# Sports & Piano

## A Renovative Way to Teach Piano Techniques for Intermediate Students Through Excerpts

(2025)

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Doctoral Music Product (CONSVTY 5698B)

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# Preface

## Introduction

Analogies are powerful tools in music education, offering vivid and relatable explanations for technical or musical concepts. A well-chosen analogy can save significant time in piano teaching by providing students with clear mental images and connections in a fun, engaging way, especially for young students.

Piano playing, like sports, relies on precise muscle usage, timing, and coordination. Many motions required in piano technique closely parallel movements in sports. Drawing on these similarities, this project will present analogies between common piano techniques and sports actions, such as pole vaulting, ice-skating, swimming, etc.

This project aims to create an innovative way for intermediate piano students that uses analogies from sports to teach piano techniques effectively.

## Content

The project will include a **textbook** for classroom use, and **tutorial videos** for teacher reference.

The textbook will cover eight topics, each focused on fundamental techniques commonly encountered in piano playing (e.g., circular wrist motion, forearm rotation) and their application to specific musical textures (e.g., two-note slurs, octaves, large intervals). Every topic will include 3-5 carefully selected intermediate-level classical repertoire excerpts to provide students with practical applications and reinforce the concepts.

To support teachers in implementing this approach, the project will also include tutorial videos for each topic. These concise videos will:

- Explain the technique focus of each topic;
- Offer suggested teaching sequences for optimal learning;
- Include demonstrations of the technique in action.

## Applicability

The textbook is designed for intermediate piano students who have acquired a basic understanding of music notation. The excerpts align with Levels 3 to 7 of the *Celebration Series*® by The Royal Conservatory of Music (RCM).

## Pedagogical Principles of Piano Playing in This Project

### 1. Bigger Motion

- **Principle:** Engage larger muscle groups (wrist, arm, shoulder, and upper body) rather than relying solely on finger movements.
- **Reason:** Fingers contain no muscles themselves; generating motion from larger body parts makes playing easier, and helps prevent injury.

### 2. Never-Freezing

- **Principle:** Maintain continuous, fluid motion, even during rests, held notes, or between notes.
- **Application:** Connect musical phrases through well-coordinated physical gestures (e.g., transforming isolated notes into a bigger unified motion).

### 3. Diversity of Repertoire

- **Principle:** Expose students to varied styles from the earliest stages.
- **Scope Includes:**
    - **Historical Periods:** Baroque, Classical, Romantic, Impressionist, 20th-century, and Contemporary.
    - **Composers:** Standard canon + underrepresented voices (American contemporary, Asian, women composers, etc.).
    - **Textures & Styles:** Homophonic, polyphonic, tonal, and atonal music.

## Goal

The primary goal of the project is to prepare intermediate-level piano students with strong technical foundations, enabling them to approach advanced repertoire with confidence and skill.

This textbook and accompanying videos aim to enhance piano instruction for teachers by combining creative teaching strategies with practical resources, making piano technique more accessible and engaging for students.

# Topic Overview

| No. | Category | Piano Technique | Sport | Picture | Piano Textures | Tutorial Video Link |
|---|---|---|---|---|---|---|
| 1 | *Wrist* | Drop & Roll (Vertical Motion) | Pole vaulting | | Two-note slur | *https://youtu.be/8BAAqiF74VU* |
| 2 | | Lateral Motion | Ice skating | | Large Interval | https://youtu.be/Rstzkj9_pVE |
| 3 | | Circular Motion | Swimming | | Ascending/Descending note | https://youtu.be/BtsT76Xwaxs |
| 4 | | Hanging & Bouncing Wrist | Bouncing a Basketball | | Octaves or Repeating Intervals | https://youtu.be/LJ9iELsNwaU |
| 5 | *Arm* | Arm Weight | Diving | | Legato & Singing Melody | https://youtu.be/_ldRjn2IxYg |

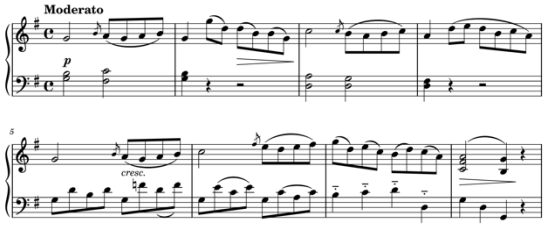
| | | | | | | |
|---|---|---|---|---|---|---|
| 6 | | Forearm Sliding | Fencing | | Accentuated Staccato | https://youtu.be/nCVggoWpJWo |
| 7 | | Forearm Rotation | Spinning a Ping-pong | | Alberti Bass, Trill Tremolo | https://youtu.be/BIdMtwUiY3g |
| 8 | *Coordination* | Unceasing Motion | Passing the Baton | | Hand-alternating Passages | https://youtu.be/Y1z3L0vxrGI |

- *Tutorial Video YouTube Playlist: https://www.youtube.com/playlist?list=PLGxzn3Jv3Ze8HlFo-ko3lzx7p49G69y2V*

# 1. Pole vaulting

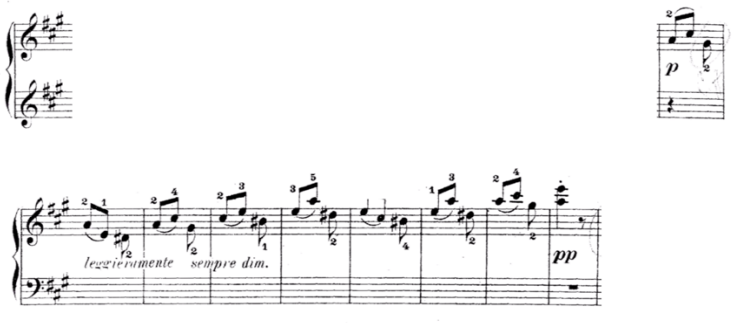
Wrist: Drop & Roll (Vertical Motion)

