

**Fryderyk Chopin's Art of Piano Fingering in Context:
Towards Historically *Involved* Performance of the Etudes**



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Abstract

The first part of this thesis reframes Chopin's art of piano fingering through the lens of the neglected (yet all too often reviled) pedagogical repertoire of the early nineteenth century. In doing so, it readdresses some largely unquestioned truisms regarding Chopin's own approach to finger choice, as well as issues of influence, originality and innovation. This line of inquiry ultimately uncovers a need to rekindle research on Clementi's and Hummel's fingering practices—Chopin's pianistic models after all. These pedagogues' didactic music offers today's players not just another indirect means for study of Chopin's approach to piano technique and performance, but direct access to a rich repository of techniques of expression in themselves which, absent fingering indications, we would probably never know existed.

Extended case studies then draw on the Chopin Etudes as the best possible illustration of these issues, using the many currently available primary sources: autograph manuscripts, manuscript copies, early editions, and student annotated scores. These case studies do not, however, provide any sort of 'performance guide' to the Etudes (much less of a prescriptive bent), but focus rather on the phenomenology of the original fingerings in context. That is, they explore interrelationships between musical composition (or improvisation), the gestural by-products of finger choice, and the player's own expressive intent. The aesthetic stance taken throughout is that any congruent use of these historical fingerings arises to a very high degree from the player's own individual rhetorical disposition and involvement, all of which should help override aprioristic (or *Werktreue*) ideas of performance outcome. Such an historically *involved* approach should thus provide alternatives to those pianists wishing to engage in historicist yet also highly personal performance of Chopin's music.

To Alfonso, Cristina, Daniel,
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Editorial Guidelines

Writing about keyboard fingering entails, almost by definition, the expression of minutiae. And because here it is the fingering process itself that gets top billing, typographical differentiation becomes an all-important issue. Thus, whatever their provenance, all fingerings in the main text appear in italics and separated by spaces, whereas italics in the musical examples denotes editorial fingerings and bold type original ones (not just Chopin's). This knowingly reverses standard editorial practice, the rationale being that, at least in nineteenth-century etudes and etude-like compositions or passages, fingering indications tend to be quite numerous. A useful strategy is therefore to make editorial fingerings appear secondary—hence the thinner italics. Those familiar with *The Polish National Edition of the Works of Fryderyk Chopin* (ed. by Jan Ekier) will be less startled as it follows a similar layout. Note that for extra clarity Chopin's own indications (whether originally published or not) appear in slightly bigger bold type, while those of his found in the student annotated scores are even further differentiated by appearing in parentheses whenever necessary. Provenance for any given fingering should therefore be clear from the music examples or the text, or conjointly.

Somewhat deviating from current established practice as well, this study eschews (direct) online references completely. Since academic cyberspace is increasingly littered with nonoperational links but most people would be able to locate and consult most of the sources mentioned within seconds on their own, presenting thorough bibliographical information seemed preferable to ephemeral URLs. Regrettably, then, this thesis does not draw on important online sources such as Daniel Leech-Wilkinson's *Challenging Performance*—though one could say it does so in spirit. It almost goes without saying that without the ever more wonderful world of digital library collections and repositories this research would not have been possible (exemplary Gallica and Polona spring to mind for obvious reasons), especially considering recent world events.

Most of the music examples are diplomatic transcriptions to the extent that it was possible to make them. Occasional liberties were taken with the placement of fingerings for better legibility, except of course where that would have altered their meaning. Otherwise all stemming, beaming, slurring and other articulation signs, pedalling, note spellings, and clefs (and their placing) all appear as in their original forms save for the odd tacit correction, slight alterations due to music engraving rules, or when aiming for better legibility. Pitch names throughout the text use the following system: CC C c c¹ c² c³, where c¹ is middle C. Should readers want to consult the original editions for themselves, references to Chopin first editions follow the system in the Online Chopin Variorum Edition (OCVE). References to the student annotated exemplars are by the student's name and shelfmark, though note that the page numbers refer to the printed scores themselves (rather than the numbering added later to each exemplar as a whole).

Whenever available, English translations were preferred, in part to avoid crowding the already footnote-heavy text with quotes in the original languages, but also because of my variable knowledge of those languages. Thus, all *uncredited* translations are my own, usually undertaken when no alternative could be found. Note that original spellings and misspellings have been retained in every language, except again for the odd tacit correction. Any remaining (small) editorial clarifications appear within the text itself.

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Abbreviations

Abbreviated Citations

<i>AoP</i>	Heinrich Schenker, <i>The Art of Performance</i>
CUP	Cambridge University Press
<i>GaP</i>	Muzio Clementi, <i>Gradus ad Parnassum</i>
IUP	Indiana University Press
<i>Mdm</i>	Fétis and Moscheles, <i>Méthode des méthodes</i>
NIFC	Narodowy Instytut Fryderyka Chopina
OUP	Oxford University Press
<i>PaT</i>	Jean-Jacques Eigeldinger, <i>Chopin as Pianist and Composer</i>
<i>Ped</i>	Muzio Clementi, <i>Preludes et exercices doigtés</i>
<i>PoM</i>	Maxine Sheets-Johnstone, <i>The Primacy of Movement</i>
PUP	Princeton University Press
PWN	Polskie Wydawnictwo Muzyczne

Library Sigla

A-Wn	Wien, Österreichische Nationalbibliothek
D-B	Berlin, Staatsbibliothek zu Berlin
E-VALm	Valldemossa, Celda de Frédéric Chopin y George Sand
F-Pn	Paris, Bibliothèque nationale de France
F-Po	Paris, Bibliothèque-musée de l'Opéra
F-Ppo	Paris, Bibliothèque Polonaise de Paris
GB-Ob	Oxford, Bodleian Library

PL-Kj	Kraków, Biblioteka Jagiellońska
PL-Kn	Kraków, Muzeum Narodowe w Krakowie, Biblioteka
PL-Wmfc	Warszawa, Muzeum Fryderyka Chopina
PL-Wn	Warszawa, Biblioteka Narodowa
S-Smf	Stockholm, Stiftelsen Musikkulturens framjande
US-NYpm	New York, The Morgan Library and Museum
US-Wc	Washington, D.C., The Library of Congress

OCVE Acronyms

AFE	Austrian first edition
FEE	first English edition
FFE	first French edition
FGE	first German edition
PFE	Polish first edition

CHAPTER 1

Introduction and Overview of the Literature: ‘More than Meets the Hand’

Background

This thesis focuses on Chopin’s *artistic* conceptions of piano fingering.¹ It sets out from the notion that at least some fingering choices are inextricable from piano touch and tone quality, matters of style and expression, and occasionally even compositional structure,² a viewpoint obviously at odds with a *utilitarian* one where mostly dependability, expediency and physical comfort would be paramount instead. It also explores Chopin’s persistent use of fingering techniques that were already being replaced by highly formulaic ‘systems’ during his lifetime,³ which throws some cold water on popular ideas about originality or innovation in this area—that is, of Chopin espousing a completely ‘modern’ outlook *avant la lettre*. Bridging this knowledge gap obviously requires extensive practice-led research of contemporaneous repertoire, as it is simply impossible to glean such information from the treatises alone.

¹ Informal reference to fingering can be somewhat equivocal, as it tends to favour isolated aspects of a multi-faceted process: the act of choosing a particular sequence of fingers, whether for or while practising, performing, composing or improvising; the habitual use of particular finger choices in any given context; the notation of any of the above for future personal retrieval or dissemination. Thus, in this study the word “fingering” and other stand-ins denote (in whole or in part) a variably intentional and conscious process ranging from the conception, practice, and (optionally) notation of finger choices. Incidentally, unless specified further, the abbreviation “piano” refers to both the historical pianoforte (or fortepiano, as these terms were quite interchangeable in the period under discussion) and the so-called ‘modern’ piano, unless specified further for some reason.

² Such interdependence should be neither news nor shocking. See, e.g., Carl Philipp Emmanuel Bach, *Essay on the True Art of Playing Keyboard Instruments*, trans. and ed. by William J. Mitchell (New York: Norton, 1949), p. 30: ‘The true art of playing keyboard instruments depends on three factors so closely related than no one of them can, nor indeed dare, exist without the others. They are: correct fingering, good embellishments, and good performance’.

³ See Jonathan D. Bellman, ‘Chopin and the Cantabile Style’, *Historical Performance*, 2 (1989), 63–71 (65): ‘In realizing his vocalistic keyboard style [...] Chopin could draw on techniques that, while not uncommon in his time, are as defunct today as his style’.

There is a pervasive disconnect between theory and practice, in fact, as very few writings on fingering since about 1840 seem to deviate much from systematically utilitarian concerns. As Jeanne Bamberger observes in her seminal article:

Since the rise of the nineteenth-century virtuoso [...] fingering has come to be associated primarily with technical proficiency. Thus, when virtuoso performers have turned their attention to editing, they have usually devised fingerings to facilitate rapid execution in difficult passages or easy memorization. [...] Often this approach shows little concern for the musical implications of the technically efficient fingering and tends to ignore the possibility of fingering as a musical or expressive device.⁴

Though vague as to ‘the rise of the nineteenth-century virtuoso’, the statement nevertheless captures the utilitarian, mechanistic climate which endures to this day, at least as regards fingering.⁵ In another rare reflection on artistic fingering closely trailing Bamberger’s, Carl Schachter notes that an approach to fingering that relies too much on making things

as easy as possible technically [...] carries with it the danger of separating the execution of the notes from that of the interpretive nuances; shadings and articulations are superimposed by an act of will on a stereotyped and undifferentiated physical pattern.⁶

And, following in Bamberger’s and Schachter’s footsteps, Jeffrey Swinkin concludes that

⁴ Jeanne Bamberger, ‘The Musical Significance of Beethoven’s Fingerings in the Piano Sonatas’, *Music Forum*, 4 (1974), 237–80 (242). For an earlier sounding the alarm, see Arnold Dolmetch, *The Interpretation of the Music of the XVIIth and XVIIIth Centuries* (London: Novello & Co., 1915), p. 364: ‘With the ordinary modern system of pianoforte fingering the proper phrasing of the old music is always difficult—frequently impossible. It is therefore well worth trying to discover the fingering in use at the time a certain piece was composed, for it will help us to its right understanding and easy performance’.

⁵ See Lia Laor, ‘“In Music Nothing Is Worse Than Playing Wrong Notes”: Nineteenth-Century Mechanistic Paradigm of Piano Pedagogy’, *Journal of Historical Research in Music Education*, 38/1 (2016), 5–24 (10): ‘[M]echanistic piano pedagogues invested much effort into identifying the essential parts comprising the musical piece to be performed and warned music students against the premature introduction of art into their studies. As a result, they ended up casting music itself out of piano lessons’. Such mechanistic ideology may have become even more prevalent in the twentieth and twenty-first centuries.

⁶ Carl Schachter, ‘Introduction to the Dover Edition’, in Ludwig van Beethoven, *Complete Piano Sonatas, Vol. 1*, ed. by Heinrich Schenker (New York: Dover, 1975), pp. v–ix (p. viii).

fingerings, often the aspect of playing most taken for granted—and assumed to be relatively interchangeable or inconsequential—do, in fact, bear upon the most significant interpretive issues and the highest-level aesthetic assumptions.⁷

Excellent pianists in their own right, these scholars clearly advocate a musically significant approach to fingering, disputing the notion that finger choice could (whether consciously or not) ever run separately from bodily expression.

They represent the exception, however, for the long-standing consensus declares ‘modern’ fingering systems to be perfectly capable to meet any and all of art music’s expressive demands, that thanks to those systems ‘technical considerations are separated from matters of interpretation’.⁸ Indeed, pianists tend to buy unquestionably into the benefits of divorcing

the technical element in fingering from its interpretive element: ‘modern’ fingering is an attempt to provide a musically neutral but technically optimal solution to getting around the notes, leaving the performer free to impose an interpretation on this subsequently.⁹

Presumably because of current cultural pressures for note-perfect performances, many pianists in both the mainstream and the historical performance camps vouch for such utilitarianism to some degree. And, indeed, it is striking to see studies undertaken from a purportedly historical viewpoint operating within that same mindset. Thus, in an otherwise informative article on eighteenth- and nineteenth-century fingering practices, Martin Gellrich and Richard Parncutt also find the implementation of utilitarian systems a blessing pure and simple:

⁷ Jeffrey Swinkin, ‘Keyboard Fingering and Interpretation: A Comparison of Historical and Modern Approaches’, *Performance Practice Review*, 12/1 (2007), 1–26 (25). The present study draws at length from this article and its revised version as a book chapter, ‘Fingering: Historical Versus Modern Approaches’, in id., *Teaching Performance: A Philosophy of Piano Pedagogy* (New York: Springer, 2015), pp. 125–52. For a glimpse of the views Swinkin is indirectly alluding to here, see, e.g., Abby Whiteside, *Mastering the Chopin Etudes and Other Essays* (New York: Scribner, 1969), p. 50: ‘[...] the importance of a prescribed fingering is practically nil. If you avoid fussing about fingering you will never produce a lasting obstacle to fluent passage work. If a rhythm is working, a finger will be ready to deliver power’. From Whiteside’s viewpoint, finger choice would seem to be almost epiphenomenal—a notion the present study diametrically opposes.

⁸ Nicholas Cook, *Music, Imagination, and Culture* (Oxford: Oxford University Press, 1990), p. 79.

⁹ Eric F. Clarke et al., ‘Talking fingers: an interview study of pianists’ views on fingering’, *Musicae Scientiae* 1/1 (1997), 87–107 (100). Do note that the authors acknowledge taking their cue from Cook, *Music*, pp. 79–82.

By doing technical exercises, pianists acquired a procedural knowledge of a wide range of fingering formulae. These could then be applied more or less automatically whenever the corresponding note patterns occurred in improvisation, sight-reading, and rehearsed or memorised performance – without further practice.¹⁰

Leaving aside for now the very questionable and simplistic idea of practice, note also how subsuming processes involving finger *choices* under such systems can subtly reduce them to finger *exercises*—a very serious yet all too common category mistake.¹¹ Moreover, however tacitly and unconsciously, this article also epitomises the teleological view that utilitarian systems progress inexorably towards ever more dependability and control, while also largely denying that the fingering process *itself* could have any inherently expressive functions.¹² One could even argue that what underpins such faith in fingering systems is the idea ‘that whatever actions an organism performs in the world are the result of a previous mental activity with propositional content’.¹³ In the context under purview, this ‘intellectualist legend’ translates into the notion that fingering rules in some system or another *somehow* result in the actions through which the player then *somehow* gets musically expressive ideas across—a conceptual sleight of hand which conveniently bypasses

¹⁰ Martin Gellrich and Richard Parncutt, ‘Piano Technique and Fingering in the Eighteenth and Nineteenth Centuries: Bringing a Forgotten Method Back to Life’, *British Journal of Music Education*, 15/1 (1998), 5–23 (10). See also *ibid.*: ‘We use the term “fingering system” to emphasise that the fingering rules in these various treatises were intended to fit together and complemented one another’.

¹¹ See, e.g., Leslie David Blasius, ‘The mechanics of sensation and the construction of the Romantic musical experience’, in *Music Theory in the Age of Romanticism*, ed. by Ian Bent (New York: Cambridge University Press, 1996), pp. 3–24, (pp. 11–13).

¹² Recent examples in this vein are Joseph Banowetz, *The Performing Pianist’s Guide to Fingering* (Bloomington: Indiana University Press, 2021), and Jon Verbalis, *Natural Fingering: A Topographical Approach to Fingering* (Oxford & New York: OUP, 2012). Less hefty but also problematic for some of the same reasons as the above are Rami Bar-Niv, *The Art of Fingering: Traditional, Advanced, and Innovative*, 6th edn (Ra’anana: AndreA 1060, 2015 [2012]) and Penelope Roskell, *The art of piano fingering: a new approach to scales and arpeggios* (London: LCM Publications, 1996). See Bibliography for more outdated writings along the same lines.

¹³ Zdravko Radman, ‘On Displacement of Agency: The Mind Handmade’, in *The Hand, an Organ of the Mind: What the Manual Tells the Mental*, ed. by Zdravko Radman (Cambridge, MA & London: MIT Press, 2013), pp. 369–97 (p. 369). For the original formulation of the ‘intellectualist legend’, see Gilbert Ryle, *The Concept of Mind* (London & Others: Hutchinson’s University Library, 1949), p. 19: ‘The crucial objection to the intellectualist legend is this. The consideration of propositions is itself an operation the execution of which can be more or less intelligent, less or more stupid. But if, for any operation to be intelligently executed, a prior theoretical operation had first to be performed and performed intelligently, it would be a logical impossibility for anyone ever to break into the circle’.

the body as a holistic entity. As we will see in some detail, the intellectualist stance proves untenable in light of decades worth of research into the co-evolution of conscious processes and manual activity.¹⁴

That verbal description of fingering practices is also notoriously tedious and ink costly probably does not help bring nuanced discussion back to the fold either.¹⁵ And we should also remember that the more amenable alternative of learning from fingered excerpts or even wholly fingered pieces will always come short of a living master's demonstrations. This is important from a pedagogical standpoint, as it suggests that piano pedagogues need to engage with fingering matters far more closely if they wish to move beyond the prevalent utilitarian models. Indeed, today's piano students seem to be mostly left to their own devices in this area, routinely exposed to some or another system while learning the repertoire at large, but seldom to *contingent* fingering processes—that is, those arising from specific expressive demands found in actual music and occasionally written down by the composers themselves.¹⁶

Also underpinning mechanistic conceptions of fingering—and of technique more generally—is still all too often the misguided belief in 'equalising' the fingers, an idea on the rise since about the turn of the nineteenth century and increasingly enforced by use of gruesome contraptions.¹⁷ Yet it is a mistake to project the

¹⁴ This is the subject of Chapter 2.

¹⁵ See, e.g., Bengt Edlund, 'The Phenomenology of Fingering. Structure and Ontology in Chopin's "F-minor [sic] Etude" from "Méthode des méthodes"', in *Chopin and his Work in the Context of Culture, Volume 2*, ed. by Irena Poniatowska (Krakow: NIFC; Musica Iagellonica Polska; Akademia Chopinowska, 2003), pp. 88–105. This paper manages to discuss fingering possibilities for just the opening twenty-four notes of the piece—hardly an invitation for further study. Moreover, those twenty-four notes happen to carry no original fingering indications whatsoever.

