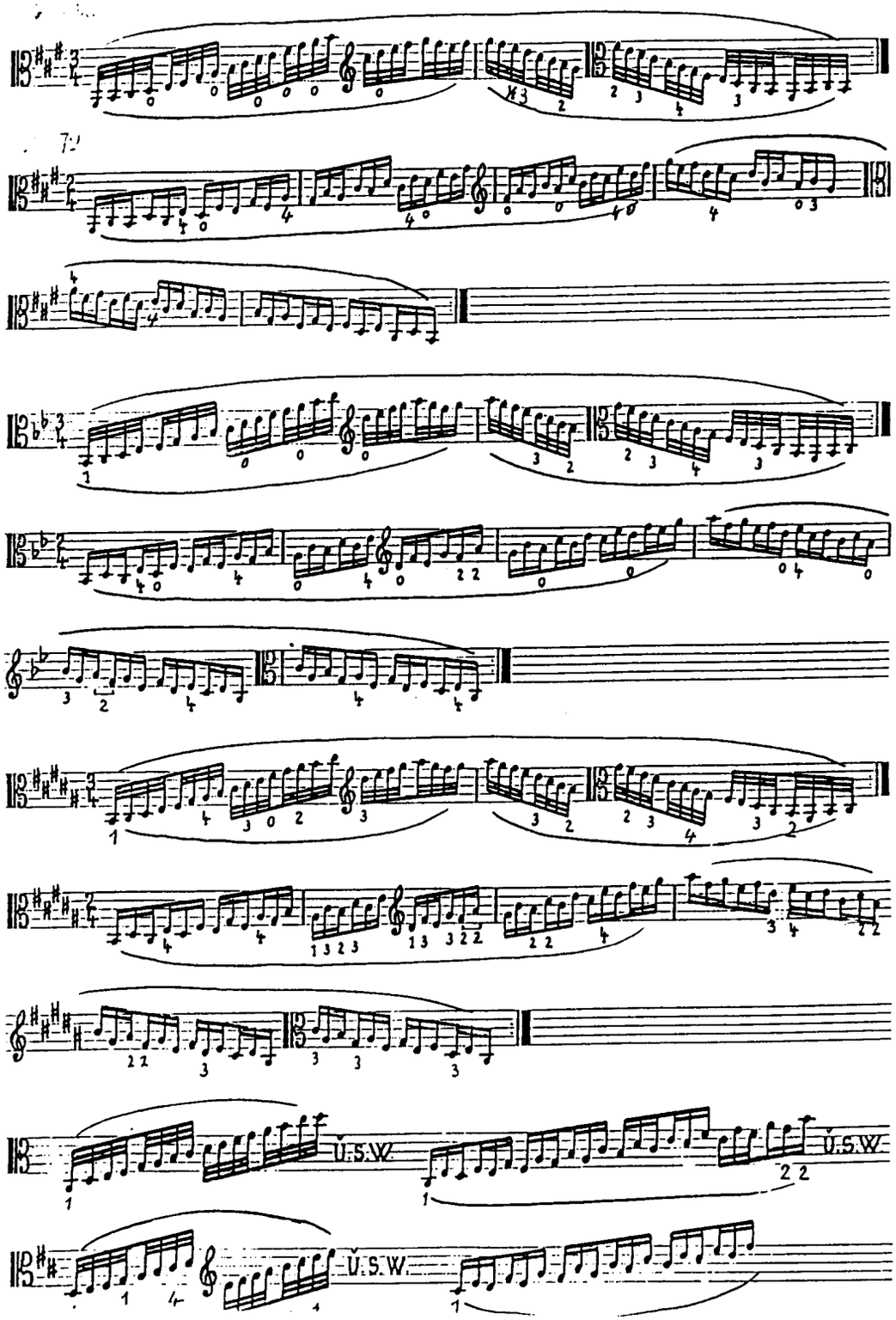
III°/V/08 ÜBUNGEN AUF SAITENPAAREN IM TERZINTERVALL III.

Terzübung in der 1.–3. Lage, welche außer den angeführten rhytmischen Modulationen auch in der sukzessiven Temposteigerung empfehlenswert ist.