*Example a.*



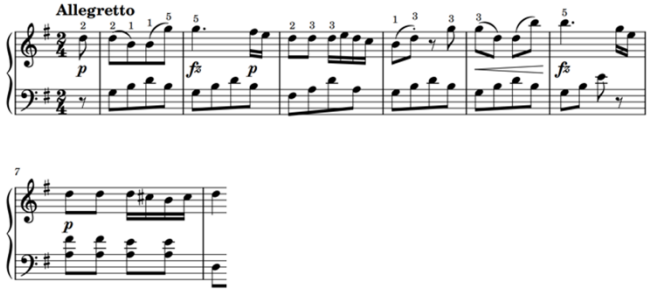

*(Beethoven: Sonatina in G major, Anh. 5, 1st mvt.)*

*Example b.*



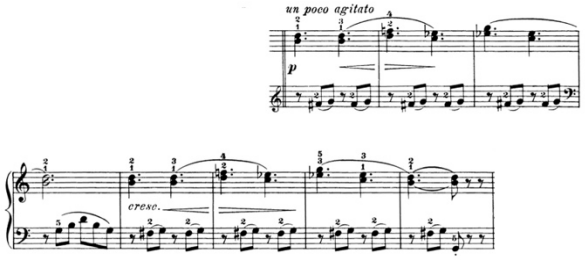

*(Gennari Karganov: Für die Jugend, Op.21, No. 5, “Scherzino”)*

*Example c.*



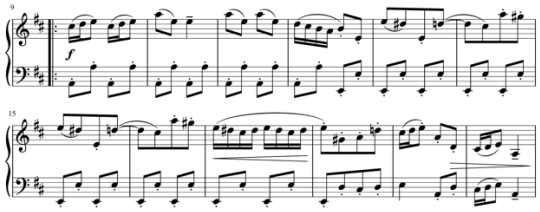

*(Clementi: Sonata in G major, 1st Mvt.)*

*Example d.*




*(Burgmüller: Etude Op. 100, No. 9 "La Chasse")*

*Example e.*

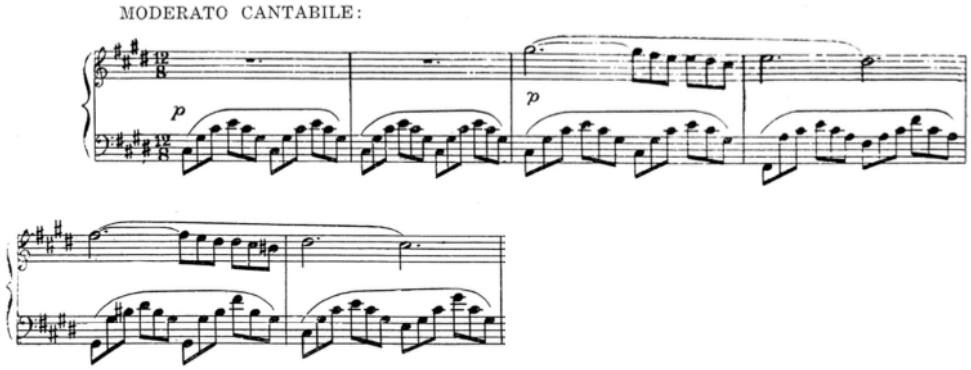



*(Bach: Musette in D Major)*

# 2. Ice skating

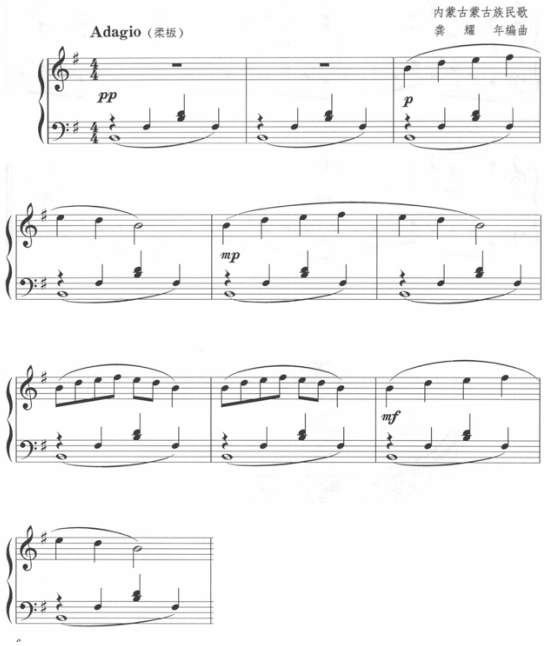
Wrist: Lateral Motion

*Example a.*



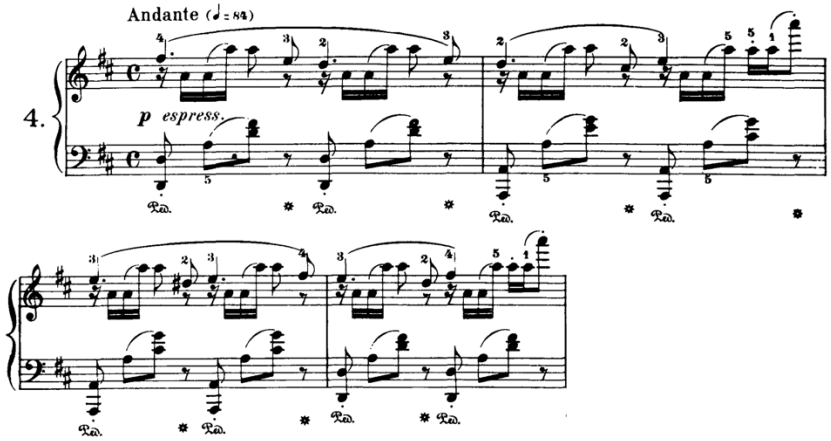

*(Nicanor Abelardo: First Nocturne)*

*Example b.*



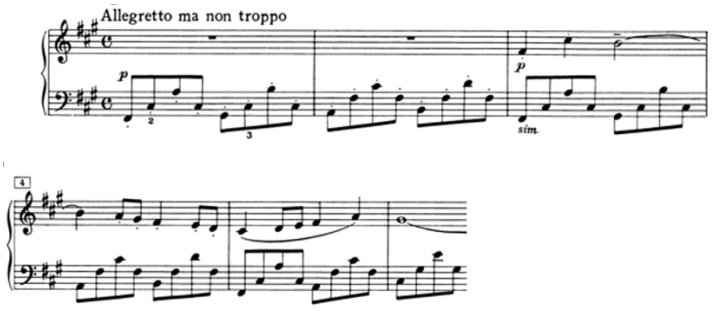
*(Mongolian Serenade, Traditional Chinese Folk Song, Arr. Yaonian Gong)*