¹⁶ As studies on this stage of learning remain to be conducted, one is forced to speculate based on personal experience and conversations with colleagues.

¹⁷ For an overview of such devices see Jean Haury, 'Machines à faire les artistes', in *Chopin et son temps*, ed. by Vanja Hug and Thomas Steiner (Bern: Peter Lang, 2010), pp. 305–32. See also Myles W. Jackson, 'Physics, Machines and Musical Pedagogy in Nineteenth-Century Germany', *History of Science*, 42/4 (2004), 371–418 (especially 377–78), id., *Harmonious Triads: Physicists, Musicians, and Instrument Makers in Nineteenth-Century Germany* (Cambridge, MA & London: MIT Press), pp. 236–48, Bernarr Rainbow, 'Johann Bernhard Logier and the Chiroplast Controversy', *The Musical Times*, 131 (1990), 193–196, and Laor, 'Mechanistic Paradigm', 15–20. For an oddly sympathetic view on the development and use of such contraptions, see Beverly Jerold, 'The 19th-century piano and finger-strengthening devices', *The Musical Times*, 162/1956 (2021), 21–39.

equalising view too indiscriminately into the past:¹⁸ what Muzio Clementi had in mind was more likely not *making* the fingers equally strong, but rather that the *use* of any one finger should not stick out in unmusical ways, a reading which would make Clementi, in Lia Laor's distinction, a 'holistic' rather than 'mechanistic' pedagogue.¹⁹ Moreover, Clementi's (and many others') support and public endorsement of Johann Bernhard Logier's *Chioplast* and other such contraptions were more likely to have been motivated by business- rather than artistic concerns.

In the context of Chopin performance and scholarship, this technical blind spot is all the more puzzling given how Chopin himself was 'absolutely opposed to the approach — a dominant one today — that sought to discipline each finger to be as strong as the others', as Jonathan D. Bellman rightly points out.²⁰ This state of affairs is obviously the result of a culture 'governed by piano competitions, obsession with note accuracy, ironclad security of memory, and ever-increasing technical demands of all kinds' rather than any appeal to historicism.²¹ In such climate it is indeed almost unthinkable to pause and realise that 'Chopin's fingering precepts — though known — have very different goals than those currently called for'.²² Even if Bellman's last insight turns out to be somewhat premature because we actually do *not* know those precepts all that well and much of the 'tacit knowledge' involved still remains to be discerned and experimented with,²³ his overall reckoning and summary of Chopin's philosophy as regards fingering are exactly correct: 'Fingering that resulted in awkward or unvocalistic phrasing, whatever its

¹⁸ See, e.g., Gellrich and Parncutt, 15.

¹⁹ See Laor, 'Mechanistic Paradigm', 6. Laor may have been too hasty, however, in classing Johann Nepomuk Hummel a 'mechanistic' pedagogue (10, 15), for reasons that will become clear from Chapters 3 and 4 onwards.

²⁰ Bellman, 'Chopin's Pianism and the Reconstruction of the Ineffable', *Keyboard Perspectives*, 3 (2010), 1–21 (8–9). See also Jean-Jacques Eigeldinger, *Chopin as Pianist and Teacher As Seen by His Pupils*, ed. by Roy Howat and trans. by Naomi Shohet, with Krysia Osostowicz and Roy Howat (Cambridge: CUP, 1986), pp. 8–9. (Hereafter: *PaT*.)

²¹ Bellman, 'Chopin's Pianism', p. 9.

²² *Ibid.*

²³ Michael Polanyi, *The Tacit Dimension* (Garden City, NY: Doubleday & Co., 1966), p. 4: 'I shall reconsider human knowledge by starting from the fact that *we can know more than we can tell*. This fact seems obvious enough; but it is not easy to say exactly what it means. Take an example. We know a person's face, and can recognize it among a thousand, indeed among a million. Yet we usually cannot tell how we recognize a face we know. So most of this knowledge cannot be put into words' (emphasis in the original).

other advantages, was to be avoided'.²⁴ In short, exceedingly pianistic and ergonomic as they may be, Chopin's fingerings are clearly *not* utilitarian or mechanistic in outlook.

Structure, Methodology, Aims and Scope

This study's overall structure is as follows: Chapters 1 and 2 introduce the 'problem' and the 'knowledge gap'; Chapters 3 and 4 attempt to flesh out a more plausible context for Chopin's development of fingering practices, drawing on relevant primary pedagogical sources and repertoire; Chapter 5 prepares the reader for the more specialised case studies of Chapters 6 through 8, which deal with Chopin's Etudes as the most informative, concentrated and sustained examples of fingering in all of his oeuvre.

The perspective throughout is phenomenological, mostly in the circumscribed meaning of involving 'the careful, unprejudiced description of conscious, lived experiences [...], precisely according to the manner that they are experienced'.²⁵ Thus, a key methodological premise is that one needs assiduous experimentation with the original fingering indications before any underlying precepts can be hypothesised or formulated. The main research questions addressed are: Can basic types of expressive intent be discerned from these fingerings and, if so, by what criteria? What are their driving principles? How exactly do they differ from contemporary views on technique, taste, and performance propriety? Are they part of an entirely foregone expressive framework, or could they somehow transcend any temporal and taste divides? And, lastly, what

²⁴ Bellman, 'Chopin's Pianism', 9.

²⁵ Dermot Moran, 'The Phenomenological Approach', in *The Oxford Handbook of Phenomenological Psychopathology*, ed. by Giovanni Stanghellini et al. (Oxford: OUP, 2018), pp. 205–15 (p. 205). Importantly, however, note that the main focus will be on the phenomenology of *movement* rather than of music at large. The latter is notoriously broad, and too pregnant a perspective to be of any practical use in the context at hand. In a very real sense, what this thesis explores is very often that which we become conscious of doing *before* we even make a sound.

effects do subjective, qualitative experiences derived from various historical fingering practices have on our performance?

An important precondition involves consulting all the manuscript and early printed sources (including all currently available annotated student copies) for the Etudes.²⁶ As these works contain the most detailed and sustained of fingering indications in all of Chopin's oeuvre, they represent our most valuable window into practices from which we could then extrapolate. As Peter Felix Ganz writes, 'From Chopin on, [...] the Etude more and more assumed the role of an introductory work and of a key to the other compositions of its creator'.²⁷ Note also that this thesis deals almost exclusively with those fingerings directly (or at least reasonably) traceable to Chopin himself, avoiding for instance those devised by Chopin's student and assistant Karol Mikuli.²⁸ In that regard, Swinkin argues that

Mikuli's stance toward Chopin is analogous to Czerny's stance toward Beethoven, in that both Mikuli and Czerny departed from and modernized the aesthetics of their respective mentors—although, I should add, the case of Mikuli is somewhat less obvious and certainly less documented. Whereas Czerny departed from Beethoven's aesthetic because of changing tastes (at least in Czerny's perception), Mikuli departed from Chopin's because he considered fingering to be a component of the pianist's interpretation rather than of the musical work itself.²⁹

²⁶ For the hitherto most comprehensive overview of the extant annotated student copies see *PaT*, pp. 198–266. See also id., 'Lumières nouvelles sur les partitions annotées de la collection Camille Dubois-O'Meara', in *Chopin in Paris: The 1830s*, ed. by Artur Szklener (Warsaw: Narodowy Instytut Fryderyka Chopina, 2007), 75–103, and Bertrand Jaeger, 'Quelques nouveaux noms d'élèves de Chopin', *Revue de Musicologie*, 64/1 (1978), 76–108. While six out of the seven exemplars described in *PaT* ('Appendix II', pp. 198–243) have been examined *in situ* or in digitised form for most annotated works, access to the Franchomme exemplar proved to be logistically unfeasible. Yet much as examining fingerings in other Chopin works therein would have proven invaluable, the Franchomme op. 10 copy is devoid of annotations and so, at least as this research project is concerned, all the relevant primary sources have been consulted.

²⁷ Peter Felix Ganz, 'The Development of the Etude for Pianoforte' (Ph.D. dissertation, Northwestern University, 1960), p. 278. See, however, also *ibid.*, p. 313: 'The etude since Liszt has in the main been of great assistance to the understanding and the proper execution of a certain composer's other piano compositions by serving as a clue, or as a stepping stone to most of the particular technical elements encountered in that composer's other works'. Certainly, one could use the same line of argument for Clementi and Hummel—in this Chopin seems to have been a follower, not a trendsetter.

²⁸ See *PaT*, p. 172: 'Mikuli's edition, still authoritative, is criticized mostly for the liberties taken with fingerings'.

²⁹ Swinkin, 'Keyboard Fingering', 18.

Even putting aside extreme ontological debates for the time being, however, Bamberger's view that fingering *does* occasionally hold such overriding power over bodily expression as to be considered part of the musical work—at least of the work *as performance*—is nevertheless too strong to dismiss.³⁰ Fingering indications often do manage to convey (even in pre-conscious ways) more performative information than regular musical notation does, and so it is nearly always more insightful to experience the original fingerings' kinetic and kinaesthetic effects before substituting, if at all, our individualistic fingering choices. Put another way, however unfeasible the reconstruction of Chopin's habitual (unnotated) fingerings may be, those indications that *have* been preserved merit levels of reflection and experimentation not usually found in the literature.

To oversimplify, perhaps, one could say that from the viewpoint of performance reconstruction some original keyboard fingerings can hold as much performance practice information as the combination of original bowings, bow strokes and fingerings does in string music.³¹ That is, fingering indications can assist with reverse-engineering physical gestures that we could not possibly derive from the score alone, even if the finer details and stylistic functions of those gestures may be lost forever (more on that in the next section). Though certainly challenging and problematic in many ways, experiential kinds of understanding of earlier forms of pianism—even in the absence of recordings—are possible to some extent because, as Bamberger insists, fingering 'speaks directly and intimately, perhaps more so than any other device, since it communicates to the performer on the immediate level of physical gesture'.³²

³⁰ See Bamberger, 237: '[A]n immediate *kinesthetic* sense of a passage can lead the player to a greater musical understanding of that passage. For this reason the fingering must often be read as part of the composition itself.

³¹ See John Gregory Moran, 'Techniques of Expression in Viennese String Music (1780-1830): A Reconstruction of Fingering and Bowing Practices' (PhD thesis, King's College London, 2001), an outstanding study which shows how concrete such information can be. Note also, however, that in keyboard playing sound generation and finger choice involve the same extremity and therefore the two cannot be so readily dissociated—which only further indicts the mechanistic paradigm of fingering.

³² Bamberger, 271.

Historical Performance Considerations

Despite there being by now a substantial amount of research into nineteenth-century performance practices, the quest for the kinds of bodily understanding just described may still feel as quixotic as the attempt to uncover a dead language's finer points of colloquial inflection from a few scattered written cues. Yet, to repeat, it is possible to glean much *essential* performative information from the fingering evidence, especially if we draw some assistance from music analysis, understood here as any useful insight derived from principles of thoroughbass, species counterpoint, and diminution—all age-old *practices*.³³ In other words, understanding of contrapuntal and harmonic functions help not only discern many of the likely intended bodily effects, but also clarify for the performer the gap between her own aural conceptions and the many possible realisations of them through expressive movement.³⁴ Analysis thus offers us an additional window onto (often highly creative) dimensions of performance which the keyboard treatises do not make explicit since they largely presuppose a living teacher to guide through—and that students had of course direct access to a living musical culture which the treatises themselves can only disclose to a very limited extent.³⁵

The main takeaway is that at least some of the essentials of the moment-to-moment feel of performance, alongside some of their conceptual underpinnings, are to some degree still preserved in the fingering indications themselves. Yet it is

³³ An apt term for this perspective is John Rink's 'performer's analysis'. See Rink, 'The (F)utility of Analysis of Performance', in *Artistic Practice as Research in Music: Theory, Criticism, Practice*, ed. by Mine Doğanatan-Dack (Farnham: Ashgate, 2015), pp. 127–47 (p. 132). For a sharp critique of institutionalised music theory and analysis as applied in today's (mainstream) performance, see Doğanatan-Dack, 'Once More, from Page to Stage', *Journal of the Royal Musical Association*, 142/2 (2017), 445–60.

³⁴ For Chopin's music-theoretical education, see Jim Samson, 'Chopin and the Traditions of Pedagogy', in *New Paths: Aspects of Music Theory and Aesthetics in the Age of Romanticism*, ed. by Darla Crispin (Leuven: Leuven University Press, 2009), 115–27, a revised version of id., 'Chopin's Musical Education', *Chopin Studies*, 6 (1999), 28–37. See also Deborah Crisp, 'Virtuoso malgré lui: Chopin's musical education', *Context*, 11 (1996), 5–12, which advances the interesting hypothesis that Chopin was, virtually from the very beginning, groomed as an opera composer rather than a composer-pianist.

³⁵ For a thought-provoking perspective on this kind of gap-bridging through analysis in the context of historical performance, see Schachter, '20th-Century Analysis and Mozart Performance', *Early Music*, 19/4 (1991), 620–26.

important to insist that we cannot take any such correlations as revealing of any actual performance *styles*, as the last few decades of research into historical recordings has made abundantly clear.³⁶ That is, performance styles from before the era of sound recording are perforce unknowable, and even when we *do* have recordings they do not convey live performance as *experienced* within its time and culture.³⁷

Nevertheless, so-called ‘historically informed’ and ‘recordings inspired’ approaches to performance could greatly benefit from engaging the gestural treasure trove contained in Chopin’s fingering indications (together with those in contemporaneous pedagogical repertoire), if only because it is impossible to extract such gestural information solely from textual descriptions or recorded media. (Even, that is, if historical recordings of pianists using Chopin’s fingerings actually existed, as by the time the earliest acoustic solo piano recordings were made most pianists were already using so-called modern instruments and modern fingering systems.³⁸) More specifically, automatic extraction of fingering information from recorded media appears to be, at least for the time being, an insurmountable engineering problem, and so one still needs to engage in a combined listening approach (that is, ‘naked-ear’ plus some sort of sonic-visualising).³⁹ The difficulty

³⁶ Abandoning strong claims to authenticity as to musical style is especially important at this point, lest insights gained phenomenologically come across as opinion rather than fact—a fair objection raised by Rink during the early stages of this research (pers. comm., 21 September 2017). Neal Peres Da Costa, *Off the Record: Performing Practices in Romantic Piano Playing* (New York: OUP, 2012) is hitherto the most comprehensive study of the seemingly unbridgeable disparity between written and recorded sources. See also Daniel Leech-Wilkinson, ‘Listening and Responding to the Evidence of Early Twentieth-Century Performance’, *Journal of the Royal Musical Association*, 135/S1 (2010), 45–62.

³⁷ A relatively new subfield aims to study phenomenologically (especially as regards technological limitations) the conditions that early recording musicians were confronted with, thus zooming in on significant differences between recorded and live performance practices. See, e.g., Inja Stanović, ‘(Re)constructing Early Recordings: a guide for historically-informed performance’, in *Research Hands on PIANO – International Conference on Music Performance*, ed. by Alfonso Benetti, Francisco Monteiro and Jorge Salgado Correia (Aveiro: UA Editora, 2019), pp. 63–69.

³⁸ A conventional (and convenient) demarcation between ‘historical’ and ‘modern’ pianos is the Steinway & Sons over-stringing patent from 1859. See, e.g., Zvi Meniker, ‘Aspects of Performance Practice in Frédéric Chopin’s Piano Works: Slurs, Pedalling, Mazurka Rhythm’ (D.M.A. dissertation, Cornell University, 2001), p. 59.

³⁹ For example, a valuable study near to the context at hand would involve determining whether in his recordings Raoul Koczalski abided or not by Mikuli’s fingerings, and to what degree.

lies in finding *some* bodily correspondence through fingering, as mere imitation of performers' timing and dynamics contained in recordings is unlikely to result in similar enough kinetics (and kinaestheses) as those actually present in their (foregone) performance—other than, that is, through sheer intuition or coincidence.⁴⁰

The prevailing unwillingness to experiment with Chopin's original fingerings—even in the context of historically-informed performance—may stem more from technical habits and performance expectations than from any serious consideration of the fingerings themselves. In my view, many pianists would be easily persuaded of the great value of these fingerings if they allowed themselves enough exposure to them, even if ultimately many would be unusable in a performance climate so far removed from Chopin's preferred piano performance aesthetics—certainly more conducive to the intimate setting of the *salon* than the larger concert hall, even in his own day. It is also important to note that finger choice is an individual affair even when making experienced use of Chopin's original indications, as our personal habits will in all likelihood remain even if we adhere and carefully attempt to extrapolate from them. In other words, hard as we may try to learn another individual's habitual (unnotated) fingering practices, exact imitation will remain a chimera because of the unattainable combinatorics involved. Thus, players feeling as intimidated by any extraneous fingering indication (even suggestion) as by a relative stranger walking into their kitchen and cooking without their permission perhaps need not worry: using another player's fingerings not only does *not* automatically rob anybody of their individual expression—it might even encourage it.

Surely, the argument for individuality in fingering is pushed too far when it holds it to be a wholly untouchable technical accoutrement, that *any* extraneous indication morally oversteps the player's private competencies—even those coming

⁴⁰ See, e.g., Anna Scott, 'Early Recordings and the Reconstruction of Brahmsian Identity' (PhD thesis, Leiden University, 2014). Although Scott's outstanding artistic research and playing show how far recordings-inspired performance can go, some explicit mention of fingering processes (original or otherwise) would have also been of keen interest.

from the composers themselves.⁴¹ As Aleksander Michałowski relates apropos Mikuli's fingerings:

The question of fingering is inseparably tied up with the interpretative individuality of the pianist, the shape of his hand and the style of his technique. *Nobody can impose a fingering and this aspect should not be given prime importance among all the problems relating to the interpretation of Chopin's music.* This explains why some of the master's own indications have been overlooked in Mikuli's edition. The latter openly admitted that in this regard he did not always follow Chopin's indications.⁴²

And yet, while not disputing the view that fingering is unquestionably an integral part of a pianist's individuality, one should still contend that 1) the alleged physical comfort given by modern fingering systems does not invariably lead to better or more individual expression, and 2) that one can always readily ignore original fingerings without also foregoing some essential musical features in the process.

