

THE ART OF THE THEREMIN



BY CLARA ROCKMORE

"But instruments do not make music: people do."

Max Rudolph
(N.Y. Times June 21, 1992)

Dedicated to my very special friend
Dr. Robert Moog
in appreciation of his continued
interest in promoting and reproducing
the space-control theremin.

Clara Rockmore

A few suggestions for future "theremenists" - those who approach and welcome it, as yet another voice, with which to interpret real music, not a magic toy for producing strange and eerie sounds.

"Less is more"

The very name of space-controlled ether-wave theremin should guide you. Don't forget your whole body is an electro-conductor, in the electro-magnetic field and it is therefore necessary to control the slightest motion - not only of hands and fingers. Any involuntary motion, such as of the head or shoulders can interfere with pitch and volume.

"You don't need hammers to work with air."

Don't forget that you are dealing with air! Think of your fingers, as delicate butterfly wings, and you will get much further than if you use strength.

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It is of course advisable - even necessary - to first learn to read music and have at least elementary knowledge of theory - harmony etc., by starting music lessons on the piano - just as all violinists do.

You cannot point to a spot in the air and say "here is middle c!"

Important

Be sure that no one passes by, as you are playing, and enters the electro-magnetic field from the other side, immediately affecting the performance.

EXERCISE NO. I

First study in the relative distance between different intervals. To be played slowly - sliding from one note to the other, but with great care taken not to slide beyond the note.

Left hand stationary. To be practiced in different keys. Hand in first position - forefinger resting on thumb.



EXERCISE NO. II

Important study to prevent the action of one hand affecting that of the other. To be played as slowly as possible - beginning each note pianissimo and slowly raising and then lowering the left hand on each note, at the same time being very careful to retain the correct pitch with the right hand.



EXERCISE NO. III

Further study to achieve greater freedom - speed and accuracy - in finding intervals of different distances. This exercise to serve as an example - the most beneficial method of having the student follow intervals given at random on the piano. Begin slowly and increase speed as the student becomes more advanced - always returning to slower tempo if the intonation is not pure.



EXERCISE NO. IV: Study for left hand.

The hand to be raised and dropped sharply on each note - producing staccato effect. To be practiced in different keys.

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Use your left hand, as you would use a violin bow. All legato, staccato and various accents can be achieved with different motions of the hand or fingers.

First have a clear idea of what you want to say, and then logic will help you find the best way to achieve it.



EXERCISE NO. V

First study in the use of different positions of the fingers of the right hand.

Instead of moving the whole hand - leave hand in position I (forefinger on thumb). To achieve position II move only the fingers by stretching them forward. For position III move them still further.

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Additional explanation of "positions" as distinct from "fingerings":

Position I - forefinger resting on thumb.

Position II, III, IV - stretching all three fingers forward (arm at rest) toward the vertical antenna and then, as needed, moving the fingers back, not only to original position I, but all the way to the palm of your right hand. When desired for musical effect - the very contact of fingers touching the palm serving as accent.



EXERCISE NO. VI

Exercise no. VI is the same as no. V, but it is to be played staccato. If found difficult - further practice of exercise no. V will prove helpful.



Ex No V + VI to be practiced also



EXERCISE NO. VII

Further study in finger positions going from position I to position III directly.



EXERCISE NO. VIII

Same as exercise no. VII only to be played staccato.

Handwritten musical score for Exercise No. VIII, consisting of four staves in 2/4 time. The notation includes various note values, rests, and staccato markings. Handwritten annotations include "1 p. 3 p. etc" above the first staff and "3 p. 4 p. etc" above the second staff.

Handwritten musical score for Exercise No. VIII, consisting of two staves in 2/4 time. The notation includes various note values, rests, and staccato markings. Handwritten annotations include "Ex No VII + VIII to be played also" above the first staff.