*Example c.*




*(Burgmüller: 12 Etúdes Op. 105, No. 4 "La Campanella")*

*Example d.*

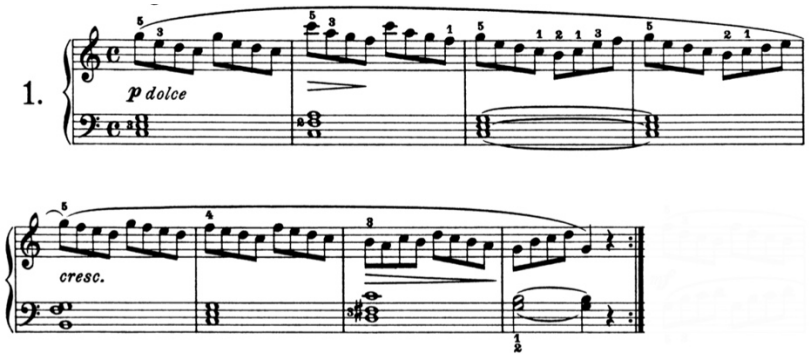



*(Debussy: Suite Bergamasque, No. 4, "Passepied")*

# 3. Swimming

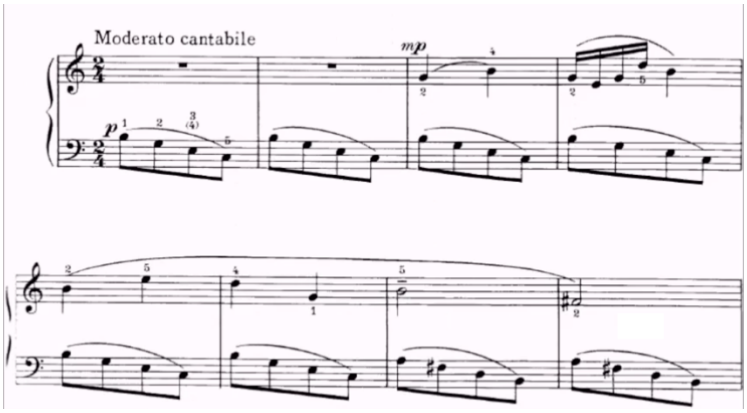
Wrist: Circular Motion

*Example a.*



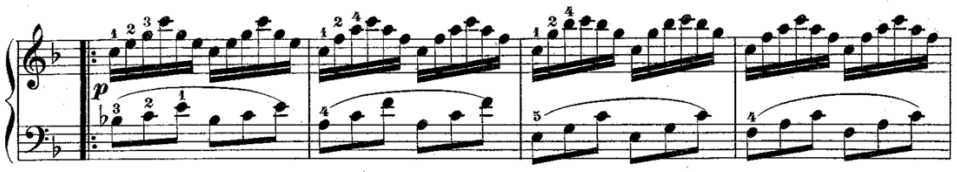

*(Burgmüller: Etude Op. 100, No. 1 "La Candeur")*

*Example b.*



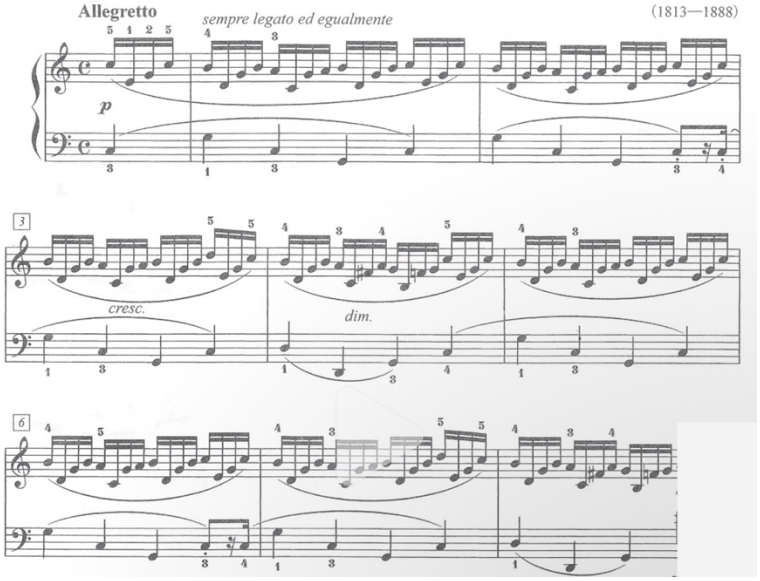

*(Dmitry Kabalevsky: 30 Pieces for Children, Op.27, No. 8, “Cradle Song”)*

*Example c.*