Moreover, fingerings may contain invaluable information not only as to how a composer meant a passage to be physically performed, but even how one might *hear* it.⁴³ This formulation is bound to be highly contentious, akin to saying fingering may occasionally even force an interpretation. But, to repeat, the choice is rather whether we should at least try to determine what kinaesthetics the composer intended or simply ignore them—as most utilitarian supporters would in favour of the most easily memorisable, formulaic, and comfortable options. Finally, another common reason composers indicate fingerings is because they denote some kind of *exceptional* gesture, one deviating from more conventional practice and thus needing to be specially pointed out.⁴⁴

⁴¹ It is quite customary to tip-toe around the issue of composers' fingerings. See, e.g., Richard Parncutt and Malcolm Troup, 'Piano', in *The Science and Psychology of Music Performance: Creative Strategies for Teaching and Learning*, ed. by Richard Parncutt and Gary E. McPherson (Oxford & New York: OUP, 2002), pp. 285–302 (pp. 296–97): 'The question of whether fingerings prescribed by composers such as Schubert, Chopin, Brahms, Liszt, Rachmaninoff, and Bartók should be followed (as, for example, Claudio Arrau has insisted) is a cultural, historical, and perhaps even ethical one and beyond our scope here'.

⁴² As quoted in *PaT*, pp. 172–74 (emphasis added).

⁴³ Bamberger, 241n13.

⁴⁴ See *ibid.*, 241, for more on this line of argument.

Historical vs Modern Fingerings

This study follows Swinkin's useful terminological demarcation between 'historical' and 'modern' fingerings throughout. His pragmatic solution is that the terms should not designate merely successive chronological categories but, rather, contrasting ideologies:

[T]he modern approach arose in the nineteenth century (with Czerny), and thus overlapped in time with the development of the historical approach, which continued well into the twentieth century (with Schenker). Hence, these terms refer less to discrete periods of time than to distinct methodological approaches.⁴⁵

While many other writers project the advent of 'modern' fingering further back, onto Clementi or even C.P.E. Bach,⁴⁶ Swinkin's assessment seems much more on point, as fingering usage in both those composers could only be considered 'modern' in the vaguest possible terms. In a nutshell, Swinkin proposes 'historical' fingerings to mean those involving frequent changes of hand position and thus able to nest finer articulatory gestures even in the context of predominantly legato articulation; and 'modern', to denote those which tend to keep a five-finger position and effect as few position changes as possible and, only when necessary, do so almost exclusively through the passing under or crossing over of the thumb (hereafter: passing-under and crossing-over).⁴⁷

A long-running contention is whether one could simply reproduce the effects of some historical fingerings by using modern ones instead. As Joel Speerstra observes,

With artificial and conscious adjustment of articulation, modern fingerings can imitate the articulation patterns created naturally by early fingerings in Baroque music. But then articulation can never be an organic experience for the performer, or rather, it can never be the simple byproduct of a process. Ignoring early fingerings is not wrong in any extrinsic sense, but it does limit

⁴⁵ Swinkin, 'Keyboard Fingering', 1n2.

⁴⁶ See, e.g., Sandra P. Rosenblum, 'Introduction', in Muzio Clementi, *Introduction to the Art of Playing on the Piano Forte*, 1801 facsimile (New York: Da Capo Press, 1974), pp. v–xix (p. xiv), and Jacquelyn DeNure McGlynn, 'Keyboard Style in Late Eighteenth-Century England: A Study of Fingering, Touch, and Articulation' (MA thesis, The University of Western Ontario, 1999), p. 3.

⁴⁷ For a useful table comparing the two approaches, see Swinkin, 'Keyboard Fingering', 21.

the performer from finding out where the historical fingering patterns can lead in an exploration of the music. They are, after all, part of the system of patterns that created the piece in the first place.⁴⁸

Another historical organist, Jacques van Oortmerssen, puts this more exasperatedly:

“Is it possible to realize the effect of old fingerings with new *Applikaturen* [i.e., fingerings]?” is a question that is often asked. What most questioners have in mind is in fact a superficial imitation of the best known example of early fingering: the articulation of two-note groups in scale passages with the third and fourth fingers. The question shows a lack of knowledge about the complexity of period-specific playing techniques.⁴⁹

Much as the charge of circularity will always lurk in this context, at least *some* historical fingerings do lead to undeniably distinct gestures and sonic effects. More to the point, the kinestheses they result in certainly lie beyond any superficial imitation. As Swinkin observes, though perhaps a bit too timidly,

Whether historical fingerings are responsible for gestural content or vice versa is a question that cannot be satisfactorily answered here, and is perhaps largely unanswerable. Of course, in cases where we know the music to have been generated largely through improvisation—as in the case of much of Chopin’s music—we can safely say that the localized gestures, where they exist, are more the byproduct of fingering and other technical proclivities rather than the reverse.⁵⁰

The circularity may turn out to be more apparent than real, however, mostly the product of undue emphasis on extant *generic* historical fingerings and a lack of experience with and understanding of *contingent* ones. That is, without also substantial practical experience with the pedagogical repertoire of the period (which contains the most sustained examples of contingent fingerings) many

⁴⁸ Joel Speerstra, *Bach and the Pedal Clavichord: An Organist’s Guide* (Rochester: University of Rochester Press, 2006), 159–60. This seems particularly relevant in the case of Chopin, as much improvising went on before any sketching took place. See, e.g., Jeffrey Kallberg, ‘The Chopin Sources: Variants and Versions in Later Manuscripts and Printed Editions’ (Ph.D. dissertation, University of Chicago, 1982), pp. 154–55. Incidentally, though it may surprise some that a clavichord-centred keyboard culture still very much existed during Chopin’s childhood, suffice it to say here that this domestic, practice-oriented instrument was responsible for much of the philosophy underpinning general keyboard technique and performance up until c. 1820. Chapters 3 and 4 explore this connection further.

⁴⁹ Jacques Van Oortmerssen, *Organ Technique* (Göteborg: Organ Art Center, Göteborg University, 2002), p. 25.

⁵⁰ Swinkin, ‘Keyboard Fingering’, 5n14.

fingering indications could prove as challenging to bring back to life and make sense of as (one imagines) working with puppets with some broken strings would be.

A Miscellanea of Writings on Chopin's Fingerings

While subscription to utilitarian systems and some stereotypical pre-1800 fingerings may be common enough, the fingering practices of even the most prominent composer-pianists from the early nineteenth century remain largely unexplored—and are often disparaged outright.⁵¹ Chopin's are in fact not that much better known than those of his contemporaries and predecessors, and so the topic clearly demands a more engaged and specialised approach than hitherto given.⁵² Incursions into the topic are still very few and far between, incipient at best and usually relegated to short asides within purportedly more ambitious projects, and often written from an utilitarian viewpoint.

The only seizable monographic study on the subject remains Claudine Lapointe's master's thesis,⁵³ which though commendable in some ways too often reads like an extended book report on Jean-Jacques Eigeldinger's work, widely and rightly considered the towering reference on Chopin performance practice. The

⁵¹ See, e.g., David Rowland, 'Clementi's *Introduction* in European musical life, 1801-1830', in *Muzio Clementi and British Musical Culture*, ed. by Luca Lévi Sala, Rohan H. Stewart-MacDonald (London & New York: Routledge, 2018), pp. 69–83 (p. 75): 'For whom was Clementi's *Introduction* written? Since it [...] spends so much time on other basic concepts such as fingering, it has long been recognised that, just like so many other instruction books of the period, it was aimed at beginners'. Thus, at the stroke of a pen, valuable performance information contained in the dozens of wholly fingered pieces at the end of the *Introduction* (numbering fifty in the first edition) becomes negligible beginner's fare.

⁵² Despite long-standing calls for expansion, e.g., Bamberger, 241n13, and *PaT*, pp. 198, 215. Meniker, p. 2, is perhaps the most explicit: 'The many extant fingerings that can be found in Chopin's autographs, first editions and students' scores certainly merit a large-scale study — a study that has not yet been undertaken'.

⁵³ Claudine Lapointe, 'Chopin's Fingering [sic] and their Application to Performance of his Piano Music Today' (M.F.A. thesis, University of California, Los Angeles, 1989). Incidentally, much predating Lapointe's study is Thomas Higgins, 'Chopin interpretation: A study of performance directions in selected autographs and other sources' (Ph.D. dissertation, University of Iowa, 1966), pp. 115–26, which for its time contains as thoughtful and as thorough a discussion of the original fingering indications as it could.

tendency to regurgitate Eigeldinger is not exclusively Lapointe's, however: with perhaps the exceptions of Swinkin's aforementioned articles and Sandra Soderlund's chapter on Chopin,⁵⁴ scattered writings on Chopin's fingerings such as those by John P. Ferri,⁵⁵ Eleanor Bailie,⁵⁶ Arthur Houle and Walden Hughes,⁵⁷ Qiao-Shuang Xian,⁵⁸ Jean-Pierre Marty,⁵⁹ Hui Chi Khoo,⁶⁰ Justin Krawitz,⁶¹ Archie Chen,⁶² and Mengzhen Wang,⁶³ all betray the same tendency to varying degrees. References to Eigeldinger aside, particularly problematic are Ferri's and Khoo's studies, which compare plenty of editorial fingerings—in Ferri's case a substantial chapter including discussion of Claude Debussy's—yet hardly mention Chopin's own. In short, the matter is quite far from settled, though it is also unlikely ever to be due to its very personal and subjective nature.

A most pressing problem in the literature on historical fingerings (not only Chopin's) is simply insufficient experimentation. For example, many a discussion of (silent) finger substitution take it to be true, tried, and tested that it merely assists with legato or physical comfort. Even Krawitz's study—a monograph on this very technique—dispatches Chopin's use of substitution in a mere seven pages (and

⁵⁴ Sandra Soderlund, *How Did They Play? How Did They Teach? A History of Keyboard Technique*, 2nd edn (Glendale: Hinshaw Music, 2019), pp. 284–90. Soderlund's exposition is highly commendable in that she prefers to let the sources 'speak for themselves' through extended quotation and sparse commentary.

⁵⁵ John P. Ferri, 'Performance Indications and the Analysis of Chopin's Music' (Ph.D. dissertation, Yale University, 1997), pp. 138–73 (Chapter 4, 'Fingering and Orthography: Surveying Editions of Chopin's Music').

⁵⁶ Eleanor Bailie, *Chopin: A graded practical guide* (London: Kahn & Averill, 1998), pp. 17–21.

⁵⁷ Arthur Houle and Walden Hughes, 'Fingering Choices With Chopin's Music', *Clavier*, 37/2 (1998), 11–13. This article deals for the most part with *alternative* fingerings for etude 1.

⁵⁸ Qiao-Shuang Xian, 'Rediscovering Frédéric Chopin's *Trois nouvelles études*' (D.M.A. dissertation, Louisiana State University, 2002).

⁵⁹ Jean-Pierre Marty, *Vingt-quatre leçons avec Chopin* (Sete: Éditions Singulières, 2007), and id., *La méthode de piano de Chopin. Essai pédagogique* (Sete: Éditions Singulières, 2007). Although there is much honest and interesting commentary in both of these books, Marty's views on fingering (Chopin's and in general) unfortunately lean towards the utilitarian and ahistorical.

⁶⁰ Hui Chi Khoo, 'Playing with Dynamics in the Music of Chopin' (PhD thesis, Royal Holloway, University of London, 2007), 163–68.

⁶¹ Justin Krawitz, 'Finger Substitution on the Piano' (D.M.A. dissertation, University of Wisconsin-Madison, 2011), pp. 95–101.

⁶² Archie Chen, 'Towards a Historically Informed Performance of Chopin's Op. 10 Études' (DMus in Performance, Royal Irish Academy of Music, 2016), pp. 77–84.

⁶³ Mengzhen Wang, 'An Analytical Approach to Fingerings in Chopin's Nocturnes' (D.M.A. dissertation, University of Kansas, 2021) produces basically no novel insights and thus cannot compare in significance to Lapointe's monograph.

mostly with material already discussed by Eigeldinger), overlooking the incredibly varied uses this technique can have, such as deliberate types of timing (occasionally even rhythmic alteration), increased rhythmic awareness, or the mimicking of vocal portamento effects, to name but a few.

As already touched upon, another salient problem in the literature is still the nearly unanimous tendency to declare Chopin wholly original in his approach to finger choice,⁶⁴ even though enough familiarity with eighteenth- and nineteenth-century pedagogical sources reveals it to be firmly rooted in eighteenth-century practices even when he pushes them to their limits or transforms them somewhat.⁶⁵ To her great credit, Lapointe does provide an overview of the pedagogical literature of the period, and thus a richer context to Chopin's fingerings than much other scholarship.⁶⁶ What the literature does not usually address, however, and which matters more than originality per se, is simply Chopin's fingering *usage*. For example, whether Chopin advocated the use of the thumb on black keys or not is of far less interest than the expressive ends he put this or any other fingering technique to use, and especially *how*. In light of mounting research on Romantic performance practices and historical recordings, knowledge of specific fingering usage would only seem to help rekindle approaches to performance more rhetorical than those currently normative.⁶⁷

⁶⁴ An exception is Higgins, pp. 34–35, which states the problem well before Lapointe and invokes Hummel as precursor for most of Chopin's allegedly innovative fingering techniques. It is thus striking to see that even quite recently, Hardy Rittner, *Die vergessene Cantilene. Frédéric Chopins missverstandene Virtuosität. Grundlagen der Aufführungspraxis* (Kassel & Others: Bärenreiter, 2022) still takes Chopin's approach to be de facto revolutionary without much deliberation.

⁶⁵ See Bellman, 'Cantabile Style', 64.

⁶⁶ See Lapointe, pp. 8–21.

⁶⁷ See, e.g., David Milsom and Neal Peres Da Costa, 'Expressiveness in Historical Perspective', in *Expressiveness in Music Performance: Empirical Approaches Across Styles and Cultures*, ed. by Dorottya Fabian, Renee Timmers and Emery Schubert (New York: OUP, 2014), pp. 80–97, Robert Hill, 'Overcoming Romanticism: On the Modernization of Twentieth-Century Performance Practice', in *Music and Performance during the Weimar Republic*, ed. by Bryan R. Gilliam (Cambridge: CUP, 1994), pp. 37–58, and, most recently, Andrew John Snedden, *Vital Performance: Historically Informed Romantic Performance Practice in Cultural Context* (London & New York: Routledge, 2021).

Organological and Anthropometrical Concerns

What pianists first tend to consider (if they are past the idea of fingering as an untouchably personal matter) is whether the original fingerings only work on period instruments and may thus require some modification when playing on modern ones, or whether those fingerings would make a difference more or less independently of the instrument used. Put another way, they question whether or not Chopin's original fingerings can force the player's hand in ways that, roughly speaking, *any* instrument would react to and project. Note that throwing anatomical variation into the mix only makes the default circularity spin even farther out of control, as many will claim limitations in size, shape or range of motion before trying out the original fingerings in earnest.⁶⁸ Thus, a reasonable 'soft' argument for practice-led research on Chopin's fingerings involves prioritising attention to the player's kinaesthesis over aesthetic outcome, as the latter—downright unknowable as far as Chopin's own playing is concerned—is far too individual and nuanced a matter to justify deterministic prescriptions. Yet that is exactly what far too much writing on Chopin performance does. Consider for instance Jan Ekier and Paweł Kamiński's exhortations for etude 11:⁶⁹

[A]ll the arpeggios should be executed in an anticipatory way. [...] The lower notes of the arpeggios in the L.H. should be synchronised with the lower notes of the arpeggios in the R.H. The non-arpeggiated L.H. notes [...] should also be best played together with the first notes of the arpeggios in the R.H.⁷⁰

One would be hard-pressed to find any justification (historical or otherwise) for them,⁷¹ and here they even clash with some of the very aesthetic values Chopin lived

⁶⁸ See Christoph Wagner, 'The pianist's hand: anthropometry and biomechanics', *Ergonomics*, 31/1 (1988), 97–131. Note that Chopin's fingerings rarely if ever demand any kind of anatomical extremes, but stay within generally manageable confines and may even be extra beneficial to those pianists with small hands.

⁶⁹ For the sake of brevity, hereafter the numbering of the Chopin Etudes refers to the twenty-four set and without the composer's name except where it might lead to ambiguity. Thus, 'etude 13' stands for Chopin's op. 25/1. Similarly, any captions lacking the composer's name refer to Chopin's works.

⁷⁰ Jan Ekier and Paweł Kamiński, 'Performance Commentary', in *Etudes – Chopin National Edition 2A, Vol. II*, ed. by Jan Ekier (Krakow: Polskie Wydawnictwo Muzyczne, 2013), p. 2–24 (p. 5).

⁷¹ See p. 225n648 for a more historically-oriented solution for etude 11 and similar cases.

by, such as effortlessly graceful performance or *sprezzatura*.⁷² To be clear, the above is an almost random reference—countless other similarly unjustifiable admonitions permeate the literature.⁷³

Bracketing aesthetic outcomes does not make all our problems go away, however, as attempts to determine what the indications are there for in the first place often invites conflict: current performance norms and confirmation bias can easily override whatever traces of their original function might otherwise be recoverable.⁷⁴ These problems certainly transcend the question of instrument choice, and so we will need to consider early nineteenth-century performance norms perhaps even more closely than any organological issues. Indeed, it is often just unwillingness to experiment with different aesthetic tenets rather than any impeding anatomical peculiarities or an alien instrument that underlie many a player's reluctance to engage with the original fingerings at a practical level. In that regard, the 'hard' argument for using Chopin's fingerings in performance may be that at least some of their effects go right to the very conception of a work—which in Chopin's case means, crucially, right *at the keyboard* rather than *as text*.

One of the reasons most commonly adduced for avoiding the use of historical fingerings on modern instruments is simply keyboard size—meaning mostly octave span.⁷⁵ But while it is true that between 1780-1850 octave span was generally smaller than in the periods immediately preceding and following, we

⁷² As we will see repeatedly throughout this study, a recent publication, Uta Goebel-Streicher, *Frédéric Chopin – Einblicke in Unterricht und Umfeld. Die Briefe seiner Lieblingsschülerin Friederike Müller, Paris 1839-1845* (Munich & Salzburg: Musikverlag Katzbichler, 2018) settles how determining those values really were in Chopin's pedagogical practice. Importantly, note that this study retains Friederike Müller's picturesque misspellings in French, but, whereas Goebel-Streicher uses italics for *all* utterances in French, here italics represent Chopin's (in any language) exclusively for easier recognition. I am extremely grateful to Gabriel Quetglas for so timely bringing this rich source to my attention.