II/L/09

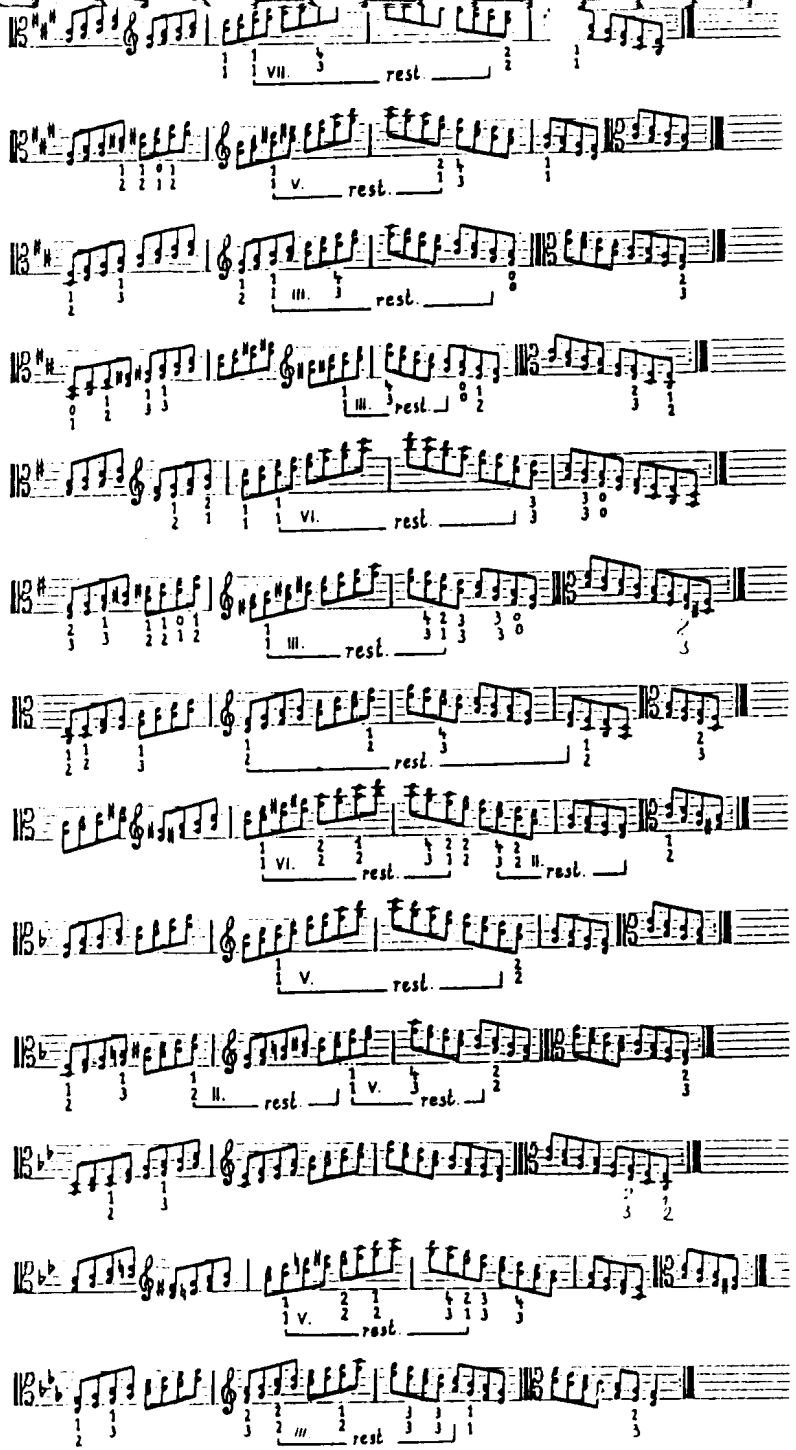
Tägliche Technik.