*(Czerny: Practical Exercises for Beginners, Op.599, No. 60)*

*Example d.*

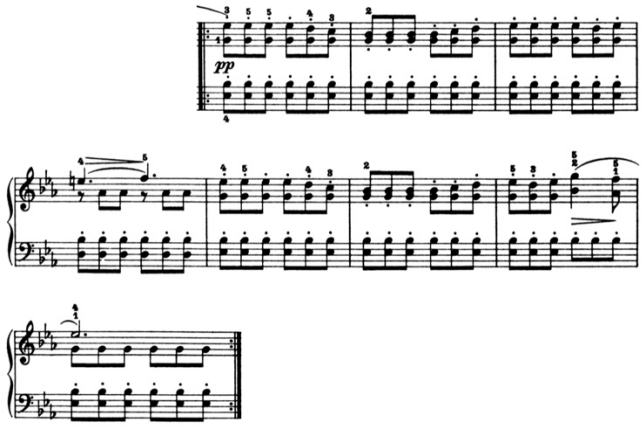



*(Heller: 25 Etudes mélodiques, Op.45, No. 1, "The Brook")*

# 4. Bouncing a Basketball

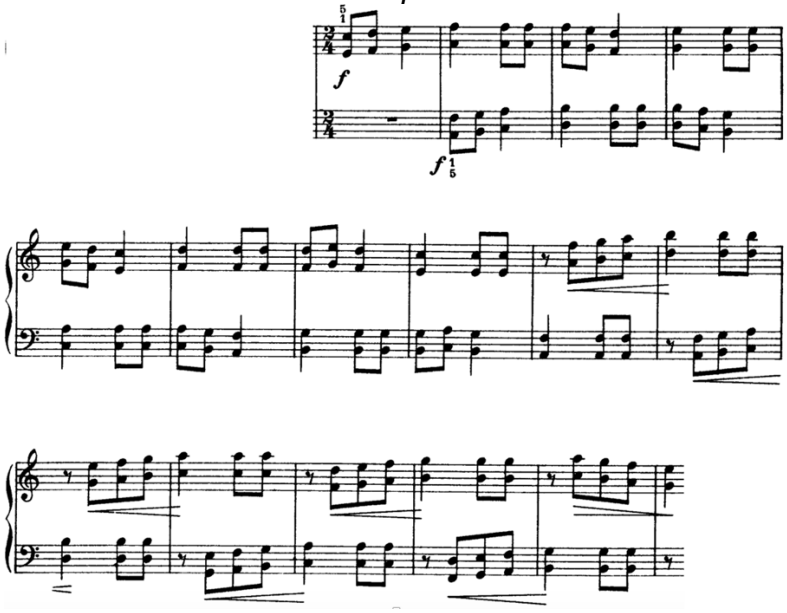
Wrist: Hanging & Bouncing

*Example a.*



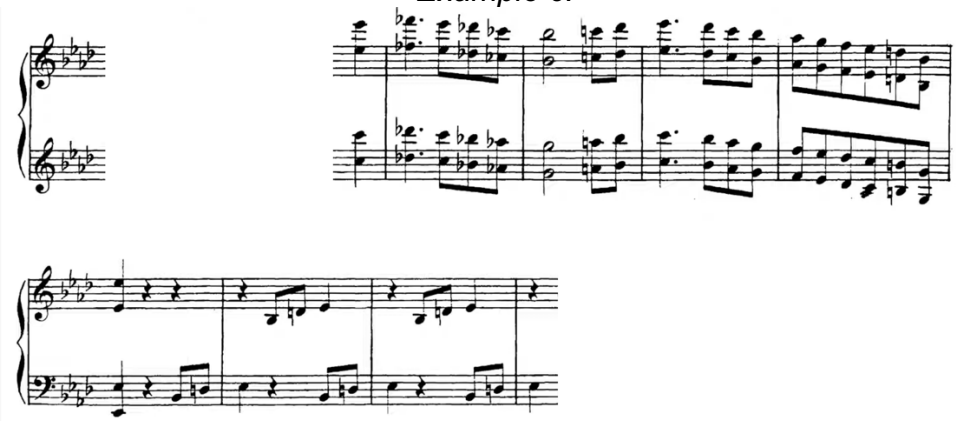
*(Burgmüller: Etude Op. 100, No. 23 "Le Retour")*

*Example b.*



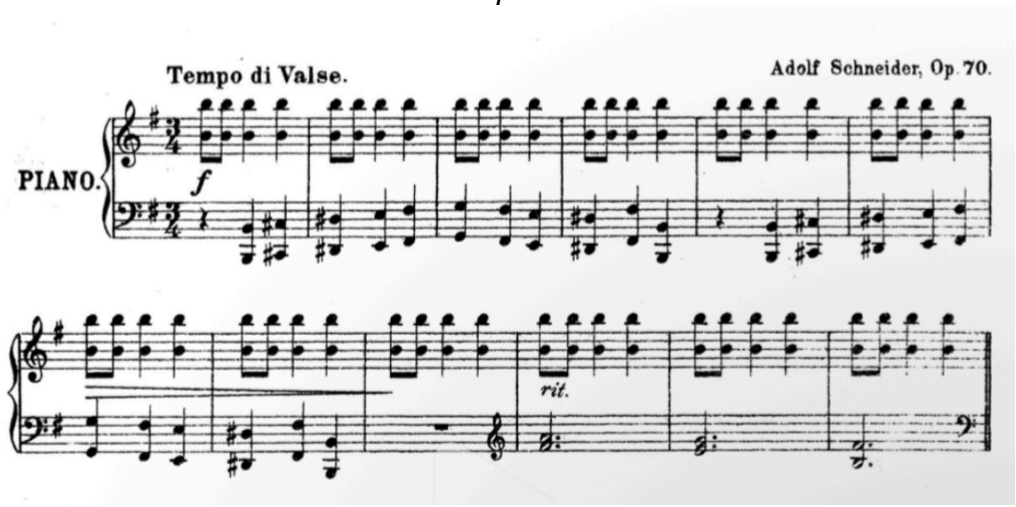
*(Bartók: Mikrokosmos, Sz.107, Vol. 1, No. 112, “Variations on a Folk Tune”)*