⁷³ For eye-opening views on the ever more normative bent of classical music performance, see Leech-Wilkinson, 'Classical music as enforced Utopia', *Arts and Humanities in Higher Education*, 15 (2016), 325–36.

⁷⁴ *Ibid.*, 328: '[T]he notion that music teachers, examiners, critics, agents and the rest know how scores *ought* to sound is a delusion. They know only what they think is proper at the moment'.

⁷⁵ To my knowledge, the most comprehensive source to date is Kenneth Mobbs, 'A Performer's Comparative Study of Touchweight, Key-Dip, Keyboard Design and Repetition in Early Grand Pianos, c. 1770 to 1850', *The Galpin Society Journal*, 54 (2001), 16–44.

should remember that hand size is a slippery concept, depending as much on *shape* as it does on span.⁷⁶ For the purposes of this study, then, touchweight and key-dip are perhaps more important than octave span, as they determine to a much higher degree the gestural amplitude a given fingering could ride on. Thus, while allowing for (sometimes wild) variations in outcome due to different anatomies and different types of instruments, I wholeheartedly agree with Elfrieda Hiebert ‘that functions of fingering can coincide on the fortepiano and the modern piano’,⁷⁷ and more often than one would think—especially from the standpoint of kinaesthetics and gesture.

To be sure, Chopin grew up during a pivotal time in piano building.⁷⁸ During his early formative years in Warsaw use of Viennese-type instruments still very much predominated:

Until the mid-nineteenth century, the Polish lands were under the influence of the Viennese school, which was mainly the result of anti-French policies imposed by the Russian authorities. Therefore most pianos that were manufactured here or imported from abroad featured Viennese action and casing design. Any attempt to promote English-style design and action, for instance such efforts by Antoni Leszczyński in Warsaw during the years 1819–1830, met with hostile criticism (even by Frederic [sic] Chopin).⁷⁹

It is therefore quite reasonable to assume Chopin’s familiarity with the Viennese action from very early on. And as any player with prolonged experience on Viennese instruments knows only too well, command of its action usually demands a more exacting approach to movement and gesture than today’s players on

⁷⁶ For a detailed discussion see Lora Deahl and Brenda Wristen, *Adaptive Strategies for Small-Handed Pianists* (New York: OUP, 2017), pp. 2–5.

⁷⁷ Elfrieda F. Hiebert, ‘Beethoven’s fingerings in the piano trio in B-flat major, WoO 39’, *Early Keyboard Journal*, 4 (1986), 5–27 (24).

⁷⁸ For a quick overview of keyboard instruments available to Chopin in Warsaw see Halina Goldberg, *Music in Chopin’s Warsaw* (New York: OUP, 2008), pp. 33–53.

⁷⁹ Benjamin Vogel, ‘Piano – the main attraction of the Polish salon during Maria Szymanowska [sic] time’, in *Annales*, Vol. 16 (Warsaw & Paris: Académie Polonaise des Sciences, Centre Scientifique à Paris, 2014), pp. 125–41 (p. 128). See also id., ‘The Warsaw Piano of Fryderyk Chopin’, in *Chopin’s Piano* (Warsaw: NIFC, 2018), pp. 100–17, id., ‘The Young Chopin’s Domestic Pianos’, in *Chopin in Performance: History, Theory, Practice*, ed. by Artur Szklener (Warsaw: NIFC, 2005), pp. 57–75 (p. 65): ‘Before Chopin left Poland for good he knew practically every possible type of grand piano, and with different actions, made in continental Europe’, and David Frick (trans.), *Chopin’s Polish Letters* (Warsaw: NIFC, 2016), p. 110: ‘Wherever you go, there are Leszczyński’s miserable instruments, for I haven’t seen one that approaches the tone of your sister’s pantaleon or ours’ (letter to Tytus Woyciechowski, Warsaw, 27 December 1828).

modern instruments may be accustomed to, due to (among other things) its shallower dip and quicker response to touch. Oversimplifying things again for convenience, on-the-fly fingering tendencies do not fare too well on these sensitive instruments because that tends to invite lurching, with less than ideal results for both player and listener (among other things: excessive extramusical noise, less than ideal feedback loops, unwanted accents, and excessively abrupt phrasing and articulation).⁸⁰

But Chopin appears to have been equally at home with English-action instruments,⁸¹ with their increased sustaining power and heavier feel (but also subtly more forgiving of any movements wanting in ideal precision coming from the player) and generally fostering a more ‘singing’ kind of approach.⁸² It is important to note, nevertheless, that ‘whereas [...] today’s historically informed performers draw a clear distinction between the ideas of music as song and music as speech, nineteenth-century writers generally did not’.⁸³ That is, important prosodic elements (which fingering helps convey to a high degree in performance) were probably as present as in earlier times, regardless of the type of action and whatever adjustments the player may have needed to make because of it. Thus, Chopin’s substantial experience on *both* Viennese- and English-action instruments (as well as the organ and quite possibly the clavichord) no doubt shaped his attitude towards finger choice long before arriving in Paris in early October of 1831.⁸⁴ Perhaps even more important is his *persistent* use of such a detail-oriented

⁸⁰ It is thus again curious how, e.g., David Breitman, *Piano-Playing Revisited: What Modern Players Can Learn From Period Instruments* (Rochester: Rochester University Press, 2021) devotes so little space to fingering matters. For a more detailed description of the challenges the Viennese action poses to modern pianists, see Christina Kobb, ‘Piano Playing in Beethoven’s Vienna: Reconstructing the Technique, Exploring its Musical Application’ (PhD thesis, University of Oslo, 2022), e.g., p. 99.

⁸¹ Although Chopin’s Bucholtz piano was destroyed in 1863, indirect evidence for it being English-action seems quite strong. See, e.g., Goldberg, *Music in Chopin’s Warsaw*, p. 49. and Vogel, ‘The Young Chopin’s Domestic Pianos’, p. 70.

⁸² The documentary record on Chopin’s general approach to cantabile playing is overwhelming (however frustratingly silent it may also be in actual practice), and in no need of rehearsing here. But *some* practical details in that regard emerge from focus on the fingering indications, as we will see.

⁸³ Cook, *Beyond the Score: Music as Performance* (Oxford & New York: OUP, 2013), p. 74.

⁸⁴ On this point, see Edmund M. Frederick, ‘The “Romantic” Sound in Four Pianos of Chopin’s Era’, *19th-Century Music*, 3/2 (1979), 150–53 (151): ‘It is often observed that Chopin’s piano style was well

approach, which must have flown in the face of a burgeoning pedagogy which took fingering systems and finger equalising to be the best approach to playing on the heavier English action.⁸⁵

Indeed, during Chopin's early years of training, construction of English-action instruments was already gathering unstoppable momentum, eventually gaining the upper hand in a quickly expanding market:

[I]n the early 1820's [sic] makers throughout Europe considerably increased the string tensions of their instruments, strengthened the mechanisms of their pianos, and universally adopted the English-inspired pattern of large hammers with multiple layers of leather. The elegant and slender sound of the Classical piano gave way to a Romantic fullness and intensity; the aesthetic of the instrument changed almost overnight into one which is clearly recognisable to modern ears.⁸⁶

And though the 1830s and 1840s also saw an increase in the use of felt-covered hammers, deer leather did not by any means go out of use during Chopin's lifetime.⁸⁷ The main takeaway is that Chopin had an almost unimaginably (for us)

developed by the time he moved to Paris in late 1831; it is not generally realized, however, that his style was probably formed while he was playing Viennese pianos, those by Graf in particular'.

⁸⁵ See, however, Mobbs, 19: 'On minimum evidence, the French is heaviest, and the English lightest', and 21: 'On minimum evidence, the Viennese is heaviest, English lightest'. (Both assessments are from a sample of instruments from 1836-1850.) In view of the difficulty (or downright impossibility) of restoring these instruments to their original playing conditions due to ephemera and other missing data, such anomalies lie well beyond the scope of the present study. The textual record nevertheless clearly indicates that, generally speaking, English-action instruments had heavier actions—or at the very least appeared to be so to players. See, e.g., Johann Nepomuk Hummel, *Ausführliche theoretisch-practische Anweisung zum Piano-Forte-Spiel* (Vienna: Tobias Haslinger, n.d. [1828]), pp. 438–39, and its translation, *A Complete Theoretical and Practical Course of Instructions on the Art of Playing on the Piano Forte* (London: Boosey, n.d. [1828]), Part III, pp. 64–65. Hereafter all quotation will be from this contemporaneous translation, but, given Hummel's prominence in this study, citations will also include Haslinger's numbering (from 2nd edn, n.d. [1838]) for the convenience of readers wishing to consult the German—and also 'normal' rather than English fingering notation. Thus, in 'Anweisung, p. xi, 1/p. iii' the first page number refers to Haslinger's 2nd edn, and the Roman numeral to each volume of Boosey's translation. There are also readily available French and Italian translations, and even a Spanish one (by Chopin's friend Santiago Masarnau, no less). See Mark Kroll, *Johann Nepomuk Hummel: A Musician's Life and World* (Lanham, MD & Others: Scarecrow Press, 2007), pp. 269–70n82–83.

⁸⁶ Christopher Clarke, 'Affect in action: Hammer design in French romantic pianos', in Hug and Steiner, pp. 269–303 (p. 272).

⁸⁷ See Robert Winter, 'The Most Unwitting Foes of the Romantic Piano May Be Those Well-Intentioned Curators Who Lend Their Instruments for Recording Sessions', *Early Music*, 12/1 (1984), 21–25 (24). For a relevant overview of hammers in the 1830s and 1840s, see Clarke, 'Pleyel's Pianos during Chopin's Parisian years: their characteristics and place in contemporary piano-building', in

large set of choices and experiences in terms of different pianos by the time he arrived in Paris, although he did famously develop a marked preference for English-action, single-escapement Pleyel instruments.⁸⁸

It is important also to realise that the transition from predominantly artistic ('historical') to utilitarian ('modern') fingerings already underway in the early nineteenth century does not neatly correlate with developments in instrument manufacture. That is, if we take Swinkin's demarcation to be correct, the so-called modern piano and the demands associated with it cannot be, as is sometimes claimed, the sole or even the main driving force behind the demise of historical fingerings. There must have been other factors involved which, quasi-independently of organology, also contributed to the rise of utilitarian views on fingering still prevalent today. And, it should also be remembered, while the finger-equalising school of thought and the overall strengthening of piano construction were probably connected, Chopin did not subscribe to either.

In sum, the idea that utilitarian fingering tendencies are always more appropriate for use on the modern piano clearly does not hold enough water. Historical fingering techniques (though perhaps with some modifications in *degree* from the ways they would be handled on historical instruments) still come through quite clearly on modern instruments, as do also the more rhetorical and tone-conscious aspects of performance they tend to facilitate. This option, however, becomes more viable if we embrace working with the inherent *inequality* of the fingers as a valid aesthetic,⁸⁹ which admits more localised nuance and expression than current tenets tending to favour 'equality and a smooth surface, the familiar image of passagework as a string of (perfectly matched) pearls'.⁹⁰ On the other hand, doing so could very well spell professional suicide: it is indeed a difficult

Chopin e il suono Pleyel: Arte e musica nella Parigi romantica, ed. by Florence Gétreau (Paris: Association Chopin 2010, 2010), pp. 212–39 (pp. 228–33).

⁸⁸ See, e.g., *PaT*, pp. 25–26, 91–92n7.

⁸⁹ Speerstra, *Bach*, p. 8: '[...] the argument for a phenomenological approach is based on only one specific physical constant: human fingers strike with unequal strength' is an observation just as valid in the context at hand, for it does spill into piano fingering practices of the early nineteenth century. Speerstra's argument thus begs for considerable expansion in the present study.

⁹⁰ Breitman, p. 17.

balancing act for players oriented toward some form of historical performance practice, for such subtleties might be perceived as technical inadequacies—even on a historical instrument.

Yet another reason today's players may want to avoid historical fingerings (and possibly the final nail on the coffin) is that they are generally far less conducive to carrying the dynamic power needed for performance in large halls. And so, to repeat, however much difference our choice of instrument and hall may make sonically, the main focus throughout this study is rather on the player's bodily expression, perception, and self-awareness—all of which ultimately underpin any technical approach and which no one type of instrument could completely override. Thus, discussion of technique will be mostly limited to those approaches derived from the primary pedagogical sources (save for the odd illustrative comparison with more modern views) and naturally focus on experience with the types of instruments known to have been used and favoured by Chopin.

In view of the dizzying variety of pianos available to Chopin and his contemporaries as compared to today's, it is tempting to conclude that a solid conception of fingering must have gone a long way for pianists to retain their own personal playing styles *despite* such variety. In that sense, finger choice is where the player's most individual expressive proclivities can find their desired expression—*almost* regardless of the instrument used.

CHAPTER 2

Theoretical Frameworks: The Phenomenological Method and Historically *Involved* Performance

*Nothing can ever happen twice.
In consequence, the sorry fact is
that we arrive here improvised
and leave without the chance to practice.*⁹¹

—Wisława SZYMBORSKA

Reclaiming the Player's Viewpoint and Expertise

As already put forward in the previous chapter, finger choice tends to elicit bodily expression and vice versa—that much seems clear despite the scarcity of controlled studies on fingering processes.⁹² Interest in the topic remains lukewarm, however:

While there is a sizeable pedagogical literature on various aspects of piano playing, including discussion of fingering, there has been virtually no systematic study of this crucial skill, the literature tending towards a reasoned but essentially prescriptive account of how to optimise a variety of practical issues.⁹³

And indeed, it is strange to find more fingering research in the psychology of music literature than where it would seem to first belong—in monographs on the Chopin Etudes, for example. This chapter thus makes the case for a qualitative, first-person approach to the study of keyboard fingering *in general* as preparation for the more

⁹¹ Wisława Szymborska, *View with a Grain of Sand: Selected Poems*, trans. by Stanisław Barańczak and Clare Cavanagh (San Diego & Others: Harcourt Brace & Co., 1995 [1993]), p. 6 (from 'Nothing Twice').

⁹² See, however, Bamberger, 238n2: 'The trials were not carried out under completely controlled conditions but they did convince me, as well as the participants, that a perceptive listener could generally 1) discriminate between performance with different fingerings, and 2) identify Beethoven's fingering as opposed to another fingering. While only eight of the passages that Beethoven fingered were used, the experience would suggest that fingering can materially affect the structural and expressive relationships that a performer projects'.

⁹³ Clarke et al., 88. This article seems to be the only study hitherto 'to gather qualitative data on what professional pianists think they do when they play' as regards fingering (*ibid.*).

specialised remainder of the thesis.⁹⁴ To that end, it is crucial we ‘take the phenomena themselves as a point of departure, not theory’,⁹⁵ as attending to one’s own movement is already a very complex undertaking before we go on to tackle ‘the challenge of languaging experience’.⁹⁶ Communicating subjective aspects of music performance does pose numerous challenges (an important reason why first-person accounts in research are still rare despite the much-hyped ‘performative turn’ in musicology in the 1990s),⁹⁷ but it is worth keeping in mind that vivid imagery often communicates conscious experiences more fully than painstaking description can.

Linguistic challenges notwithstanding, a phenomenological approach is well-suited for the simple reason that—barring rare forms of pathology—‘whatever our

⁹⁴ See, e.g., Patricia Holmes and Christopher Holmes, ‘The performer’s experience: A case for using qualitative (phenomenological) methodologies in music research’, *Musicae Scientiae*, 17/1 (2013), 72–85.

⁹⁵ Maxine Sheets-Johnstone, *The Primacy of Movement*, expanded 2nd edn (Amsterdam & Philadelphia: John Benjamins Publishing Company, 2011 [1999]), p. 47 (hereafter: *PoM*). This chapter draws mainly and extensively on Sheets-Johnstone’s preeminent writings on the phenomenology of movement.

⁹⁶ *Ibid.*, p. 494: ‘Reductionism indeed turns us away not only from experience but from recognizing the challenge of languaging experience; it deflects attention away from the fact that language itself is not experience and from the ensuing need for, and the fundamental importance of solid descriptive foundations’.

⁹⁷ The dearth of studies from the performer’s perspective is still a recurring theme in the literature on music performance. See, e.g., Doğantan-Dack, ‘The Role of the Musical Instrument in Performance as Research: The Piano as Research Tool’, in *Artistic Practice as Research in Music: Theory, Criticism, Practice*, ed. by Mine Doğantan-Dack (Farnham: Ashgate, 2015), pp. 169–203 (pp. 170–71), ead., ‘In the Beginning Was Gesture: Piano Touch and the Phenomenology of the Performing Body’, in *New Perspectives on Music and Gesture*, ed. by Anthony Gritten and Elaine King (Farnham: Ashgate, 2011), pp. 243–65 (pp. 245–47), and ead., ‘Practice-as-Research in Music Performance’, in *The SAGE Handbook of Digital Dissertations and Theses*, ed. by Richard Andrews et al. (London & Others: SAGE, 2012), pp. 259–75 (p. 263). See also Gabriela Imreh’s germane protestations in Roger Chaffin, Gabriela Imreh and Mary Crawford, *Practicing Perfection: Memory in Piano Performance* (Mahway, NJ & London: Lawrence Erlbaum, 2002), e.g., pp. 15–18, 22. The classic phenomenological study of piano playing remains David Sudnow, *Ways of the Hand: A Rewritten Account* (Cambridge, MA & London: MIT Press, 2001 [1978]). More recently, Andrew Wright, ‘The Polyphonic Touch: coarticulation and polyphonic expression in the performance of piano and organ music’ (PhD thesis, Leiden University, 2016) presents an impressive interdisciplinary qualitative study. There is also a plethora of ‘practitioner’s literature’ where (usually) famous performers speak about their craft in some detail, but which are rather impressionistic and rarely include more than passing discussions of fingering.

differences, movement is our mother tongue' and thus rather amenable to inter-subjective verification.⁹⁸ Indeed, as Maxine Sheets-Johnstone points out,

phenomenological methodology is performed for an audience, an audience of colleagues who validate the investigative findings or question aspects of the findings, raise basic concerns about the findings, and so on.⁹⁹

It also bears stressing that this approach differs from some forms of practice-based research in that it categorically prioritises process over product. Furthermore, it does not (at least not intentionally) constitute autoethnography either, as

individual labor involved in the performance of phenomenological methodology is personal, but the knowledge emanating from it exceeds the personal, and this is because, when carried out assiduously, the performance eventuates in foundational knowledge.¹⁰⁰

Yet another necessary caveat is that, given this study's fundamental outlook, a phenomenological survey or interview approach would have proven chimerical from the start, as locating bona fide experts on Chopin fingering practices (or recruiting non-experts and have them attain said expertise) would represent unfeasible research projects almost by definition.¹⁰¹

⁹⁸ *PoM*, p. 195. On the verifiability of phenomenological findings, see ead., 'Phenomenology and the life sciences: Clarifications and complementarities', *Progress in Biophysics and Molecular Biology*, 119 (2015), 493–501, ead., 'In Praise of Phenomenology', *Phenomenology & Practice*, 11/1 (2017), 5–17, and ead., 'Phenomenological Methodology and Aesthetic Experience: Essential Clarifications and Their Implications', in *Performance Phenomenology: To the Thing Itself*, ed. by Stuart Grant, Jodie McNeilly-Renaudie and Matthew Wagner (Cham: Springer Nature Switzerland AG, 2019), pp. 39–62.