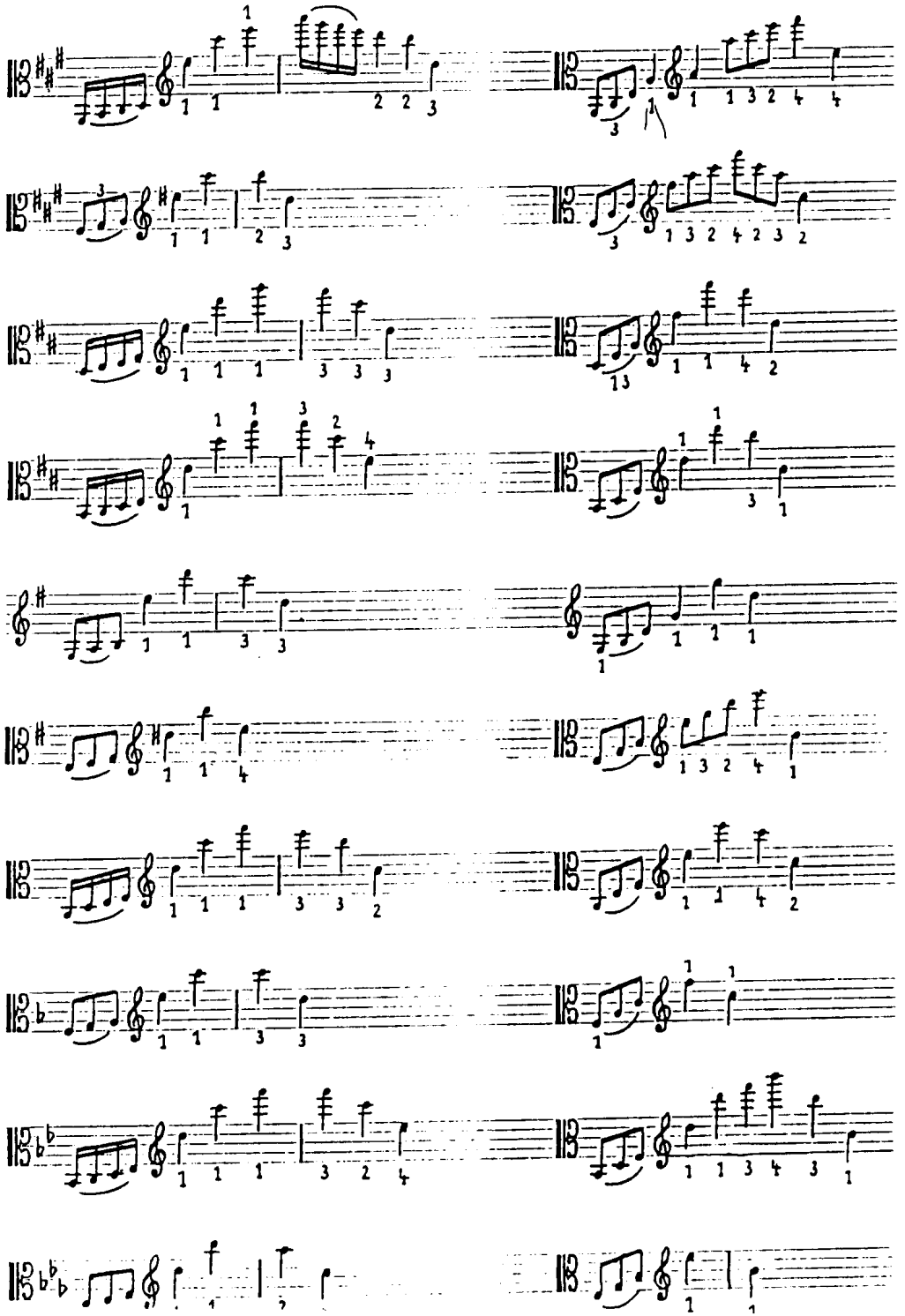


Angegeben sind nur diejenigen Töne, die den Lagenwechsel darstellen

III | L | 12

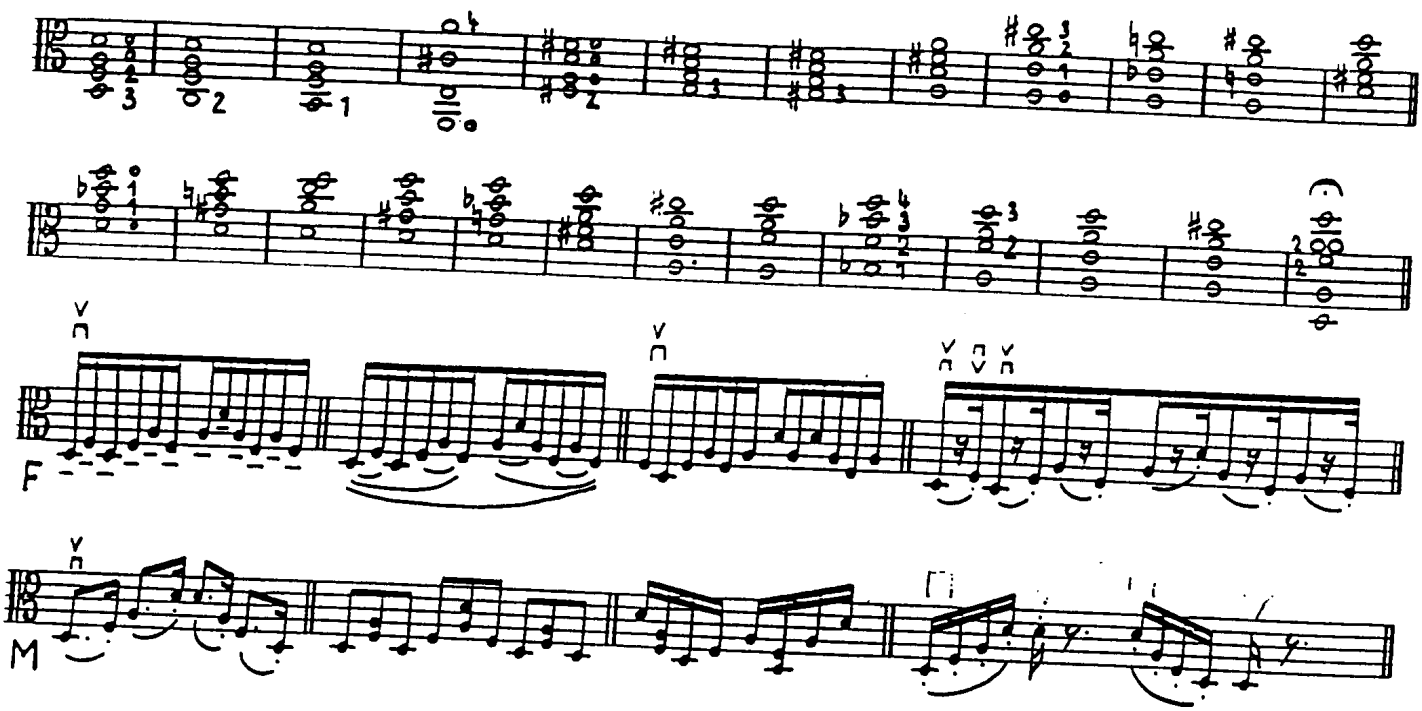
Angegeben sind nur diejenigen Töne, die den Lagenwechsel darstellen