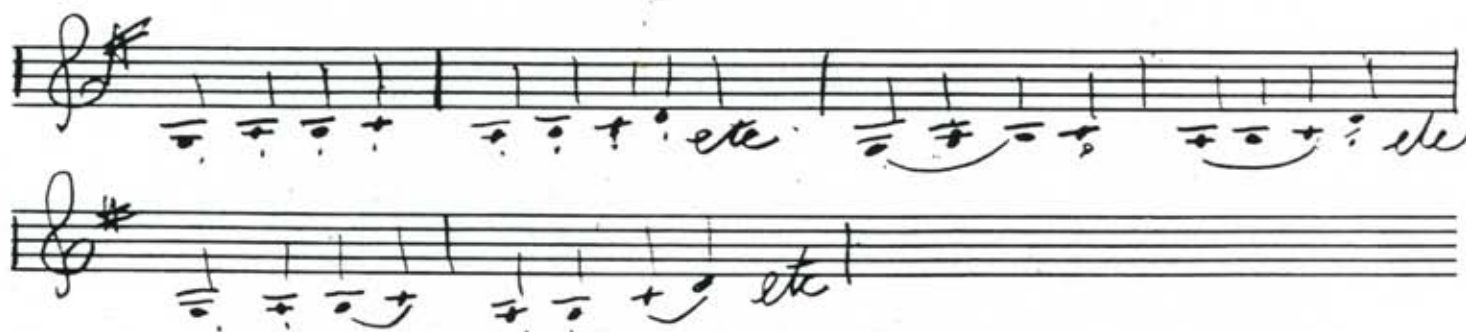
EXERCISE NO. IX

Study in positions I, II, III and IV also in half position. Half position is obtained by stretching the fingers to a half-tone distance.

1st 2nd 3rd 4th



No 1 X to be practiced also



EXERCISE NO. X: Octave study

Finger position I to IV first played staccato. Same exercise then practiced legato.

The sound of the slide to be eliminated by opening the left hand while going from one note to another and closing it when the note is reached retaining even volume.

No X to be practiced also

EXERCISE NO. XI

Advanced study in quick changes of position.

Handwritten musical score for Exercise No. XI, featuring five staves of music. The notation includes various fingerings (e.g., 4, 1, 4, 1, etc.) and articulations (e.g., accents, slurs). The music is written in treble clef with a key signature of one sharp (F#) and a time signature of 4/4. The first staff begins with a piano (p) marking. The exercise involves rapid changes of position, as indicated by the title.

EXERCISE NO. XII

Daily warm up exercise.

Handwritten musical score for Exercise No. XII, featuring six staves of music. The notation includes various fingerings (e.g., 1, 4, 4, 1, 1, 2, 1, 2, 1, 2, 3, 4) and articulations (e.g., accents, slurs). The music is written in treble clef with a key signature of one sharp (F#) and a time signature of 4/4. The exercise is described as a daily warm up exercise.

VIBRATO

Very important - to produce the desired tone quality.

Forefinger of the right hand resting on the thumb and please, please not a wide vibrato, but as fast and as much in place as possible - not to be mistaken for a trill.

A trill should not be a wide vibrato, but a very exact, either a half or a whole tone distance.

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Avoid constant vibrato, allowing areas without it, as the music dictates.

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When ready to try to make music start with easy pieces.

Example: The Swan - C. Saint-Saens

Air on the G String - Bach.

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Now, the quality of the sound is all important - mold it with a beautiful vibrato and beautiful phrasing.

The choice of "positioning" your right arm or fingers, will depend entirely on your musical phrasing, and so as to be always prepared for the direction that the music is going.

Try all alternatives, of arm at rest and fingers forward or back, or arm forward or back, with fingers either together or stretched forward or back as the music dictates.

PRACTICAL INSTRUCTIONS

Connect the instrument first and let it warm up, about fifteen minutes, before tuning.

Tune to your own body capacity. I found it, for myself, to be the G - below middle C - giving me three + octaves up to the vertical rod and a one + octave down toward myself.

The range of each newly built instrument may be different.

In searching for material, in the vast libraries for voice and other various instruments, suitable for the theremin, remember that in fast passages close intervals are possible, not so for passages easy for the violin, "over the string" ones.

In playing develop the daring of a diver, in reaching wide jumps, without any sliding - always aiming not only for the desired note, but the very center of the note.

A sample of what level of difficulty I was able to perform on the theremin:

Schelomo - Bloch, for cello and orchestra, played with the Philadelphia Symphony Orchestra in Philadelphia.

Sonata for violin and piano - C. Franck, performed with my sister Nadia Reisenberg (all four movements) in recital at Town Hall, New York.

Concerto for theremin and orchestra - in three movements by Anis Fuleihan, performed with the New York Symphony in New York with Leopold Stokowski (who commissioned the work especially for me) conducting. This composition was subsequently performed with the Philadelphia Symphony Orchestra at the Academy of Music in Philadelphia, Alexander Hilsberg conducting and with the New York Philharmonic at the Lewison Stadium, New York.