⁹⁹ Sheets-Johnstone, 'Performing Phenomenological Methodology', in *The Routledge Companion to Performance Philosophy*, ed. by Laura Cull Ó Maoilearca and Alice Lagaay (Oxford & New York: Routledge, 2020), pp. 195–203 (p. 197).

¹⁰⁰ *Ibid.*, p. 202. See also ead., 'Phenomenological Methodology', p. 56n7: 'Certainly words carry no patented meanings, but the term "phenomenology" does seem stretched beyond its limits when it is used to denote either mere reportorial renderings of perceptible behaviours or actions, or any descriptive renderings at all of perceptible behaviours or actions'. For an incisive critique of a similar stretching of the term "embodiment", see ead., 'Embodiment on trial: a phenomenological investigation', *Continental Philosophy Review*, 48/1 (2015), 23–39.

¹⁰¹ A useful definition of expertise for the purposes of this study can be found in Barbara Gail Montero, *Thought in Action: Expertise and the Conscious Mind* (Oxford: OUP, 2016), p. 5: '[W]hen an individual has undergone ten or more years of close to daily extended practice with the specific aim of improving, and, importantly, is still intent on improving'.

And so, this study takes expert-level practice of Chopin's original fingerings in the Etudes—in the context of concurrent practices—as its starting point.¹⁰² While of course no single approach could by itself ever lead to Chopin's own performance style, his fingering indications do nevertheless offer a (literally) tangible means of experiencing some of his foregone deportment at the keyboard. To put this a bit facetiously, the main concern here is *not* 'to resurrect the music in the true Chopin manner', but rather to relive certain bodily conditions which could then lead to a 'less restrictive – indeed, liberating – authenticity determined largely by self-knowledge and conviction, by the artistic imperative to express oneself'.¹⁰³ A more apt term for this methodological stance could well be 'historically *involved* performance', in contrast to the rather passive mind-as-computer metaphor that lurks in the established term 'historically informed performance' (aka HIP).

Keyboard Playing and Kinaesthesia

Let us begin our exercise in kinaesthetic empathy with what remains a fairly uncontroversial observation since at least ancient Greek times,¹⁰⁴ namely that biological self-movement and kinaesthesia are incredibly puzzling, astronomically complex phenomena.¹⁰⁵ We need only ponder on the 40,000+ muscles in elephants'

¹⁰² I must at this point rather apprehensively insert my individual perspective through countless hours of deliberate practice of the original fingerings (well over the proverbial 10,000 on the Etudes alone). In this context, it goes without saying that I will always be 'still intent on improving'.

¹⁰³ Rink, 'Authentic Chopin: history, analysis and intuition in performance', in *Chopin Studies 2*, ed. by John Rink and Jim Samson (Cambridge & Others: CUP, 1994), pp. 214–44 (p. 216).

¹⁰⁴ See, e.g., Mark L. Latash, *Synergy* (Oxford & New York: OUP, 2008), p. 35: 'If we want to understand how the CNS controls movements, we should not confound our analysis with a question of how it comes up with an idea to perform a movement in the first place. [...] At least for now, this issue seems to be a subject of philosophy, not of natural science, and our understanding of it has not changed much since the times of Plato, Aristotle, and Galen'.

¹⁰⁵ For a conveniently succinct definition of kinaesthesia in contradistinction to proprioception, see *PoM*, p. 512: '[P]roprioception is an evolutionary fact of animate life having to do preeminently with the experience of movement through bodily deformations. [...] [K]inaesthesia is a bona fide sensory modality in its own right, one rooted in a neurophysiology that gives us an immediate sense of our own movement dynamics' (all italics original). See also Barry Stillman, 'Making Sense of Proprioception: The meaning of proprioception, kinaesthesia and related terms', *Physiotherapy*, 88/11 (2002), 667–76, which somewhat conflates the two as is almost customary in the literature due to these terms' intertwined history.

trunks and marvel at how infants ever learn to move them at all.¹⁰⁶ And if the synthetic methodology in artificial intelligence is also any indication,¹⁰⁷ chess-playing software Deep Blue managed to defeat reigning world-champion Garry Kasparov long before autonomous humanoid robots could negotiate even a short flight of stairs,¹⁰⁸ a startling disparity eventually known as ‘Moravec’s paradox’:

From the beginning of AI, it was apparent that what was easy for humans (walking around without stumbling into a chair in our living rooms) was difficult for any artificial system. Too much information had to be processed in real time—seeing, recognizing, and reacting to the fact that a chair is in one’s way. Conversely, what was difficult for humans (such as multiplying two twenty-digit numbers) was a piece of cake for a machine.¹⁰⁹

Reassuring as this gap may be for the time being, that so-called higher mental processes should pose less of a challenge to the synthetic method than the goings-on of even the simplest animate beings raises uncomfortable questions as to agency and the sense of self. (As already mentioned, the idea that propositional mental content somehow precedes every physical action—hence obviating the agency conundrum—can still make understanding the role of the body in expert activities too daunting a task.¹¹⁰) In short, there is clearly much more to our ‘forces of habit’

¹⁰⁶ Humans comprise a much more modest 639 muscles *in toto*.

¹⁰⁷ Crudely put, the idea that understanding consciousness may well require attempts to build it—“attempts” being the operative word. See for example Roberto Cordeschi ‘Steps Toward the Synthetic Method: Symbolic Information Processing and Self-Organizing Systems in Early Artificial Intelligence Modeling’, in *The Mechanical Mind in History*, ed. by Philip Husbands, Owen Holland and Michael Wheeler (Cambridge, MA & London: The MIT Press, 2008), 219–58. For an eminently accessible overview, see Rolf Pfeifer and Josh Bongard, *How the Body Shapes the Way We Think: A New View of Intelligence* (Cambridge, MA & London: The MIT Press, 2007), pp. 77–82 (p. 78): ‘This way of proceeding has proved enormously powerful: because you have to build something that actually works in the real world, there is no way of glossing over details, which is possible when you formulate a theory abstractly’.

¹⁰⁸ See Feng-hsiung Hsu, ‘IBM’s Deep Blue Chess Grandmaster Chips’, *EEE micro*, 19/2 (1999), 70–81 (72) for the relevant fact that, by the historic 1997 rematch, Deep Blue was capable of searching and evaluating chess positions at a speed of up to 200,000,000 per second. Much the same gap is still evident some twenty years later, as AlphaGo’s accomplishments are still well ahead of any autonomous robotics. See, e.g., Haofeng Yu, ‘From Deep Blue to DeepMind: What AlphaGo Tells Us’, *Predictive Analytics and Futurism*, 13 (2016), 42–45.

¹⁰⁹ Diego Rasskin-Gutman, *Chess Metaphors: Artificial Intelligence and the Human Mind*, trans. by Deborah Klosky (Cambridge, MA & London: MIT Press, 2009 [2005]), p. 82. See also Demis Hassabis, ‘Chess Match of the Century’, *Nature*, 544 (2017), 413–14 (413). For the very same reasons, we should probably not hold our breath as to piano-playing robotics either, and expect gesture-recognition technology to be as exasperating as its voice counterpart, if not more.

¹¹⁰ For an apropos critique of this gap in the context of music performance, see Doğantan-Dack, ‘The body behind music: precedents and prospects’, *Psychology of Music*, 34 (2006), 449–64.

than we can possibly come to know.¹¹¹ And physical gestures in music performance only further complicate understanding, even prior to consideration of any models of musical listening, communication, or semiotics.¹¹²

Now before we lose our way through any philosophical rabbit hole, let us highlight the simple notion that ‘movement in a quite literal sense informs perception’.¹¹³ In piano playing, this means that movement primarily makes perception intelligible to ourselves:¹¹⁴ that is, physical gestures (even at the minute scale sometimes promoted by finger choice) do not merely effect sound or visually convey expressive information but are also instrumental in *constituting the player’s phenomenal experience* itself.¹¹⁵ Thus, because gestures also shape keyboard performance *subjectively*, we will need to go past the seemingly natural, ‘resultist’

¹¹¹ See Sheets-Johnstone, ‘On the origin, nature, and genesis of habit’, *Phenomenology and Mind*, 6 (2014), 96–116.

¹¹² Rather than clinging to any existing slippery definition, ‘gesture’ throughout this study will refer to the largely intuitive but straightforward meaning of physical movement with communicative intent. See, however, Lilian Lima Simões, ‘The Roles of Gesture in Piano Teaching and Learning’ (PhD thesis, Queen’s University Belfast, 2014) for not one but two illuminating literature reviews covering many of the pervasive problems the concept of gesture raises when applied to music performance and pedagogy. Closer to the topic at hand, see Michèle Wheatley-Brown, ‘An Analysis of Terminology Describing the Physical Aspect of Piano Technique’ (MA thesis, University of Ottawa, 2011), an outstanding study which clarifies many enduring misconceptions resulting from the attempt to make *verbal* sense of movement in piano playing.

¹¹³ *PoM*, p. 159. Sheets-Johnstone here builds on Nikolai A. Bernstein’s discovery that control of movement needs afferent (inward) feedback in addition to efferent (outward) impulses. Thus, in a very real sense self-movement always has an *exploratory* dimension to it.

¹¹⁴ Even verbal communication partakes of a similar phenomenon: far from being negligible, ancillary add-ons to speech, physical gestures in fact assist the speaker through the forming of thoughts. For a classic illustration, see Jonathan Cole, Shaun Gallagher and David McNeill, ‘Gesture following deafferentation: A phenomenologically informed experimental study’, *Phenomenology and the Cognitive Sciences*, 1 (2002), 49–67 (but also *PoM*, p. 514 for a fascinating critique). There is by now a rich body of literature attesting to the gestural basis of (and for) language. Salient examples are Frank R. Wilson, *The Hand: How Its Use Shapes the Brain, Language, and Human Culture* (New York: Vintage Books, 1998), Michael C. Corballis, *From Hand to Mouth: The Origins of Language* (Princeton and Oxford: PUP, 2003), and Colin McGinn, *Prehension: The Hand and the Emergence of Humanity* (Cambridge, MA & London: The MIT Press, 2015). Colin Falck, *Myth, Truth, and Literature: Towards a True Post-Modernism*, 2nd edn (Cambridge: CUP, 1994 [1989]) covers much of the same terrain from a philosophy of literature perspective.

¹¹⁵ See Sheets-Johnstone, ‘Phenomenological Methodology’, p. 43: ‘Contrary to received wisdom, movement is not basically a force *in* time and *in* space and is not even commonly experienced in an everyday sense as a force *in* time and *in* space. As the phenomenological analysis of movement reveals and shows, any movement creates its own space and time, just as it creates its own force’. See also ead., p. 50: ‘The waywardness of received wisdom comes prominently to the fore [...] in the erroneous dictionary definition of movement as a “change of position.” Objects in motion change position; movement does not change position, for it has no position’.

attitude which dictates that movement at the keyboard serves exclusively acoustic or visual goals.¹¹⁶ A common manifestation of this phenomenon is how a heightened (or in any event more precise) sense of timing emerges through controlled movement than if we remain mostly still.¹¹⁷ Compare the two fingering possibilities for the RH (especially the ascending octave) in **Figure 2.1** for a quick illustration of this kind of subjective variability:

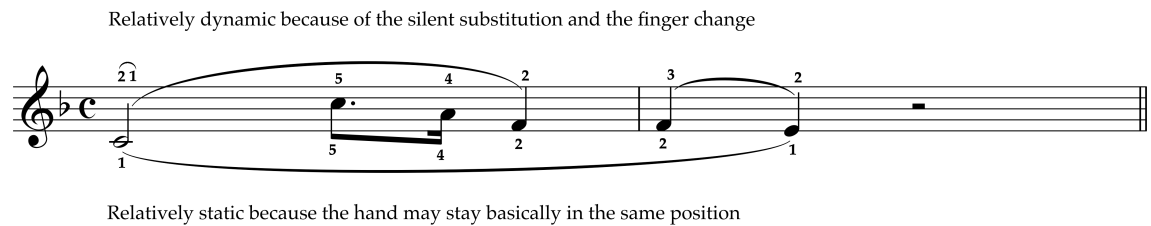


Fig. 2.1 Varied kinaestheses

Let us now briefly explore how kinaesthetic variability arises from use of different fingerings. If the reader tries out this short bit again with each of the (admittedly rather random) fingerings indicated in **Figure 2.2**, it becomes apparent how they result in (or at the very least suggest) different qualitative dynamics of movement, almost regardless how we may wish to realise it in sound:

¹¹⁶ I take issue below ('The *Vorsetzer* Test', pp. 41–52) with what has become almost an article of faith in the literature on gesture in music performance, namely the expressive vs effective gesture dichotomy. I hope to show how the idea that one merely serves a visual-rhetorical purpose while the other actually effects sound is, at the very least, empirically suspect as regards piano performance. For a brief overview of 'bracketing', or *epochē*, see William R. McKenna, 'Epochē and Reduction', in *Encyclopedia of Phenomenology*, ed. by Lester Embree et al. (Berlin & Heidelberg: Springer, 1997), pp. 177–8. See also Lester Embree, 'Constitutive phenomenology of the natural attitude', in *ibid.*, pp. 114–16. A good example of the 'natural attitude' in this context is Werner Goebel, 'Movement and touch in piano performance', in *Handbook of Human Motion*, ed. by Bertram Müller and Sebastian I. Wolf (Cham: Springer Nature Switzerland AG, 2018), pp. 1821–38 (pp. 1822–23): 'Human movement in piano performance is primarily directed to produce sound imagined by the performing musician. Rather than being the goal of the artist (such as body movements in ballet dancing [...]), the movements serve another primary purpose – that is – the creation of sounds to be perceived by the audience'. This of course takes kinaesthesia almost completely out of the picture.

¹¹⁷ Do note, however, that virtual stillness occasionally has its valuable musical uses.

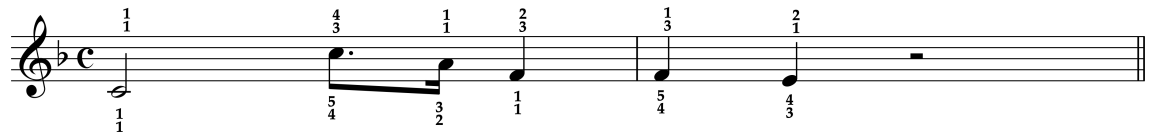


Fig. 2.2 Further varied kinaestheses (all RH fingerings)

Even if tried out on a coffee table, each of the above fingerings for the same passage will elicit different subjective results—which in turn will differently inform our hearing.¹¹⁸ Clearly, that kinaesthetic properties inherent in each fingering should make some kinds of musical intent—as well as outcome—problematic ultimately points to their non-interchangeability.¹¹⁹ Thus, if no repetition of human movement ever can be identical, why should we even seek to draw out exact outcomes from *different* fingerings?¹²⁰ Using finger choice to cultivate an infinitely expressive variety of gestures does seem a more ecological and intentionally congruent alternative.

To clarify, the point is not whether we could substitute fingerings to achieve the exact same (or close enough) effect, but that different fingerings result also in (possibly radically) different *perceptions* of the same music for the player. Where the real controversy begins is the question of whether use of different fingerings results in performances that are or should be perceptibly different from one another. In other words, whether the player's kinaestheses do or do not also carry 'out there' in sound to some degree. And yet, the widespread belief that valid musical results could be partly or even completely divorced from the performer's own experience producing them clearly points to how mechanistic music performance has become: that is, the long-standing resultist obsession with

¹¹⁸ See, e.g., Martin Schürmann et al., 'Touch activates human auditory cortex', *NeuroImage*, 30 (2006), 1325–31, and John J. Foxe, 'Multisensory Integration: Frequency Tuning of Audio-Tactile Integration', *Current Biology*, 19/9 (2009), 373–75.

¹¹⁹ See Chung-kai (Edmund) Cheng, 'Executive mismatch and Robert Schumann's hand injury: tranquil execution, widely-extended texture and early nineteenth-century pianism' (PhD thesis, University of Hong Kong, 2013), p. 1: Executive mismatch refers to [...] a situation during a performance or a practice session, when the performer moves his body in ways that cannot possibly create the sonic effects he intends to create'.