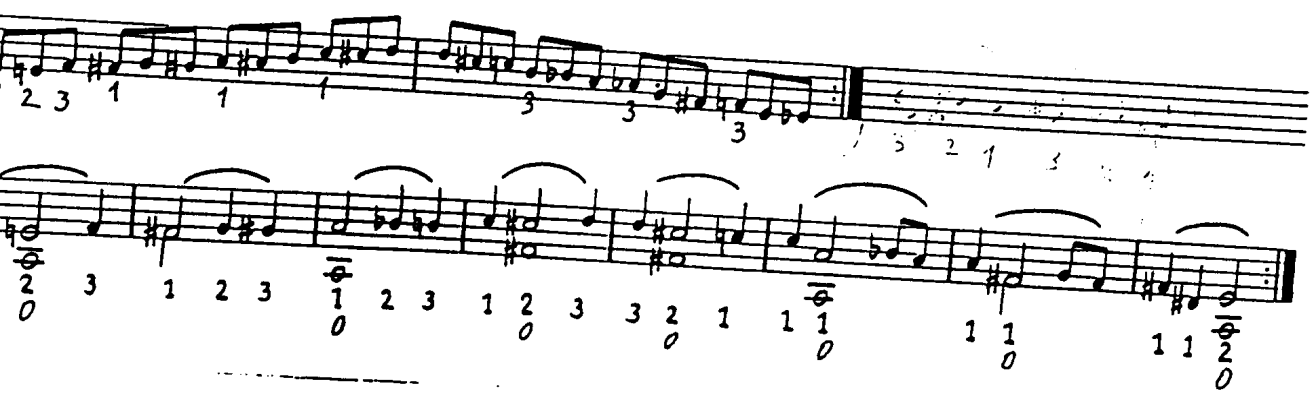
II°-IV°/R/10 DER RECHTE ARM – DER SAITENWECHSEL MIT DEM BOGEN

Die Eigenart der Bogentechnik ist durch die Zahl der Saiten, kleinere Entfernung der Saiten, kleinere Bogenstrichwinkel und durch grössere Differenzen in der Saitendicke hervorgerufen.