Now - take it further, with all my blessings, and may the theremin remain - yet another voice - in the world of music.

When performing, as soloist, with a symphony orchestra, make sure, at the rehearsal, that your instrument is placed so, as to insure that neither the bows of the first violins, or the baton of the conductor, can possibly intrude in your magic electro-magnetic circle.

CLARA ROCKMORE - THEREMINIST

The Theremin (named for its inventor, the noted Russian scientist Leon Theremin) is a wonder-working product of modern electrical magic -- a musical instrument that is not touched by the hands in playing. It possesses a rich and beautiful tone -- a tone of aerial delicacy, yet of remarkable carrying power. In quality, it resembles the violin in the higher ranges, the cello in the lower.

Technically speaking, the tone is produced by the introduction of the performer's body into an electro-magnetic area about the instrument (generated by means of an alternating current around the antennae), the body serving as a conductor and in this way achieving change in pitch, timbre and volume. As the right hand approaches a vertical antenna, the pitch of tone becomes higher, and as the hand is withdrawn, it becomes lower. Similarly, the intensity of tone is regulated by approaching or withdrawing the left hand to and from a metal ring on the left of the instrument. Thus the entire tone scale and all musical effects are actually produced by movements of hands and fingers in the air, without contact with the instrument.

Among the noted musicians who heard the theremin in its early development was the celebrated pianist Josef Hofmann. Indeed, several of his valuable suggestions were adopted by ^{the} ~~the~~ inventor in later construction of the instrument.

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Clara Rockmore, who is Russian by birth, and a former concert violinist, was one of the first to envision the great possibilities of the theremin as a concert instrument. Under the inventor's personal guidance, she set to work to master its intricate and difficult technique, and soon demonstrated extraordinary qualifications, foremost of which was the accuracy with which she produced the desired pitch from the air -- "aerial fingering", as one critic has since termed it.

Naturally this demands an artist of exceptional gifts as well as training. Miss Rockmore is such an artist: her vocation was evident from babyhood. At two, she was playing the piano; at four, she was entered at the Imperial Conservatory of Music in St. Petersburg, the youngest pupil ever to have received this honor. Later she became one of Professor Leopold Auer's most promising pupils, eventually following a career as concert violinist until she turned her attention to the theremin.

The first public demonstration of the theremin as a concert instrument was given by Miss Rockmore in The Town Hall, New York City, on October 30, 1934. It was the season's surprise. A fascinated audience sat completely under the spell of what seemed to them magic music -- music that floated on the air from a source seemingly uncontrolled by human power. Intrigued at first, the listeners soon recognized the presence of an artistic mind and soul directing the performance; they appreciated the fine and sincere musicianship, irreproachable for taste and dignity, and a marvel of sensitive, poetic feeling.

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The New York Times critic wrote of Miss Rockmore's performance of the formidable Cesar Franck "Violin Sonata": "What she accomplished in matters of intonation, legato, staccato playing, accentuation and nuances must have come as a distinct surprise to those who entertained false ideas of the theremin's possibilities. She evinced not only her exceptional control of every phase of theremin playing, but also a highly developed musical imagination and interpretive powers".

When she appeared as soloist with the Philadelphia Orchestra the critic of the Evening Bulletin stated: "Miss Rockmore is the greatest virtuoso of this instrument, with extraordinary qualifications. She calmly darts her fingers at invisible spots in the atmosphere and produces the desired pitch with wonderful accuracy".

RELEASED BY COLUMBIA CONCERT MANAGEMENT

CLARA ROCKMORE, THEREMINIST

PRESS EXCERPTS

"An expert and very artistic thereminist ... virtuosity that seemed almost heaven-born".

... Los Angeles Herald Express

"Sensitive, musicianly performances ... really exquisite form ... remarkably lovely".

... Saint Paul Pioneer Press

"Remarkably adroit performer ... surprising vivacity".

... San Francisco Examiner

"Masterly playing ... obviously a musician."

... Los Angeles Times

"Extraordinary technique ... sensitive musicianship"

... Long Beach (Calif.) Press Telegram

"Fine musicianship ... imitating perfectly every detail of the technique of stringed instruments ... interpretations are artistic in phrasing and accurate in pitch".

... Salt Lake City Desert News

"Clara Rockmore, an exquisite, tragic-looking woman, plays the theremin like the true poetess she appears to be".