*Example c.*



*(Beethoven: Minuet in E-flat Major, WoO 82)*

*Example d.*

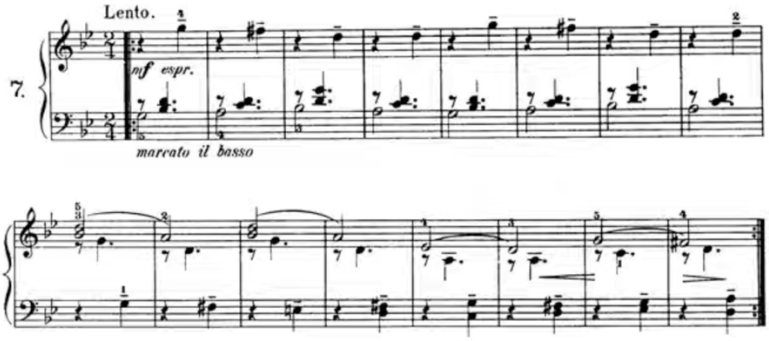



*(Adolf Schneider: Spanish Waltz, Op.70)*

# 5. Diving

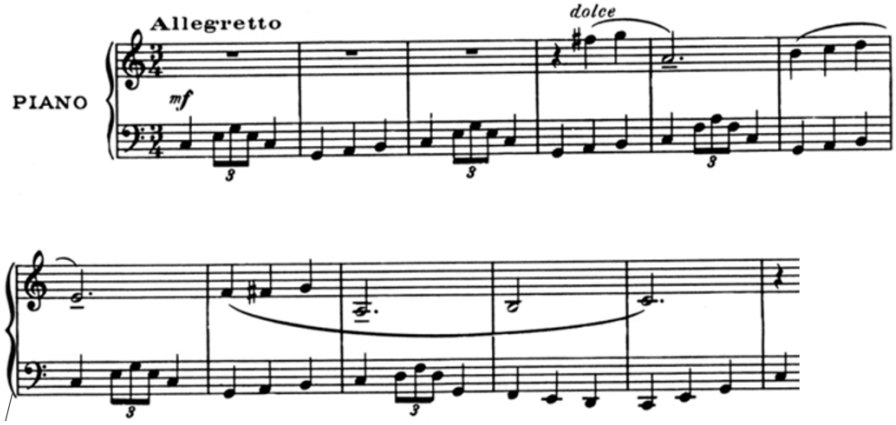
Arm: Arm Weight

*Example a.*



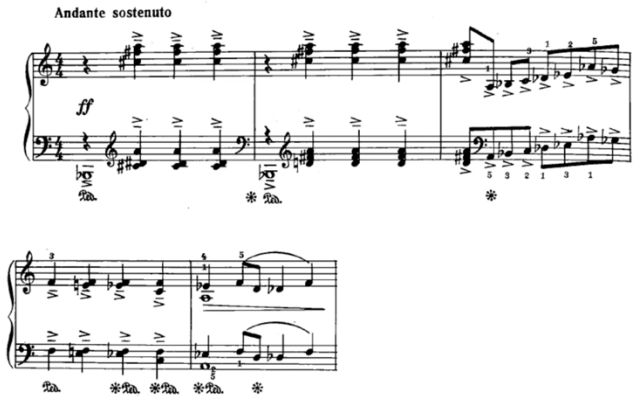

*(Tchaikovsky: Album for the Young, Op.39, No.7, "The Sick Doll")*

*Example b.*



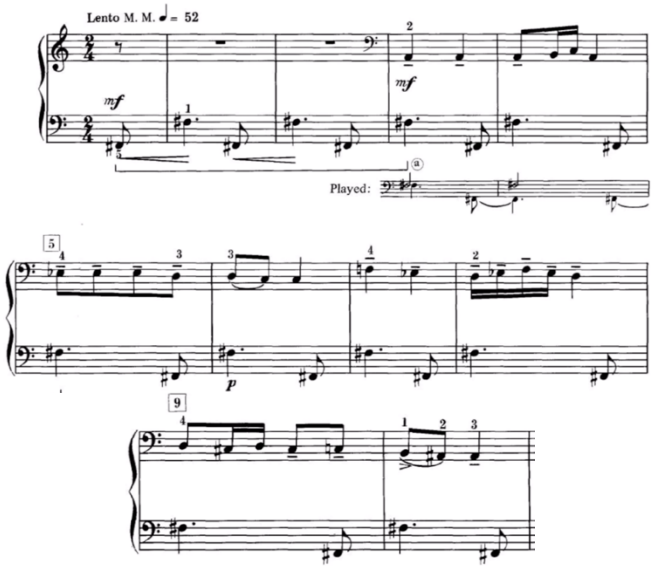

*(Prokofiev: Music for Children, Op. 65, No.2, "Promenade")*

*Example c.*



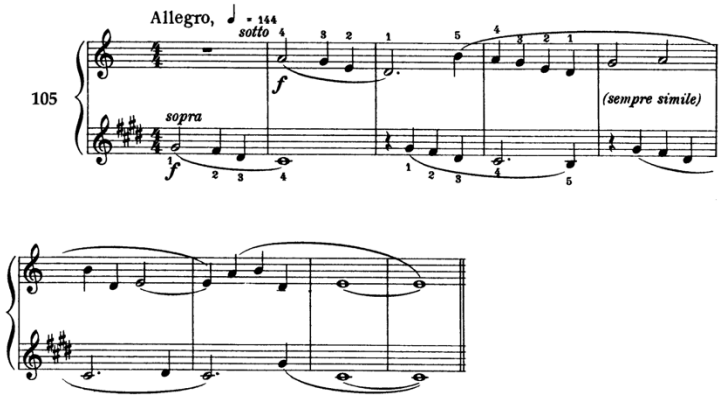

*(Khachaturian: Children's Album, Book 2, No. 7, "Funeral Procession")*