II°/L/14 . ANFANGSSTUDIUM DER CHROMATISCHEN TONLEITER

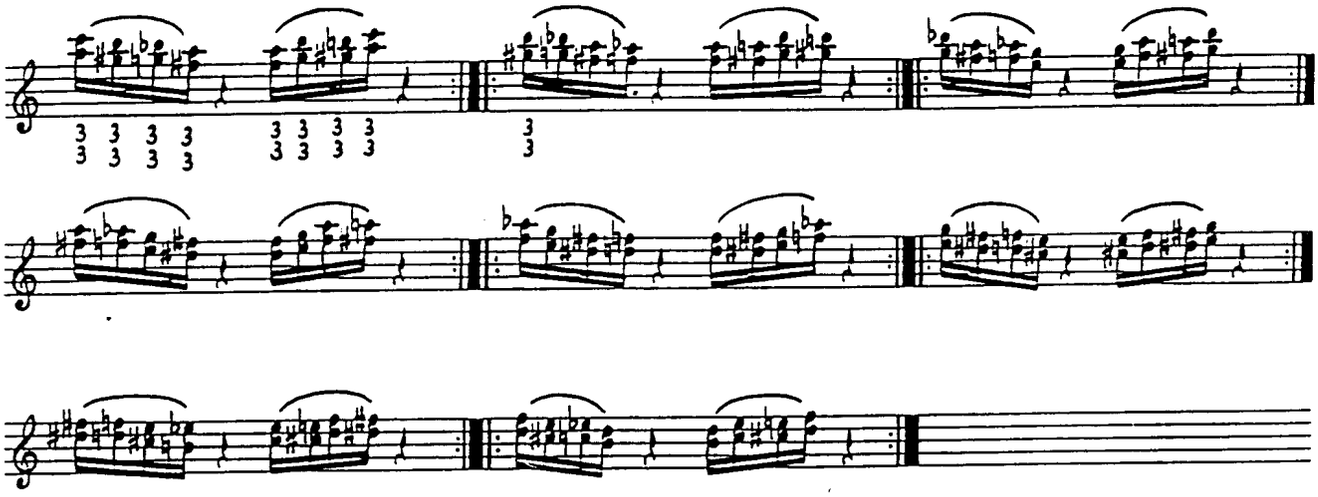
auf der D4-Saite mit Anleitung der Intonationskontrolle



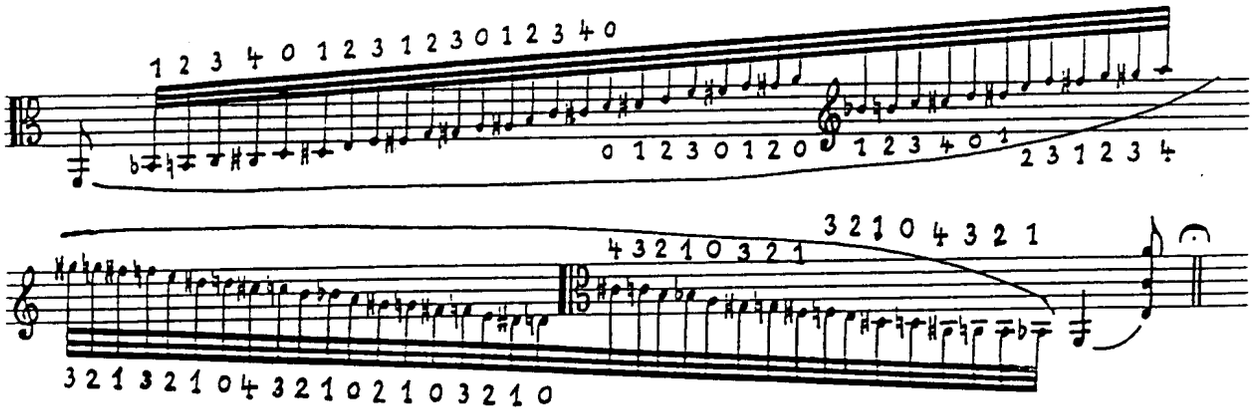
3 - p. 12

IV°/L/15 · CHROMATISCHES GLISSANDO IN TERZEN

Diese Tabelle enthält die Anleitung, wie man eine chromatische Tonleiter studieren soll. Sie enthält einzelne Abschnitte auf der A2 und F3-Saite.

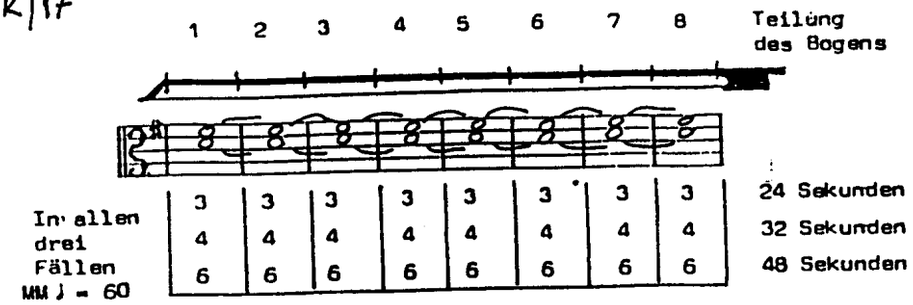


IV°/L/16 MEISTERSTUDIUM: Chromatische Tonleiter in 3 Oktaven in der 1.Lage (Paganini)