¹²⁰ See, e.g., Latash, p. 119.

mechanical perfection often blatantly disregards not just how performers' conscious experience may fit the picture, but even their very health and well-being.¹²¹

Note that in trying out the above little fragment a 'quiet hand' is preferable to fully appreciate the different fingerings' effect on it.¹²² For example, the $2\hat{1}$ silent substitution in **Figure 2.1** could suggest a hand that starts from a fairly compact position to play c^1 with 2, then quietly expand hedgehog-like through the substitution to 1 so that 5 reaches c^2 without any jolts. Incidentally, note Heinrich Schenker's view that

[s]uch a change of finger in itself gives an impression similar to the sound transmitted by a singer or violinist. Just as the singer and the violinist continue, enlivening the sound with, respectively, a spun-out breath or a bow stroke, the pianist gives an illusion of spinning the sound on by changing fingers on one note. The quick changing of fingers approximates a continuous presence; without finger change, played only once, the sound appears fixed.¹²³

Indeed, some flowing movements (especially those brought forth by finger substitution) are also highly suggestive of portamento-like effects that, though mostly subjective, possibly do affect the listener as well through some form of real-time kinetic empathy. As already stated, however, we must await further empirical evidence to determine more precisely how finger choice fits the picture in that regard.¹²⁴

¹²¹ See Katharine Liley, 'The Feeble Fingers of Every Unregenerate Son of Adam. Cultural values in pianists' health and skill-development' (PhD thesis, Royal College of Music, London, 2018), e.g., pp. 24–25, for recent statistics on keyboard players' higher rates of occupational injuries as compared to other instrumentalists—however high those surely are as well.

¹²² A 'quiet hand' does not mean a virtually static hand coupled with 'fingers only' technique, as many still claim. Before expanding on this issue in Chapters 3 and 4, what is important to keep in mind here is that any jolts are to be avoided by making as flowing a gesture as possible. For an agreeable preview, see Heinrich Schenker, *The Art of Performance*, ed. by Heribert Esser and trans. by Irene Schreier Scott (New York & Oxford: OUP, 2000), p. 21: '[...] a quiet hand position is the only one that gives the possibility of playing several notes in succession so that they—melting into one another, as it were—form a chain of notes with the same effect as a legato group on the violin or in singing'. From this viewpoint the hand may indeed *appear* static to the casual observer, which is possibly another reason for the age-old misunderstanding.

¹²³ *Ibid.* (hereafter: *AoP*), p. 28. Note that it is not altogether clear if Schenker refers to how the sound appears to the player or the listener—or, indeed, to both.

¹²⁴ See Hamish James Alexander Robb, 'Embodying Meaning and Imagining Sound in Nineteenth-Century Piano Music' (Ph.D. dissertation, Princeton University, 2015), pp. 72–82.

Whether or not this section ultimately embraces views close to those of the ‘new mysterians’,¹²⁵ the main point to impress is that fingerings are really not *phenomenologically* interchangeable—regardless how aware of them we may be once chosen, and even regardless any attempts to match a given musical outcome through different ones. In short, even the tiniest variations in finger choice may have ramifications well beyond our immediate conscious control in performance, as we will see below.

The Role of Finger Choice in Kinaesthetic Memory¹²⁶

Perhaps for psychological self-preservation reasons, it is often the performing artists themselves who perpetuate ideas of unthinking expert bodies and the benefits of shunning hyper-reflection—the so-called ‘centipede effect’:

The Centipede was happy quite,
Until a Toad in fun
Said, ‘Pray, which leg goes after which?’
And worked her mind to such a pitch,
She lay distracted in a ditch
Considering how to run.¹²⁷

¹²⁵ See Owen Flanagan, *The Science of the Mind*, 2nd edn (Cambridge, MA & London: The MIT Press, 1991), p. 313: ‘I call this second type [i.e., Thomas Nagel and Colin McGinn] the “new mysterians,” after a forgettable 1960s pop group called Question Mark and the Mysterians. The new mysterians think that consciousness will *never* be understood’. For a delightful reply, see McGinn, *Minds and Bodies: Philosophers and Their Ideas* (Oxford & New York: OUP, 1997), p. 107.

¹²⁶ It is crucial here to suggest a more modest conception of memory in piano performance than is customary. That is, not as the conventional score-less feat expected of today’s soloists but rather the combined aural, kinetic and kinaesthetic recall needed in real-time for any performance. In this scenario, whether one plays from a score or not, or how well one might hold some music in one’s mind, are largely irrelevant issues. In my view, a book chapter bearing much more directly on memory in piano performance than anything hitherto written specifically on the subject is Sheets-Johnstone, ‘Kinesthetic memory: Further critical reflections and constructive analyses’, in *Body Memory, Metaphor and Movement*, ed. by Sabine C. Koch et al. (Amsterdam & Philadelphia: John Benjamins, 2012), pp. 43–72. That Sheets-Johnstone is also an experienced pianist does seem worth mentioning: ‘[I]n the 12+ years I took piano lessons, Chopin was by far my favorite and continues to be my favorite as I attempt to practice and play now as an octogenarian’ (pers. comm., 3 February 2019).

¹²⁷ As quoted in Andrew M. Colman (ed.), *A Dictionary of Psychology*, 4th edn (Oxford: OUP, 2015 [2001]), p. 119 (s.v. centipede effect). The poem is traditionally attributed to Katherine Craster and known as ‘The Cendipede’s Dilemma’, yet the *Cassell’s Weekly* number where her ‘Pinafore Poems’ were allegedly first published in 1871 is nowhere to be found.

Widespread as the notion of expert performance being to some degree *aminded* is, it has not gone completely unchallenged. Intriguingly, it is philosophers with extensive experience as professional dancers like Maxine Sheets-Johnstone and Barbara Gail Montero who have most cogently (and vehemently) contested it.¹²⁸ Their view, surely relevant here given their background is that, if anything, expert performance demands *more* procedural awareness, not less—think race-car driving vs the everyday variety and a clear picture of the stakes emerges.¹²⁹ Despite their considerable differences, Sheets-Johnstone and Montero both tellingly frame said awareness around movement itself (as ‘thinking in movement’ and ‘cognition-in-action’, respectively).¹³⁰

The consensus view, however, asserts that we are at best peripherally conscious of fingering processes during performance, that they fast become automatised to a very high if not absolute degree. Yet exactly *how* that comes about remains unexplored apart from vague appeals to mechanical repetition and ‘muscle memory’.¹³¹ The classic interview study cited at the beginning of this chapter, for example, finds that

¹²⁸ Montero (p. 35) strongly contends the notion, calling it ‘the just-do-it principle’. In its most extreme form, this principle stipulates that ‘[f]or experts, when all is going well, optimal or near-optimal performance proceeds without any of the following mental processes: self-reflective thinking, planning, predicting, deliberation, attention to or monitoring of their actions, conceptualizing their actions, conscious control, trying, effort, having a sense of the self, or acting for a reason. Moreover, when all is going well, such processes interfere with expert performance and should be avoided’.

¹²⁹ See *ibid.*, p. 5.

¹³⁰ Sheets-Johnstone, ‘Thinking in Movement’, *The Journal of Aesthetics and Art Criticism*, 39/4 (1981), 399–407, and its expansion in *PoM* (Chapter 12, ‘Thinking in Movement’), pp. 419–49. For ‘the cognition-in-action principle’, see Montero, p. 38: ‘For experts, when all is going well, optimal or near optimal performance frequently employs some of the following conscious mental processes: self-reflective thinking, planning, predicting, deliberation, attention to or monitoring of their actions, conceptualizing their actions, control, trying, effort, having a sense of the self, and acting for a reason. Moreover, such mental processes do not necessarily or even generally interfere with expert performance, and should not generally be avoided by experts’.

¹³¹ For standard views of memory in piano performance, see Chaffin and Topher Logan, ‘Practicing perfection: How concert soloists prepare for performance’, *Advances in Cognitive Psychology*, 2/2-3 (2006), 113–30, and Parncutt and Troup, pp. 285–302. See also Chaffin, Imreh and Crawford, e.g., pp. 23, 51, 70–72. In short, the few studies that probe fingering in any detail class it as a ‘basic’ cue, and distinct from ‘interpretive’ and ‘performance’ cues (see, e.g., *ibid.*, p. 176). The most recent exposition on the matter seems to be Jane Ginsborg, ‘Memorization’, in *The Oxford Handbook of Performance, Volume 1: Development and Learning, Proficiencies, Performance Practices, and Psychology*, ed. by Gary E. McPherson (New York: OUP, 2022), pp. 234–53 (pp. 240–41), which keeps

fingering and the process of memorisation are closely linked, but none of these pianists seemed to believe that they chose fingerings specifically for their memorability: “You have to know the piece aurally, motorically, and visually: I don’t know which is most important. You have to know the music, and until you’ve done that it doesn’t matter how well you know the fingering. You’ve got to know the piece independent of the fingering.” And from another: “You just wouldn’t choose a fingering that was difficult to memorise in the first place.”¹³²

The scholarship on memory in piano performance parallels pianists’ somewhat desultory interest in the subject, as it is all but silent on what happens *after* ‘basic cues’ trigger purportedly automatised fingerings.¹³³ Indeed, the prevalent consensus does seem to preclude non-automatic conceptions of fingering:

When a performer has to think mostly of basic cues dealing with matters of technique, the possibilities for musically creative variation are limited. When a performer is focused on interpretive cues and is thinking about what the music sounds like, the opportunities for creativity are greater but still limited. [...] An expressively spontaneous performance is, therefore, most likely when the performer is focusing on expressive cues and the musical structure that supports them.¹³⁴

But are fingerings really the rote automatism they are usually made out to be, or could the player also be relatively conscious of them in real-time? Since even a most casual self-examination deems that it *is* possible, should we not interrogate the phenomenon further? Indeed, what *does* awareness of fingering actually consist

the very same classification. I contend that this classification only further obscures the role of the body in expressive piano performance.

¹³² Clarke et al., 98. On the ‘motoric’ issue, see Sheets-Johnstone, ‘Kinesthetic Memory’, p. 64: ‘Traditional views of motor behavior, motor memory, motor control, motor habits, and so on, exemplify a further dimension of the bias in their Cartesian reduction of movement to objects in motion, quantifiable *things* tied to positions in space and moments in time, and either by nature not kinesthetically attuned or by manner of study not recognized as being kinesthetically attuned’. And, *ibid.*, p. 47: ‘We might thereby be led to bypass linguistic practices that conceptually disfigure the truths of experience by encasing them in a motorology, as in talk of motor intentionality, motor control [...], motor schema, motor intention [...], and more broadly, talk of sensorimotor subjectivity [...], sensorimotor profiles [...], and the like’.

¹³³ Silence in the literature notwithstanding, the ‘triggering’ view is essentially correct. See Sheets-Johnstone, ‘Kinesthetic Memory’, p. 52: ‘When [Aleksander Romanovich] Luria speaks of the *automatization* of movement, it is important to point out that he is describing the way in which a single impulse is sufficient to activate a kinetic melody, and not asserting that one is unaware of writing one’s name, that one is unconscious of doing so, or that one can nod off while the process continues by itself. A kinetic melody is Luria’s term for ‘*an experienced kinetic event*’ (*ibid.* p. 49).

¹³⁴ Chaffin and Logan, 127.

of—what do we actually perceive when we do turn our attention to fingering in real-time? *Prima facie*, one would think the process does not mean having strings of digits flash through one’s mind (akin to the flashing of note names those of us trained in *solfège* early on are doomed to live with), but a more bodily grounded and holistic awareness of movement—that is, ‘the result of global kinetic orchestrations’.¹³⁵

From that standpoint, awareness of fingering may be more like a permanent contingency—it is, in other words, *foundational*. ‘Quick, play *any one note* on the keyboard’ will likely involve a split-second decision of what finger to use, regardless how overtly conscious the decision was for either (or both) what key and what finger. That is, we *do* seem to know what finger goes when and where in real-time, regardless of how aware the player may be of the process at the exact moment of carrying it out. This would seem to cast some doubt in the belief that modern standard fingerings are more secure and reliable precisely because of the automatism that goes with them—of blissful disengagement from ‘basic’ concerns and cues while giving our all to music-making.

However tenuous (even illusory) our self-awareness and sense of agency may be while carrying out a given fingering, it is crucial to insist on the fact that kinaesthesia, unlike other sense modalities, is insuppressible.¹³⁶ That is, even though skill practice largely consists in relegating the more familiar kinetic melodies to the periphery or even the background so we can go about our business unhindered, ‘they are not [...] on that account outside consciousness’.¹³⁷ Thus, possibly the boldest claim to be made in this regard is that some modern utilitarian fingering choices may not make the process conscious *enough* to be memorable. That is,

¹³⁵ Sheets-Johnstone, ‘Kinesthetic Memory’, p. 65.

¹³⁶ *Ibid.*, p. 45: ‘Neurologist Marc Jeannerod observes – much to his disappointment from the viewpoint of being able to design an experiment to resolve the “Wundt/James” problem of whether “conscious knowledge about one’s actions” is *a posteriori* or *a priori*, that is, whether it is based on “efferent information of a central origin” or “information from sensory organs,” hence the impossibility of determining accurately whether it is Wundt or James who is correct – that *it is impossible to shut off kinaesthesia*’ (last emphasis added).

¹³⁷ Sheets-Johnstone, ‘Fundamental and inherently interrelated aspects of animation’, in *Moving Ourselves, Moving Others: Motion and emotion in intersubjectivity, consciousness and language*, ed. by Ad Foolen et al. (Amsterdam & Philadelphia: John Benjamins, 2012), pp. 29–55 (p. 39).

since ‘shadings and articulations are superimposed by an act of will on a stereotyped and undifferentiated physical pattern’, as Schachter puts it,¹³⁸ such fingerings may (at best) require some extra mental effort to maintain focus while playing or (at worst) unwittingly result in rather mechanical engagement and/or mind-wandering of the perilous variety. Conversely, many historical contingent fingerings foster quite ideal kinds of kinaesthetic body memory and attunement to musical content.¹³⁹ If expert performance consists, almost by definition, in constantly fine-tuning familiar kinetic and kinaesthetic melodies (which as we have seen *are* there for self-examination should we care to), fingerings that foster such moment-to-moment awareness do seem the better alternative. We may even have to revise the empirical validity of classifying fingering as a ‘basic cue’, as it appears to constrain interpretive and expressive possibilities in real-time performance to an extremely high degree.¹⁴⁰ It is foundational, in other words, and thus inseparable from whatever direction our performance might take at any given moment—much as it may also offer (potentially at least) immense variety in the process.

To repeat, because of the utilitarian tendency for ergonomically ideal, minimal movement, utilitarian modern fingerings may also result in lesser kinaesthetic memory, while much that is perceived as effortful movement in historical contingent fingerings can be also perfectly ergonomic—but also of great mnemonic value. The issue at bottom is whether movement derived from finger

¹³⁸ Schachter, ‘Introduction’, p. viii.

¹³⁹ Neglecting to take into account the many extant historical contingent fingerings of the early nineteenth century may point to a more general, systemic disregard for the pedagogy of the period. See Laor, ‘Mechanistic Paradigm’, e.g., 7: ‘[S]ociomusical processes emerged in the twentieth century that led to the formation of discrete professional specializations in the field of music, as manifested in the establishment of separate associations, institutions, and journals for, among others, music educators, composers, music theoreticians, and music researchers. My review of these separately published literatures reveals little inter-specialization collaboration and dialogue with regard to pedagogical music and practice from its inception’.

¹⁴⁰ Like many others, Chaffin, Imreh and Crawford believe one can bypass such bodily constraints (see, e.g., p. 146): ‘Settling fingerings is the first priority when learning a new piece. Motor memory begins to develop immediately so that changing a fingering produces interference between the old and new fingerings and takes a lot longer to learn than the original choice. To avoid this interference, a pianist must try to anticipate how she will want to perform the music when she is able to play fluently and up to speed. Even in the initial sessions, before she could play fluently, Gabriela *had to anticipate her interpretive and expressive goals so that her choice of fingerings would not constrain her*’ (emphasis added).

choice is congruent with the musical content and desired expression or not. A purely quantitative sense of physical effort should *not* be the scale by which to rate the value of any given fingering—on the contrary, effortful fingerings (in a purely kinaesthetic sense) can be most mnemonically effective in performance while also promoting a healthy and ergonomic technique.¹⁴¹ In short, appeals to ‘muscle memory’ independently from deliberately conscious attention to finger choice throughout the learning process may even turn out to be detrimental, for untold hours of otherwise mindful practice could go to waste in the process.¹⁴²

Thus, we may also have to rethink the view that standardised fingerings ease memory constraints because of their ready-made-and-fit finger sequences, as they more often than not fail to imprint distinct and therefore memorable enough kinaestheses. A more efficient approach to fingering would instead make the process as conscious as possible, thus lead to (literally) grasping whatever needs to be grasped musically and conceptually.¹⁴³ The superb attention to detail of many early nineteenth-century contingent fingerings (and much concurrent pedagogical literature) amply demonstrate this—even if mostly tacitly as we will see in much of the rest of this study.

¹⁴¹ A study which takes this (ahistorical) route is André Charles Duvall, ‘The Development and Application of Keyboard Fingering Principles in the Music of J. S. Bach and C. P. E. Bach: An Analysis in Comparison with Modern Approaches to Fingering, and the Utilization of the J. C. Bach-Ricci Method for Nurturing a Versatile Technique in the Early Stages of Study’ (D.M.A. dissertation, University of North Carolina at Greensboro, 2014). Duvall takes comfortably economical use of motion as the main arbiter of value, thereby deeming choices which (to him) seem too effortful as ineffectual, e.g., some of Johann Caspar Vogler’s fingerings for J.S. Bach’s *Prelude and Fuggetta* BWV 87a (ibid., pp. 23, 43–62). A little clavichord playing experience would have gone a long way to prevent jumping to some of those conclusions, e.g., why Vogler did not make use of silent substitutions as much as Duvall would have liked despite the many opportunities seemingly available.

¹⁴² In this regard, going over Imreh’s self-documented learning process in Chaffin, Imreh and Crawford, though certainly fascinating, can also be a little heart-breaking. I surmise it was the very attempt to fully automatise fingerings which often impeded her progress in memorising the piece for score-less performance—the stated goal in the first place. That, as well as her insistence on superposing standard fingerings on musical material ultimately not too amenable to them may have resulted in diminished bodily self-awareness and thus kinaesthetic memorability.

¹⁴³ See McGinn, *Prehension*, p. 86: ‘We have the idea that the mind attaches itself to an object, maybe encompasses it—and the hand does something similar. An abstract schematic notion is thus specialized into two more concrete notions. The concept of prehension, then, is equally correctly used when we speak of grasping a meaning or grasping a ball, literally in both cases’.