*Example d.*




*(Vladimir Rebikov: Silhouettes, Op.31, No. 9, "The Witch in the Forest")*

*Example e.*

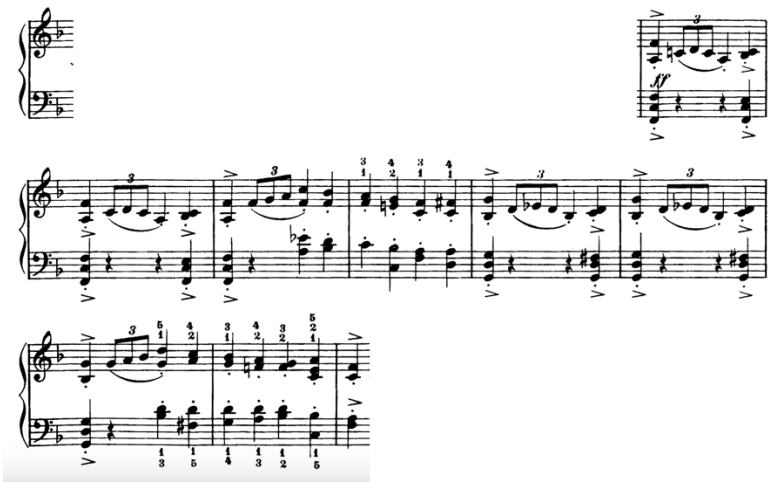



*(Bartók: Mikrokosmos, Sz.107, Vol. 1, No. 105, "Games (with two five-tone scales")*

# 6. Fencing

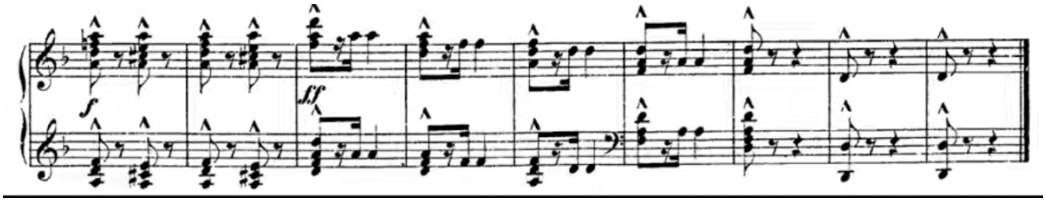
Arm: Forearm Sliding (/poking)

*Example a.*



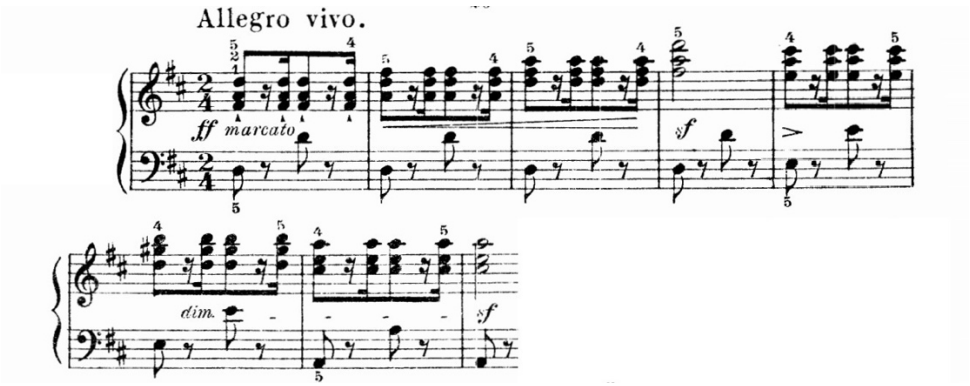
*(Ludvig Schytte: 25 Modern Etudes, Op. 68, No.9)*

*Example b.*



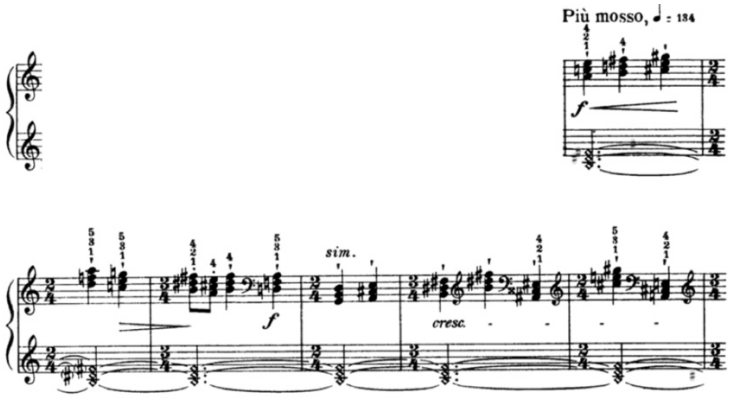
*(Schumann: Album for the Young, Op. 68, No. 29, "Fremder Mann")*