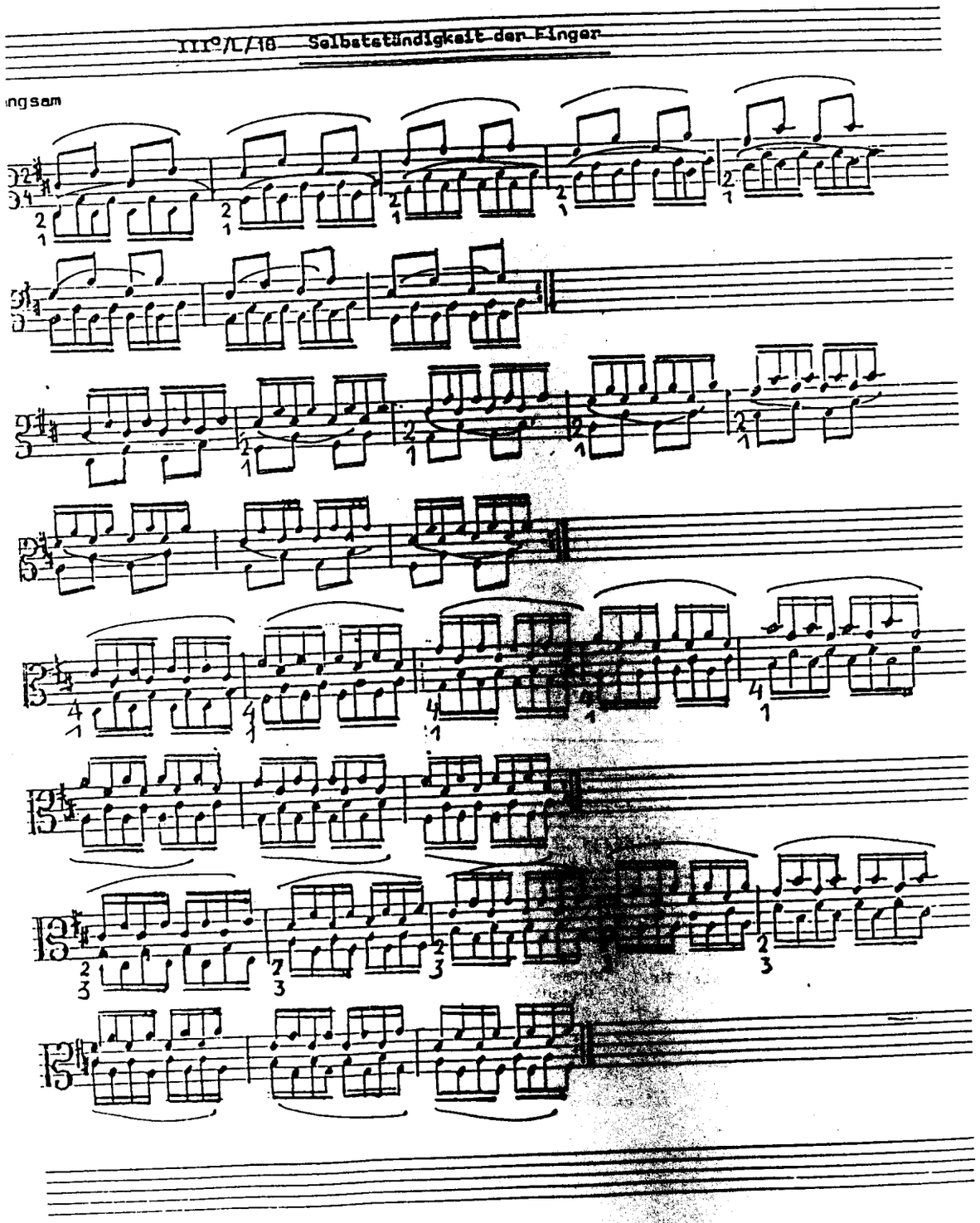


Beispiel Nr. Chromatische Tonleiter in 3 Oktaven in der 1.Lage (Paganini)

III/R/17



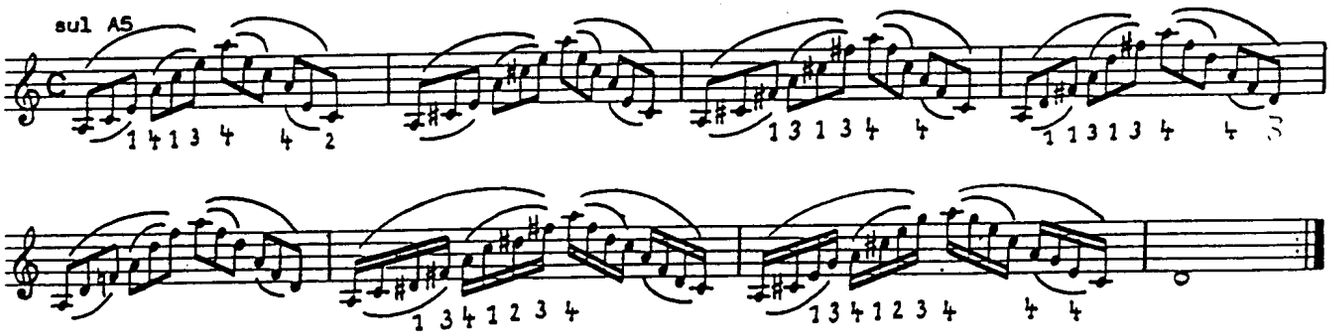
In allen drei Fällen MM ♩ = 60	3	3	3	3	3	3	3	3	24 Sekunden
	4	4	4	4	4	4	4	4	32 Sekunden
	6	6	6	6	6	6	6	6	48 Sekunden