The Vorsetzer Test

The most treacherous elephant in the room remains whether the player's qualitative dynamics of movement are at all perceptible to the listener, because if that were not the case (which in fact does seem to be the consensus) discussion thus far would have been mostly in vain.¹⁴⁴ For one thing, that would make superficial imitation of historical fingering effects sufficient in and for performance, as the means to bring them about would indeed turn out to be interchangeable and irrelevant—at least from the listener's perspective. In this scenario only the resulting, quantifiable timing and dynamics would be worth considering, rendering fingering decisions primarily a matter of convenience and confirming 'that the organisation of the music implicit in a fingering is for the player's conceptualisation, not the listener's'.¹⁴⁵ In short, the consensus view denies that qualitative dynamics of movement between keypresses might have any relevance other than technical expediency, making finger choice simply a matter of differing locomotion—rather than expression—on the keyboard.

It is important to note, however, that the problem is often reductively formulated instead as whether isolated variations in touch result in any perceptible variations in timbre, that is, *even on a single note*.¹⁴⁶ But while that may seem quite manageable to study scientifically, it also betrays too atomistic an outlook.¹⁴⁷ To be

¹⁴⁴ See, e.g., Cook, *Music*, p. 83: 'I have discussed the issue of piano fingering at some length because it is a representative example of the type of knowledge that is embodied in the production of music but hardly, if at all, implicated in its reception, at least in the case of the untrained listener'. As this section will hopefully make clear, this extremely popular 'covert' view of fingering may turn out to be somewhat myopic.

¹⁴⁵ Clarke et al., 94.

¹⁴⁶ See Doğantan-Dack, 'In the Beginning Was Gesture', p. 252–56 for an overview of (and issues with) such research.

¹⁴⁷ See Parncutt and Troup, p. 289: 'Acousticians and psychologists have often wondered why, in spite of this evidence, so many pianists still believe that the timbre of a piano tone depends on *touch*—not only how fast but also *how* the key is depressed. A possible reason is that movements of a pianist's body and arms (smooth and round versus jagged and tense) seem to both performers and audiences to result in different timbres'. But then, rather contradictorily, *ibid.*, p. 290: 'Tone quality in piano performance is determined not only by the physics of individual keystrokes but also involves a complex and largely intuitive interaction among body movements, technical finesse, and musical interpretation. [...] For example, it is possible that the exact timing of a *rubato* melodic phrase affects the global perception of timbre'. The object of our exploration here is *precisely* how

clear, this section does *not* consider the possibility of objective timbral variation as such but, rather, whether some aspects of bodily expression do or do not travel along with the sounds themselves—that is, whether we can somehow ‘hear’ gestures made at the keyboard. As Andrew Wright observes, ‘many of the most significant aspects of gesture in piano playing [...] are entirely invisible, but can clearly be *heard* in the musical performance’,¹⁴⁹ for example when we hear a pianist next door struggle with muscular tension through an under-prepared performance.¹⁵⁰ Such sonic imprinting actually need not presuppose substantial timbral change in any individual sound, however: pianists do sound different from one another (or, indeed, from their own selves at different points in time) to a great extent because of differences in their qualitative dynamics of movement—but perceived as they unfold *in context* rather than because of any timbral change in individual notes.

Wherever the truth to this phenomenon may ultimately lie, even if it is merely a filling-in inherent to the listening process it would still merit further investigation. In point of fact, abstraction from it may be next to impossible, as Mine Doğantan-Dack insists:

Perceptually the *physical cause* of a sound is most directly revealed in its timbre rather than in its pitch or duration. The manner of physically initiating and sustaining a sound, that is, the *gestural* aspect in producing it, is one of the decisive factors for its timbral identity. [...] In this sense, it is difficult, if not impossible, for a listener to abstract the timbral information from its physical source and cause (try to imagine a piano tone without

that vague ‘complex and largely intuitive interaction’ might actually work and how fingering fits into it. Note, once again, how the authors’ natural attitude also bars kinaesthesia from the picture.

¹⁴⁹ Wright, p. 60.

¹⁵⁰ A recent study, Wim Pouw et al., ‘Acoustic information about upper limb movement in voicing’, *Proceedings of the National Academy of Sciences of the United States of America*, 117/21 (2020), 11364–67, shows how gestures accompanying speech are distinctly (if indirectly) also *heard* through their effect on phonation. On the motor theory of speech perception—highly relevant in this context—see *PoM*, pp. 321–23, and R.G. Collinwood (as quoted in Falck, p. 25): ‘Listening to a speaker instead of looking at him tends to make us think of speech as essentially a system of sounds, but it is not; essentially it is a system of gestures made with the lungs and larynx, and the cavities of the mouth and nose’.

imagining the piano – visually or otherwise – and any agent producing the tone!).¹⁵¹

Now if said qualitative dynamics of movement were indeed aurally discernible—that is, apart from any illusionistic visuals within a de facto multi-modal scenario,¹⁵² they would go beyond identifying agency and timbral identity and on to make up the player’s *presence*, hard as that may still be to measure objectively. And since controlled experiments on this matter are yet to be conducted, we are forced to speculate and consider the phenomenon at least philosophically through a little thought experiment.

Enter the *Vorsetzer*, an external piano-roll player commercialized by M. Welte & Sons in 1905 that when set in front of a piano could depress its keys (‘and the spirits of the audience’,¹⁵³ one is tempted to add) with its felt-tipped wooden ‘fingers’.¹⁵⁴ Surely a feat of engineering at the time, external automata such as the *Vorsetzer* are nonetheless invariably still outperformed by counterparts featuring in-built playback mechanisms such as music boxes and barrel organs (though, to be fair, these reproduce not bona fide performances but transcriptions thereof). To put this in the nicest possible way, a *Vorsetzer* is about as close to a piano-playing human as it is to a card-playing centipede: its radical simplification of movement

¹⁵¹ Doğantan-Dack, ‘In the Beginning Was Gesture’, p. 248. See also Pamela Feo, “‘So intangible a thing as a pianist’s touch’: Listening to the Body in Player-Piano Performance’, *Keyboard Perspectives*, 11 (2018), 167–86 (183): ‘Despite the recent proliferation of listening studies, the implications of listening to an invisible body have gone unexplored, perhaps because we take for granted that a body is present in live performance and absent in a recorded one’.

¹⁵² Attesting to the hugely important element of visual perception in keyboard performance is the fact that most people, from professionals to inexperienced concertgoers, would usually prefer to sit where they could also see the player’s hands. See Klaus-Ernst Behne and Clemens Wöllner, ‘Seeing or hearing the pianists? A synopsis of an early audiovisual perception experiment and a replication’, *Musicae Scientiae*, 15/3 (2011), 324–42. As the experiments were not conducted in a live setting, however, we should not assume findings about how the visual and aural are perceptually intertwined to automatically apply to live music as well. The remainder of this chapter should give some indications as to why that may be a problem.

¹⁵³ Ambrose Bierce, *The Devil’s Dictionary* (Cleveland: The World Publishing Company, 1911), p. 252 (s.v. Piano).

¹⁵⁴ See, e.g., George Brock-Nannestad, ‘The development of recording technologies’, in *The Cambridge Companion to Recorded Music*, ed. by Nicholas Cook et al. (Cambridge: CUP, 2009), pp. 149–76 (pp. 151, 173).

through the one-finger-per-key setup, lack of feedback of any sort, and highly rudimentary pedalling capabilities all make for its extremely poor verisimilitude.

Assuming the aforementioned Moravec paradox to hold for some time (and judging from recent efforts as to humanoid piano-playing automata there is every reason to believe it will),¹⁵⁵ we better imagine using an in-built playback system as a more realistic alternative for our thought experiment (yet keeping *Vorsetzer* for the experiment's name, for reasons to be revealed in due course).¹⁵⁶ Indeed, if all a pianist can transmit to an audience really boils down to just timing and dynamics, such an in-built player piano would be infinitely better equipped to reproduce them. The challenge then, or so the argument goes, would only be to do that as accurately as possible, thereby eliminating any discrepancy between a pianist's live performance and its reproduction. To ascertain whether that is the case or not we need a kind of Turing test for the pianist's physical *presence*—a bizarre thing to need to test indeed.¹⁵⁷

¹⁵⁵ See, e.g., Jen-Chang Lin et al., 'Electronic piano playing robot', in *2010 International Symposium on Computer, Communication, Control and Automation (3CA)*, vol. 2 (2010), pp. 353–56, Alyssa M. Batula and Youngmoo E. Kim, 'Development of a mini-humanoid pianist', in *2010 10th IEEE-RAS International Conference on Humanoid Robots* (2010), pp. 192–97, Youngmoo E. Kim et al., 'Enabling humanoid musical interaction and performance', in *2011 International Conference on Collaboration Technologies and Systems (CTS)* (2011), pp. 212–15, and Ada Zhang, Mark Malhotra and Yoky Matsuoka, 'Musical piano performance by the ACT Hand', in *2011 IEEE International Conference on Robotics and Automation* (2011), pp. 3536–41. Fastforward to 2023, and Zhejiang Lab's piano-playing humanoid robot 'Xiaole' already displays some (very) modest cocktail pianist skills. It already 'works' at a restaurant in its hometown, Hangzhou, though no reviews seem to be in print as of this writing.

¹⁵⁶ The most advanced *Vorsetzer*-type player piano on the market today seems to be 'Teotronico', a 53-fingered marvel manufactured by Mateo Suzi in 2012, and presumably an improvement over Welte's 'fingers' because of its ability to effect *some* horizontal movement. See Jorge A. Ruiz-Vanoye et al., 'Can Machines Play Musical Instruments?', in *International Journal of Combinatorial Optimization Problems and Informatics*, 10/3 (2019), 1–6.

¹⁵⁷ Even the perceived need for such an experiment prompted Daniel Leech-Wilkinson's usual sagacity: 'To study this phenomenon objectively would feel like accepting what I see as the perverted status quo! If people can't tell the difference between a machine and a human, it's because humans (under pressure from recording) have allowed themselves to believe that their job is to perform like machines. And I want to spend my time dissuading them, not seeking out tiny remains of humanity nestling, overlooked, in the cracks (which I do hope you'll find are still there). If music AI programmers knew more performance history, they'd realise how many other approaches there have been, how many more might be possible in the future, and then they could make artificial performances that taught us something new. That would be really exciting. But of course, they don't know performance history and assume that the way (THE way) people play now is the way music is and what they need to copy. And musicians don't provide living examples of alternatives to help them, because if they did, they wouldn't get hired. Etc.' (pers. comm., 6 October 2020). More recently, he further explains that 'no one thinks they're supposed to play like a machine, but they

In a nutshell, the *Vorsetzer* test involves a human pianist, a state-of-the-art player piano with a built-in playback system, and a blindfolded listener. In randomised order, either the pianist plays, or the player piano reproduces music recorded beforehand by said pianist.¹⁵⁸ Would the listener be able to tell the two conditions apart? It would seem that in this day and age any good player piano will probably make that a challenging task.¹⁵⁹ I contend, however, that it will *always* be a leap to claim that only negligible variations obtain between the live and reproduced performances—regardless how technologically advanced and verisimilar the capturing and reproduction system may be.¹⁶⁰

To the best of my knowledge, no such test has yet been conducted—perhaps not even by player piano technology developers. What *has* been tested instead is how algorithm-generated performances fare against a human performance when both are reproduced by a player piano—an experiment which, incidentally, betrays the pervasive bias for music performance as primarily decoded inscription of some sort, which takes ‘expression’ to be a somewhat extraneous, incorporeal add-on in the form of ‘deviations’ from an exact rendition of the musical notation.¹⁶¹ The results of one such experiment were disconcerting (to say the least) as the only human performance included was quasi-unanimously rated ‘least human’ by the

have had normativity bred into them so thoroughly that an AI facsimile of a normative modern performance is relatively easy to achieve. How wonderful would it be if human performances were varied enough that AI didn’t know where to begin?!” (pers. comm., 24 March 2023).

¹⁵⁸ This is of course a necessary simplification of how a real-life experiment would need to be set up, and whose design would necessarily include (among many other details) several pianists and listeners.

¹⁵⁹ Note again that the purpose of the experiment (real or imaginary) is not to judge these systems’ capabilities but rather to probe our perceptions. The best-known built-in player piano technology currently in operation seems to be the Yamaha’s Disklavier series, though to my knowledge at least Steinway, Bösendorfer, and Mason & Hamlin also have player piano systems on the market.

¹⁶⁰ Elaine Chew observes that current technological capabilities may not (yet) be up to the task: ‘You might consider the fact that a Disklavier reproduction is not going to be absolutely exact, and could be ever so slightly different from the original play-through. A comparison between having a pianist playing vs. pure reproduction without pianist must also take into account the acoustics. A live performer will adapt their playing to the reverberance of the space, to how the sounds interact and decay, whilst a mechanical reproduction will not’ (pers. comm., 9 October 2020).

¹⁶¹ See Antonio Rodà et al., ‘Toward a Turing test for automatic music performance’, in *International symposium on computer music multidisciplinary research* (2015), 1–8.

audience.¹⁶² The researchers did ask themselves whether ‘the role of the physical presence of the performer (who was absent in this study) could be an area for further investigation’,¹⁶³ yet still framed presence exclusively in terms of visual perception:

In our experiment we asked the subjects to evaluate a human performance (or more correctly, the playback by means of a real grand piano of a human performance recorded earlier) without a human pianist on the stage. But to what extent does a performance without the physical presence of the human performer influence the perception of the performance? In other words, to what extent are listeners influenced by the visual spectacle of seeing an acoustic grand piano on the stage that was playing alone?¹⁶⁴

Clearly, their assumption is that the performer’s presence would not make any difference other than visually—that otherwise the reproducing piano perfectly reproduces *all* other aspects of the performance. Another important problem to consider in addition to the pervasive visual bias is that today’s listeners are already more than used to *not* taking in the player’s dynamic physical presence as a causal agent due to their preponderant use of recorded music. Yet, as Doğantan-Dack insists:

Even though sound-recording technology is often regarded as having broken the singular, causal ties between the performer and her performance in the listener’s experience by abstracting the acoustical features of a performance from its original place, time and social context of occurrence, as the direct and immediate consequence of the performer’s actions, a performance – whether live or recorded – is always indissolubly linked to its maker. Research in sound perception and cognition provides substantial evidence that images of sound and sound production are closely linked such that actions of the performers that produce the musical sounds are represented as part of the musical sounds themselves in the listener’s experience.¹⁶⁵

The just-a-matter-of-timing-and-dynamics mentality clearly makes finger choice out to be a *covert* activity which only the player can be privy to unless close visual

¹⁶² Ibid., 4: ‘The Human performance ranked second least human-like for group A (3 votes) and equal lowest for group B (5 votes)’.

¹⁶³ Ibid., 1.

¹⁶⁴ Ibid., 6–7.

¹⁶⁵ Doğantan-Dack, ‘Recording the performer’s voice’, in *Recorded Music: Philosophical and Critical Reflections*, ed. by Mine Doğantan-Dack (London: Middlesex University Press, 2008), pp. 293–313 (p. 298).

inspection also takes place. To be fair, we should also acknowledge the fact that the more rhythmically equalised and percussive the playing style is, the less important such phenomenological distinctions a piano performance would have. But the keyboard repertoire from the first half of the nineteenth century usually does demand a great deal of phenomenological congruence, as vocalicity was still the predominant expressive model—a well-known feature of Chopin’s music and approach to performance and therefore in no need of rehearsing here.¹⁶⁶ Fingerings from that standpoint may turn out to involve quite perceptible, *overt* phenomena, though such perception may also hinge on the listener’s expertise.¹⁶⁷ This is certainly not a new working hypothesis, as keyboard players since at least the early eighteenth century have been routinely credited with the ability to tell others’ fingerings solely through aural stimuli.¹⁶⁸

If the reader mentally reviews the *Vorsetzer* test once again, differences that went unnoticed between the human performance and its reproduction may now come to the fore. There is a remarkably long list of extramusical stuff we might not be aware of registering while attending to a piano performance, ranging from the player’s breathing (sometimes, famously, also humming, grunting, or even singing along) to variously percussive, tapping, and frictional sounds of fingers (sometimes, unavoidably, also of nails) on the keys, clothing and bench sounds, as well as various sounds coming from the lower limbs, not all necessarily involving use of the pedals.¹⁶⁹ Crucially, the speed at which the keys are *released* (which to my

¹⁶⁶ See however, Žarko Cvejić, ‘From Men to Machines and Back: Automata and the Reception of Virtuosity in European Instrumental Art Music, c. 1815–c. 1850’, *New Sound*, 48/2 (2016), 65–80, for a quick overview of the musical automata paradigm already at the gates of actual performance during the early nineteenth century. See also Alexander E. Bonus, ‘Maelzel, the Metronome, and the Modern Mechanics of Musical Time’, in *The Oxford Handbook of Time in Music*, ed. by Mark Doffman, Emily Payne and Toby Young (Oxford: OUP, 2021), pp. 303–40.

¹⁶⁷ See Jens Haueisen and Thomas R. Knösche, ‘Involuntary Motor Activity in Pianists Evoked by Music Perception’, *Journal of Cognitive Neuroscience*, 13/6 (2001), 786–92.

¹⁶⁸ See, e.g., François Couperin, *L’Art de Toucher le clavecin* (Paris: The Author, 1716), pp. 21–22: ‘My experience has proved to me that, without seeing the hands of the person playing, I can distinguish by ear whether the two repercussions have been played by the same finger, or by two different fingers’ (translation from Bamberger, 238). See, however, Goebel-Streicher, p. 230, for Chopin wanting to sit where we could also see Müller’s hands, and thus check her fingerings for the finale of the Sonata op. 35. There are obviously limits to this capacity, even at the top levels of expertise.

¹⁶⁹ A number of historical sources do discuss these issues. See, e.g., Andreas Streicher, *Brief Remarks on the Playing, Tuning and Care of Fortepianos*, trans. by Preethi da Silva (Ann Arbor: Early Music

knowledge no player piano system does reproduce) adds yet another revealing noise factor to the aural picture. What all this means as regards the player's dynamic presence in a live piano performance is that the extramusical sounds it produces act (at least potentially) as clues to goings-on at the keyboard and thus to some degree indirectly disclose the player's qualitative dynamics of movement.