*Example c.*




*(Czerny: 125 Exercises for Passage Playing, Op. 261, No. 58)*

*Example d.*

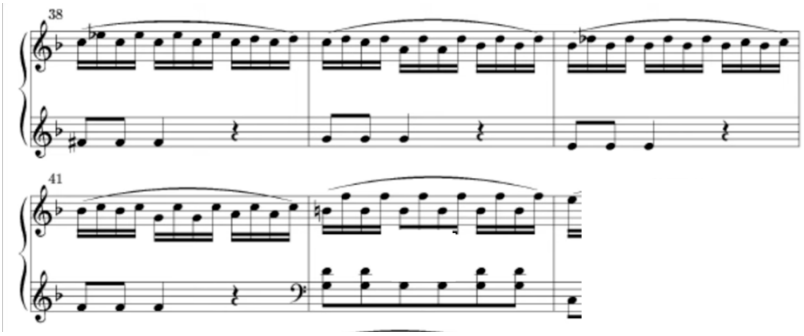



*(Bartók: Mikrokosmos, Sz.107, Vol. 4, No. 102, "Harmonics")*

# 7. Spinning a Ping-pong

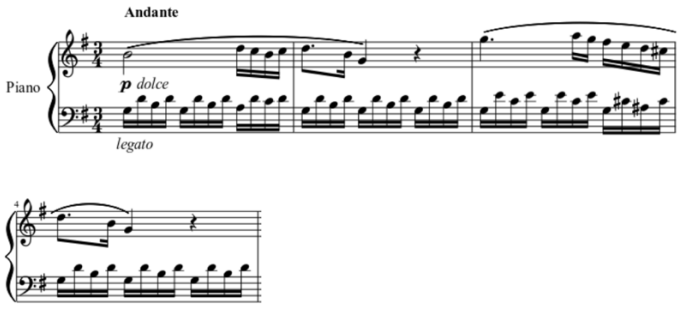
Arm: Forearm Rotating

*Example a.*



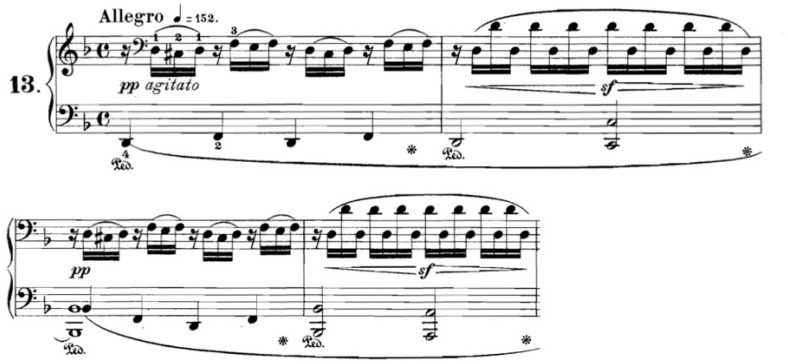

*(Clementi: Piano Sonatina in F Major, Op. 36, No. 4, I: Con spirito)*

*Example b.*



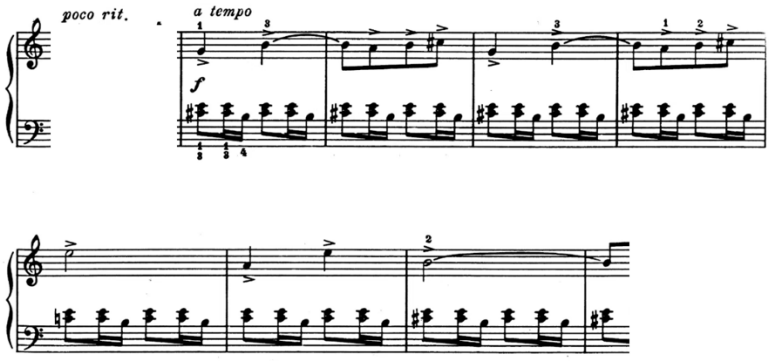

*(Mozart: Piano Sonata No.16 in C major, K.545, II: Andante)*

*Example c.*



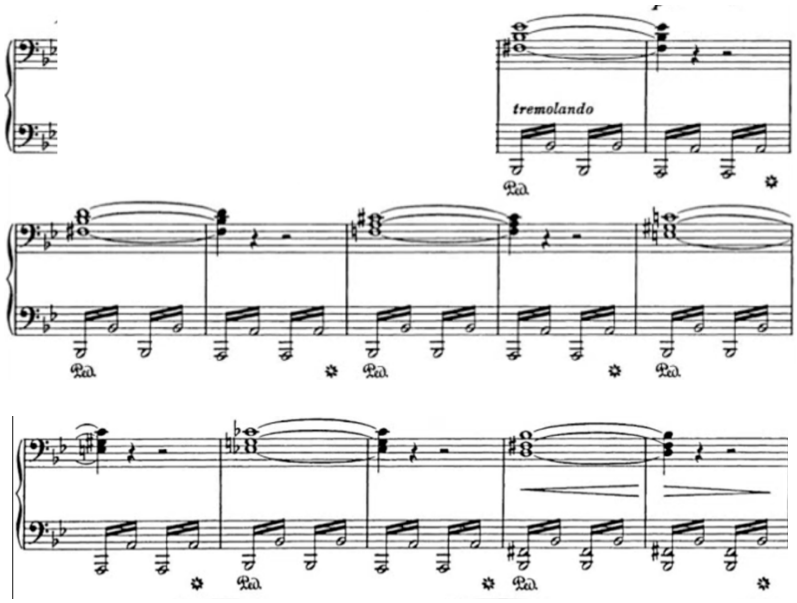

*(Burgmüller: Etude Op. 100, No. 13 "Consolation")*

*Example d.*




*(Khachaturian: Album for Children, Book 1, No. 9, "March of the Cavaliers")*