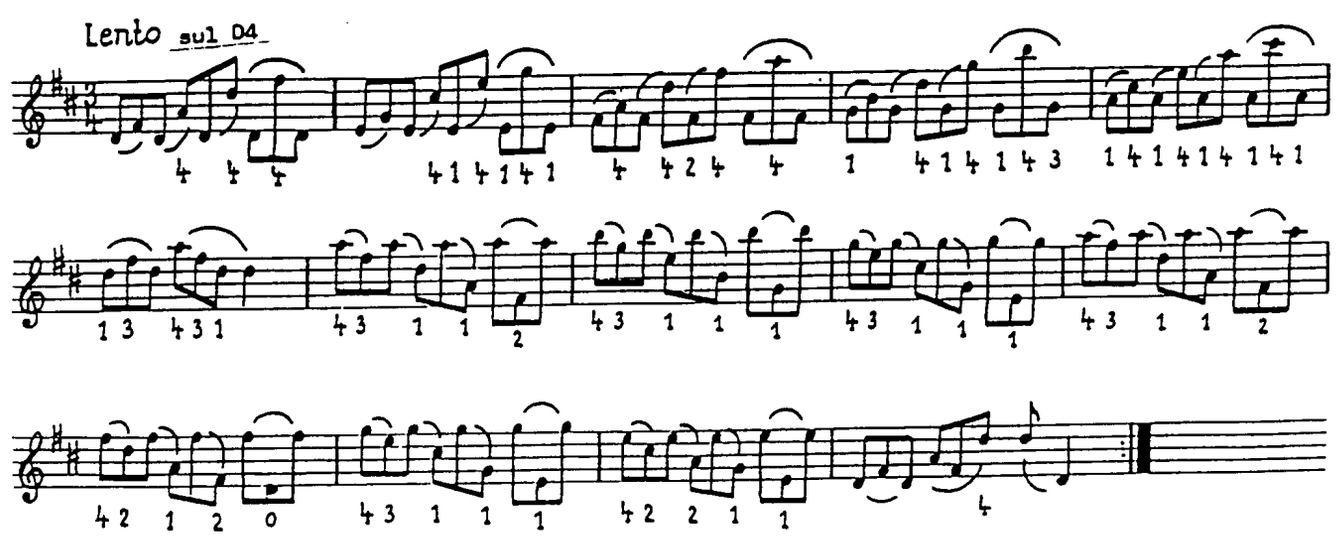


IV/G/20 – Doppel mit praktischer – mit Compendium

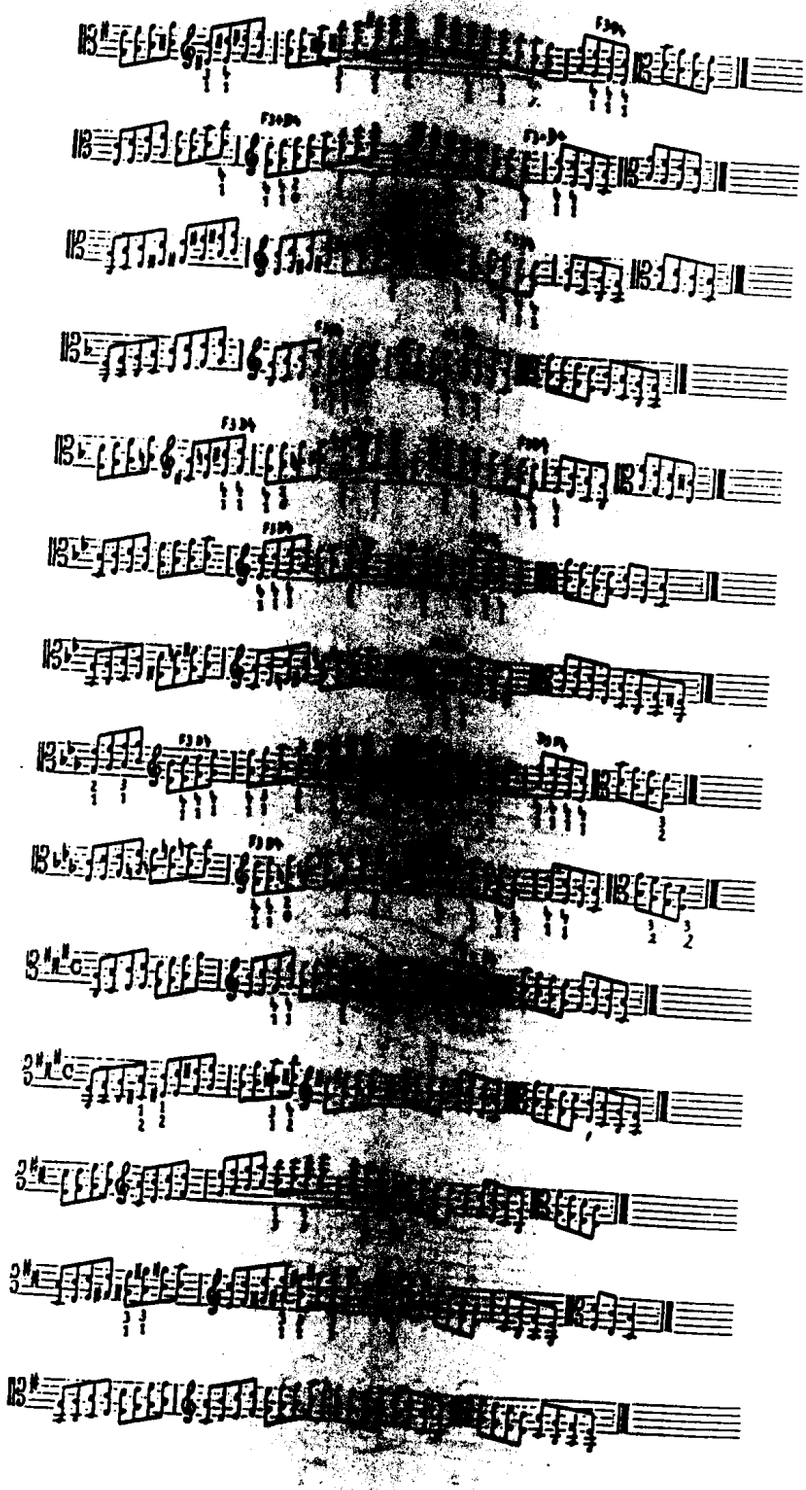
IV/L/19

Springende Lagenwechsel auf einer Saite





III/L/13



František Slavík and his "Compendium"

František Slavík, by main profession a specialist in the field of ceramic ovens, devoted fourty years of his active life to studies of the viola d'amore. He didn't treat the viola d'amore as a historical instrument only, but he tried to put it across as a fully valuable modern instrument, capable of further development. His endeavours to achieve the top virtuosity and to utilize fully the tone potentialities of the viola d'amore are concentrated in his three "Caprices", which are a parallel to the 24 Caprices by Paganini.

Born in 1911 in eastern Bohemia, son of a prominent industrialist, he stu-died commerce parallel with music - violin at the Prague Conservatory (prof. Reissig), composition privately at Josef Bohuslav Foerster. Finally, he started to play a marvellous viola d'amore, which was contained in his father's collections.

After the communist upheaval in 1948, when his father's factories were etatized, he established and headed a research and project group. Persecuted for his "class origin" he lost his job and had to move to the border region.