... Chicago Herald-American

"Clara Rockmore, the most celebrated performer on the theremin, again distinguished herself as a proficient performer on an exceedingly difficult instrument ... has it in her power to hold an audience in thrall... She accomplished miniature wonders."

... New York Post

"Prodigious skill, in rapid passage work"

___ New York World Telegram

"Variety of tone and tempo she created so magically ... gracious in its melodic flow"

___ Worcester (Mass.) Telegram

"Admiration for Miss Rockmore's musicianship and devotion to her instrument"

___ Buffalo (N.Y.) News

"Performed with the consummate skill and grace of the real artist".

___ The Durham Sun

"Produced tones that had all the sweetness of the organ, oboe, violin and cello combined".

___ Wilkes-Barre Record

"Miss Rockmore evidenced great skill in her theremin program, gaining surprising tonal effects in a wide variety of compositions ... Garbed in sombre black, her fine features immobile, and black hair brushed tightly to the head and parted in the middle, she might have stepped from the pages of a novel by Gorky or Chokhov".

___ The Ottawa Journal

"Real musicianship and refinement of phrasing ... phenomenal technique ... plays violinistically"

___ Los Angeles Times

"Adding wonderment to a concert ... she achieved the most amazing runs and glissando effects, yet her attack was precise, her staccato crisp".

___ Pasadena, Calif.

"Exquisite sounds ... gentle, touching tonal quality ... great talent and feeling"

___ Oakland (Calif.) Tribune

"Fascinating was the performance ... great sensitivity and warmth of expression accounted for amazingly beautiful results of definite artistic value".

___ The Pittsburgh Press

"Theremin delights crowd ... thrilling in ethereal effect".

___ The Winnipeg Tribune

"Pure virtuosity ... delighted reception"

___ Victoria (Canada) Daily Colonist

"She revelled the unusual instrument's startlingly vocal tones at their best".

___ The Seattle Times

"Brought rich and vibrant tones from her instrument"

___ The Spokane (Wash.) Review

"The value of the theremin as a musical medium was readily apparent ... Miss Rockmore's manipulation had the fascination of necromancy; her musicianship showed a finely considered balance of interpretive forces which her hearers obviously appreciated"

___ The Portland Oregonian

"Miss Rockmore's seance-like management of this slightly supernatural instrument is quite amazing".

— Detroit Times

"Unusual musical delight ... fine and sincere musicianship, irreproachable for taste and dignity, and a marvel of sensitive and poetic feeling".

— Norwalk (Conn.)

"She elicits from the instrument tones which are reminiscent of a stringed instrument, but fuller and more vibrant... here was a fascinating performance".

— Dayton (Ohio) News

"More plastic than a violin or cello".

— St. Louis Post-Dispatch

"Singing tone ... beautiful legato".

— Los Angeles Examiner

"Extraordinary skill ... musical taste ... real artistry".

— Minneapolis Morning Tribune

"Showed her mastery of the theremin ... smooth-toned playing".

— New York Herald Tribune

"Sound musician with a finely developed gift of self-expression".

— Vancouver (Canada) Daily Province

"Richly Effective ... sensitively phrased ... Esthetically satisfying".

— Fargo (S.D.)

"Miss Rockmore, as has been noted before, is an excellent thereminist, but first of all she is an excellent artist".

____ New York World-Telegram

"Miss Rockmore had full command of her solo instrument and utilized every opportunity for exploitation of the emotional nature of "Schelomo". Bloch's Rhapsody was originally written for 'cello but is excellently suited to the brilliance of the theremin".

____ Philadelphia Inquirer

"Miss Rockmore is the greatest virtuoso of the instrument ... With an assurance which must have been born of instinct as well as skill, she calmly darts her fingers at invisible spots in the atmosphere and produces the desired pitches with wonderful accuracy".

____ Philadelphia Evening Bulletin

"There was enchantment in the playing of Clara Rockmore ... tenseness of mood and vivid imagination ... it was most beautiful".

____ Toronto Evening Telegram

"Miss Rockmore, in a manner suggestive of the supernatural, drew exquisite tones seemingly out of thin air. With no tangible point of contact with the Theremin she performed difficult scale passages and leaps with an astounding dexterity and precision. Even if the woods were full of Theremin players, Miss Rockmore would still be outstanding, since she is a first-rate musician and a fine artist".

____ New York Post