*Example e.*

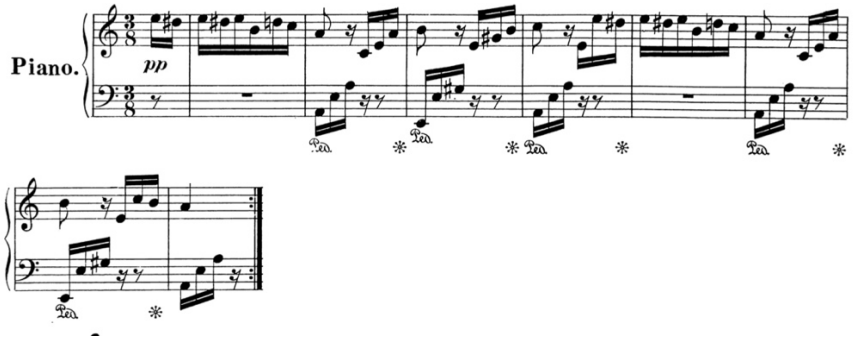



*(Liszt: Nuages gris, S. 199)*

# 8. Passing a Baton

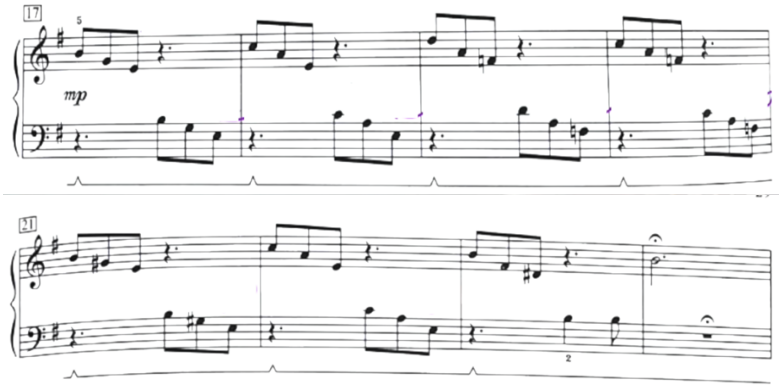
Coordination: Unceasing Motion

*Example a.*



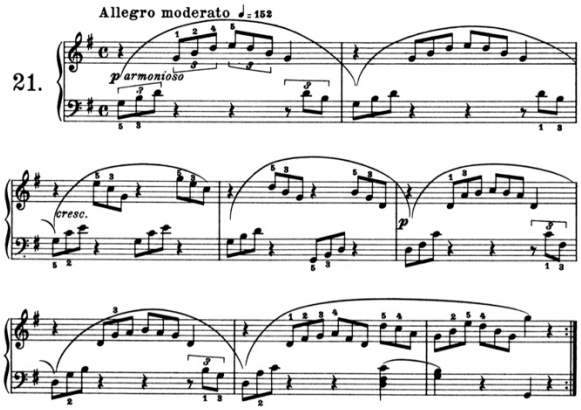

*(Beethoven: Bagatelle No. 25 in A minor, "Für Elise")*

*Example b.*



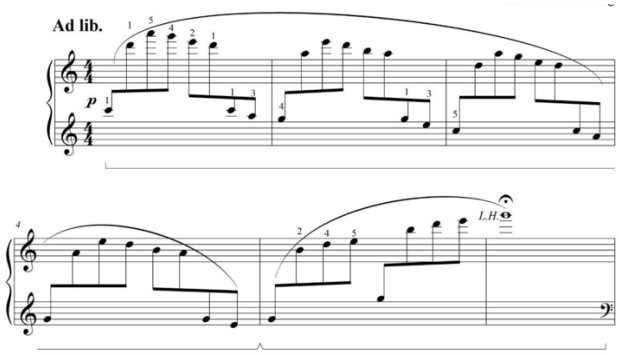

*(Ann Crosby Gaudet: The Stormy Sea)*

*Example c.*



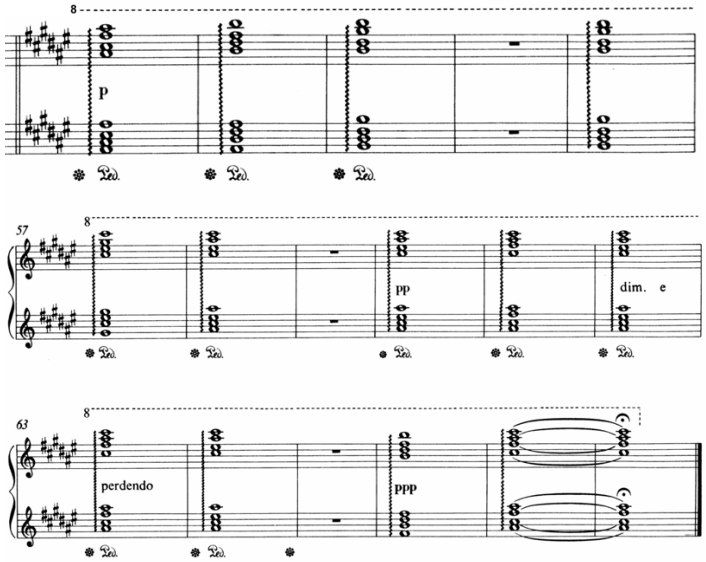

*(Burgmüller: Etude Op. 100, No. 21 "L'Harmonie des Anges")*

*Example d.*




*(Liuyang River; Traditional Chinese Folk Song, Arr. Mary Gossell & Shenwei Geng)*

*Example e.*




*(Liszt: In festo transfigurationis Domini nostri Jesu Christi, S188)*