In the year 1954 Mr.Slavík won the State Prize after solving a very diffi-cult strategic task (which involved the risk of imprisonement if he wouldn't succeede). Since then, he was allowed to travel abroad. He utilized his bussiness trips to various countries for propagation of the viola d'amore via concerts, lectures, teaching students (Germany, Bulgaria, India), he also wrote articles, mainly in German.

After retiring in 1973 Mr.Slavík became a full-time musician, devoting himself fully to performing, recording, teaching and searching for new music for this instrument. In 1984 he took part in the Viola d'amore Congress in Stuttgart, where he played his Caprices and presented also his discovery - a unique string quartet by Jan Václav Stamic for the viola d'amore, violin, viola and cello that he had found in Kroměříž Archive. Mr.Slavík stopped playing in 1988 because of health problems.

The "Compendium of the Viola d'amore" is based on a collection of author's articles published mainly in German. The author wrote the work in German expecting its publishing in Germany.He adressed about thirty publishing houses, but nobody dared publish such a specialised work. The English version should open this highly valuable work for the contemporary, English-speaking world.

The Compendium covers a wide range of problems, showing author's profound knowledge of many disciplines - history, musicology, mechanics, acoustics, psychology, composition, education etc. For this reason, it isn't easy to follow the author's way of thinking, which combines various approaches and treats various aspects of the matter. This makes the book quite original.

Jan Mahy