From a technical perspective, perhaps an unsurmountable barrier for player piano technology to achieve greater verisimilitude is that it takes *all* movement at the keyboard (both captured and reproduced) to be exactly the same for every note played, and for every player—it simply cannot capture whatever tensional, linear, amplitudinal, and projectional qualities were present in the player's own movement.¹⁷⁰ Consider just the first of those qualities as represented in a comparable, though mostly visually-oriented scenario as described by Wright:

In analysing the movement of a conductor, for example, the amplitude of the right arm beat patterns gives information to players or singers about the dynamic: most often bigger means louder, smaller means softer. However, the amount of tension in the movement can also readily be perceived. The conductor could make a very intense fortissimo with a small sudden gesture with great tension, and similarly a very soft pianissimo with big gestures executed with a light, floating arm and a relaxed body. Tension can be readily perceived from a second-person perspective, *but is invisible to motion sensors*.¹⁷¹

Kinaesthetic empathy is indeed something we rely on to such degree in daily life that—again, barring pathology—we tend not to give it a second thought: there may actually never be such a thing as a passive observer or listener of music, spoken language, dance, pantomime, or indeed any other kind of human physical activity.¹⁷²

Facsimiles, 1983 [1801]), p. 2: *'The finger should touch the key only with its fleshy pad, and never with the nail. If this fails to occur and the nails fall often on the keys, it will have an unbearable effect. This will be doubly annoying for the listener, since with each attack the player will make a genuinely horrible noise and will not be able to produce a pure tone, much less a beautiful one'* (italics original). A more readily accessible, albeit partial translation is Richard A. Fuller, 'Andreas Streicher's notes on the fortepiano. Chapter 2: "On tone"', *Early Music*, 12/4 (1984), 461–70.

¹⁷⁰ See *PoM*, pp. xxii, 123.

¹⁷¹ Wright, p. 60 (emphasis added).

¹⁷² See, e.g., Katie Overy and Istvan Molnar-Szakacs, 'Being Together in Time: Musical Experience and the Mirror Neuron System' *Music Perception*, 26/5 (2009), 489–504. For a more critical view on mirror neurons research, however, see Sheets-Johnstone, 'If the Body is Part of Our Discourse, Why Not Let It Speak?', in *Surprise: An Emotion?*, ed. by Anthony Steinbock and Natalie Depraz (Cham:

Among the many far-reaching implications of this for music performance is that in a sense there may ultimately never be—perhaps not even in the solitary practice room—such a thing as isolated musical subjectivity: all musical activity may turn out to be intersubjective through-and-through.¹⁷³

So far, the *Vorsetzer* test reveals the obvious fact that human touch at the keyboard cannot be absolutely the same for every note and for all individuals—that would be a patently false proposition by any standard. Human piano playing hardly ever involves fixed vertical motion: most keypresses (alongside complex kinaestheses) happen during movement across several planes simultaneously and nested within ever larger gestures. In other words, it is not only the speed of keypresses and subsequent free-falling hammers striking the strings that matters, but also how one moves from one strike to the next and thus gesturally bind sounds together (accompanied by all those extramusical sounds mentioned earlier and which together undergird the total effect a performance has on the listener). This rich aural picture is not just impossibly challenging to put into words—the real-time *interaction* it creates in live performance is also both uncapturable and irreproducible by any media. Kinaesthetic orchestrations in piano playing simply cannot be reduced to mere visual rhetorics, for there is an indivisible communicative continuum which extends from any aural imagining before there is any actual sound to its eventual dying off in the real world.¹⁷⁴ As we will now see,

Springer Nature Switzerland AG, 2018), pp. 83–95 (p. 89): “The *suggestion* of “a mirror neuron response in the motor areas of their [i.e., macaques’s] brains” and in consequence of a mirror neuron system in the human brain is clearly what is of moment to them [i.e., Giacomo Rizzolati, Leonardo Fogassi, and Vittorio Gallese]. Accordingly, they pass over the *kinesthetically interesting finding* because of their desire to identify “the exact brain areas” that are activated when volunteers observe what they term “motor acts””.

¹⁷³ See, e.g., Susan A.J. Stuart, ‘Enkinaesthesia: Proto-moral value in action-enquiry and interaction’, *Phenomenology and the Cognitive Sciences*, 17 (2018), 411–31, and Lambros Malafouris and Maria Danae Koukouti, ‘How the Body Remembers its Skills: Memory and Material Engagement’, *Journal of Consciousness Studies*, 25/7–8 (2018), 158–80 (170): ‘Never in human history or prehistory did there exist such a thing as an isolated “natural” body. The human body is, and has always been, more than a body, i.e. a situated body. This situated body and the bodily memories that we tend to associate with it cannot be circumscribed using the skin as a boundary. To think of body memory in this sense is to misunderstand completely the meaning of “situatedness”’.

¹⁷⁴ The conceptualisation of the mental implicit in ‘aural imagining’ is of course a necessary simplification and not to be confused with the ‘intellectualist legend’, as musical audiation involves coordination of aural and sensorimotor brain activity.

that is why established taxonomies of gesture as applied to piano performance fail to do the process justice.

Simplifying somewhat for the sake of convenience, ‘expressive’ gesture in the literature usually denotes the player’s ancillary movements (that is, those believed to communicate expressive intentions visually) while gestures believed to generate sound are called ‘effective’ gestures.¹⁷⁵ This seemingly straightforward dichotomy does not hold phenomenologically upon closer inspection, for it reductively presupposes a point where the two kinds of gesture part ways—that what ultimately remains is a mechanical keypress motion (rather than a gesture) and that whatever gesture came before it was made either to facilitate those mechanics or to *visually* convey ‘structure’ (as researchers all too often conclude).¹⁷⁶ What this viewpoint implicitly maintains is that, in human piano playing, *Vorsetzer*-like mechanics invariably and unavoidably result, regardless of finger choice or gesture, that in fact nothing we do at the keyboard matters as long as we somehow project the right timing and dynamics from our heads outwards—the intellectualist legend, full circle.

The realisations thus far impinge on practice-led research inspired or modelled on historical recordings, especially piano rolls. First and most obvious, perhaps, is that we should strive to understand the moment-to-moment bodily intentionality contained in them before launching into more or less informed (or in some cases even exact) imitation. As Doğantan-Dack argues,

Research that aims to understand the sounds of a performance – and the physical movements generating the sounds – without consideration of the artistic processes of aesthetic judgement and choice informing them is

¹⁷⁵ For currently established taxonomies of gesture in music performance, see Alexander Refsum Jensenius et al., ‘Musical Gestures: Concepts and Methods in Research’, in *Musical Gestures: Sound, Movement, and Meaning*, ed. by Rolf Inge Godøy and Marc Leman (Abingdon & New York: Routledge, 2010), pp. 12–35. See also Marcelo Wanderley et al., ‘The Musical Significance of Clarinetists’ Ancillary Gestures: An Exploration of the Field’, *Journal of New Music Research*, 34/1 (2005), 97–113.

¹⁷⁶ See, e.g., Jane W. Davidson, ‘Qualitative insights into the use of expressive body movement in solo piano performance: a case study approach’, *Psychology of Music*, 35/3 (2007), 381–401 (385): ‘A significant link between the identifiable expressive movements and musical structure was found. Therefore, it could be that it is only at these key structural moments (a hand gesture at a cadence point, for instance) that expressive intention can be found’.

bound to remain inconclusive in accounting for what happens in a musical performance.¹⁷⁷

Because of the inherent limitations of *any* recorded media (but piano rolls especially),¹⁷⁸ often this process requires nothing short of divination—akin to telling from footprints on the sand not just the runner’s readily quantifiable features, but also how running *felt* during spur-of-the-moment decisions like avoiding stepping on a crab, or waving to a stationary friend and tripping because of it, and so on. In that regard, historical fingerings more or less directly connected to some early recordings might prove invaluable for the gestural information they contain, for we can thus attempt to fill in some of the gap phenomenologically. In other words, while the minutiae behind a particular performance on record might prove too challenging to reverse-engineer, one might still be able to extract general gestural information from it that way.

For all of the above reasons, the ulterior motives for this little thought experiment were not just to determine whether it is possible to perceive the player’s presence (which in any case is all we may be able to test at the present time): the real test would be to determine whether it would be possible to discern the difference between 1) an expert human player who is to some degree *making a performance up in real-time* and 2) a (doubtlessly) singularity-level humanoid automaton perfectly reproducing a ready-made performance, *including all the details imprinted upon by the human player’s dynamic physical presence*. An impractically futuristic use of a humanoid *Vorsetzer*, to be sure, but it drives home the all-important issue of spontaneity in live performance, and its close relative, the issue of whether performance is indeed a shared—that is, interactive in some intangible way—experience in real-time or not.

¹⁷⁷ Doğantan-Dack, ‘Practice-as-Research’, p. 263.

¹⁷⁸ See, e.g., Kenneth Hamilton, *After the Golden Age: Romantic Pianism and Modern Performance* (New York: OUP, 2008), p. 143: ‘[T]hey are quite incapable of reproducing dynamics with any finesse at all, let alone a carefully layered tonal balance. But one thing they do show is a performer’s use of asynchronization and arpeggiation. In fact, it is their robotic failure to reproduce tone colorings and dynamics adequately that makes this feature much easier to hear on rolls than in early recordings’.

Fortunately, there is no need to conduct the *Vorsetzer* test in actuality to conclude that human beings demonstrate such divination on a daily basis. That it would take such a thought experiment to realise how far we have gone into living primarily with recorded music speaks volumes—but that is another story, one well beyond the scope of the present study.¹⁷⁹ More to the point, perhaps, the thought experiment suggests that we may be becoming increasingly insensitive to musically expressive cues, revealing the extent to which we do not just condone but perhaps even demand mechanical performances.

Where Do We Go from Here?

What should be blatantly obvious by now is that knowledge of historical contingent fingerings comes from skilled practice and experience, not casual assimilation of abstract rule sets. Chopin (like many other professional nineteenth-century players) was quite obviously an expert in Montero's sense,¹⁸⁰ and we just cannot be expected to grasp his carefully worked-out fingerings by casual try-out, or worse, superficial comparison with modern fingering practices. In short, they cannot be reduced to a kind of heuristics. There is simply no substitute to assiduous practice of the 'kinetic melodies' they contain—even if the resulting understanding comes mostly in the form of tacit knowledge.

By default, such knowledge cannot be fully transmitted by any sort of manual, as the primary sources themselves repeatedly point out.¹⁸¹ That is, in fact, the main difficulty we face here—that the overall experience and effect such worked-out fingerings can have over both player and performance are simply too rich for description. The issue is thus likely to remain underappreciated, especially in an age which values instantaneity to such a degree as ours—as David

¹⁷⁹ See, however, Mark Katz, *Capturing Sound: How Technology Has Changed Music*, revised edn (Berkeley & Others: University of California Press, 2010 [2004]), especially what he calls 'the phonograph effect': 'Simply put, a phonograph effect is any change in musical behavior—whether listening, performing, or composing—that has arisen in response to sound-recording technology. A phonograph effect is, in other words, any observable manifestation of recording's influence' (p. 2).

¹⁸⁰ See p. 28n101.

¹⁸¹ The irony involved in producing this very study is (painfully) not lost on me.

Schulenberg observes, fingering is ‘a traditional topic in historical performance that has been neglected in recent years as players and scholars have moved on to less basic issues’.¹⁸² Hopefully, one of the main contributions of this study will be the realisation that practice-led research into and experimental revival of early nineteenth-century fingering practices is no basic issue, but a transforming and far-reaching one.

As already mentioned, there are also very strong pressures for working pianists *not* to invest in the varieties of historical fingerings featured here. Few professional-level performers today—even among those steeped in historical performance—seem willing to spend much time honing them.¹⁸³ In any event, their avoidance would be more than understandable, as many of the effects derived from early nineteenth-century fingerings are likely to be far removed from (some surely antithetical to) current notions of good taste and musical competence, not to mention how they may also contravene prevalent ideologies in piano pedagogy. Their use in performance, therefore, may not be advisable without substantial practical experience—and without weighing the professional risks involved in subverting musical propriety.

A final difficulty to mention is that there is an even more serious dearth of studies on nineteenth-century piano fingerings from a phenomenological perspective. David Sudnow’s classic work on the phenomenology of jazz piano improvisation does not delve very far into fingering issues, and as it also lies too far in conception and type of experiences this study focuses on, the potential for building upon that work is quite limited.¹⁸⁴ For all of these reasons, the

¹⁸² David Schulenberg, ‘New Thoughts on an Old Topic: Consistency and Inconsistency in Historical Keyboard Fingering’ (unpublished paper presented at the second annual Historical Performance Institute conference, Indiana University, 2017).

¹⁸³ To be fair, my assessment may be severely limited because of my strong preference for travelling (sometimes hundreds of miles) to listen to a single pianist rather than hundreds of them in recordings. I could be completely wrong, in fact—there *could* very well be pianists out there hard at work with these fingering practices but who have not yet shared their research, or who dare use them live or in recorded performances that I have not yet gotten to know.

¹⁸⁴ Sudnow draws mostly from Maurice Merleau-Ponty’s phenomenology, which is ultimately incompatible with Sheets-Johnstone’s on many of the key issues related to this study. See *PoM*, pp. 237–77 (Chapter 6, ‘Merleau-Ponty: A man in search of a method’).

phenomenological method in this case also forces a creative attempt to distill nearly two decades of detailed note-taking right at the keyboard, in addition to the more obvious archival aspect of the research.

The reporting includes commentary on a host of underappreciated primary pedagogical sources, aiming to draw concrete performance practice information also from comparison between keyboard treatises and sets of etudes directly and specifically connected with them.¹⁸⁵ This should take us well beyond what the excerpts or shorter pieces in the treatises can.¹⁸⁶ And indeed, taking the Chopin Etudes and the unfinished *Projet de méthode* (hereafter: *Pdm*) to be a complementary tandem would not be too different from many other cases in the period under purview. In-depth study of *Pdm* is therefore quite fundamental: we cannot possibly aim to understand Chopin's fingering indications without some reconstruction (however hypothetical) of his keyboard technique, and vice versa. But for that we will first need to form at least an approximate idea of how Chopin himself came to learn to play on the keyboard—a 'constructive phenomenology' of sorts.¹⁸⁷

¹⁸⁵ For instance, Clementi's *Introduction* in connection to his *Preludes et exercices doigtés* and *Gradus ad Parnassum*.

¹⁸⁶ See Appendix A, pp. 297–316, for possibly the most important document of this practice from the early nineteenth century, and which has been hiding right under our noses for much too long.

¹⁸⁷ See *PoM*, p. 217: 'In the constructive phenomenological endeavor, we start not as we would in normal phenomenological fashion with a present-day adult world, working our way back in genetic fashion, methodically exposing how we come to perceive the world as we do, how we come to believe as we do, how we come to the cultural meanings we do, and so on. We start from the other end, from the world of our natality, and attempt to follow it in its forward movement, concentrating our efforts on understanding how that world comes to be built up'.

CHAPTER 3

On Context and Influence (I): ‘Playing by Numbers’

[T]here are things that are not meant to be talked about but meant to be done, and those things in relation to which purely expressive language appear so secondary, so unconvincing, so miserably inefficacious, are the most important and most precious things in life.¹⁸⁸

—Vladimir JANKÉLEVITCH

How, indeed, does one progress to the advanced methods of finger choice—other than by pure trial and error, that is? What does such learning entail, besides first applying relatively standard fingerings for scales, arpeggios and double notes whenever possible, then generate whatever else is needed but mostly without any outward models, that is? Thus far, we have seen how fingerings act as signposting for bodily memory, self-awareness, and grasping of musical content in addition to their more outwardly ‘resultist’ functions in performance, so these questions are far from otiose. Attempting to answer them may also help dispel some die-hard myths surrounding Chopin’s education, perhaps even yield novel insights into performance practices of the period. To be perfectly clear, what follows is no gratuitous iconoclasm but a hard look at the evidence which may, for some of us at least, cut an even more interesting and truer-to-life picture of Chopin the performer.

¹⁸⁸ Vladimir Jankélévitch, ‘Do Not Listen to What They Say, Look at What They Do’, *Critical Inquiry*, 22/3 (1996), 549–51 (549).

The Myth of ‘The Quiet Hand, Stiff Finger School’¹⁸⁹

The first order of business is to take issue with an idea which has long hindered bodily understandings of early nineteenth-century keyboard technique and pedagogy. It resurfaces in many popular historical surveys which, rather simplistically, take dynamic descriptions of keyboard playing in the treatises (as well as static depictions in various media) to correspond with historical reality.¹⁹⁰ Katharine Liley’s excellent summary of the consensus view offers an ideal starting point for this discussion:

Early methods focused exclusively on training the fingers, which was adequate and appropriate for lightweight early keyboard instruments. In the later nineteenth century some pedagogues began to advocate the use of the whole arm in response to the heavier-keyed modern piano and more virtuosic repertoire. Conflict between the ‘finger’ and ‘arm-weight’ schools broke out but was essentially resolved in the twentieth century to the effect that we now have a sensible middle way, free from the more extreme (and potentially harmful) manifestations of either school.¹⁹¹

The historical reality of such seemingly straightforward progression is doubtful, to say the least, and (published) practice-led studies still too few and far between to

¹⁸⁹ Reginald R. Gerig, *Famous Pianists & Their Technique* (Bloomington & Indianapolis: IUP, 2007 [1974]), p. 180: ‘[Liszt] freed piano technique completely from the fetters of the quiet hand, stiff finger school’.

¹⁹⁰ In addition to Gerig, *op. cit.*, George Kochevitsky, *The Art of Piano Playing: A Scientific Approach* (Los Angeles: Alfred Music, 1995 [1967]), and James Parakilas et al., *Piano Roles: Three Hundred Years of Life with the Piano* (New Haven: Yale University Press, 2001 [2000]) betray similar views. An even more ambitious survey along those lines is Luca Chiantore, *Tone Moves: A History of Piano Technique* (Barcelona: Musikeon Books, 2019 [2001]), while Thomas Fielden, ‘The History of the Evolution of Piano Technique’, *Proceedings of the Musical Association*, 59/1 (1932), pp. 35–59, proffers much the same ideas as all of the above, but thankfully in much more condensed form. The most recent article to still take these givens as gospel is Youn Kim, ‘Music Psychology of the Piano-Playing Hands in Historical Discourse’, *The Journal of Musicology*, 38/1 (2021), 32–66. Possibly the most direct warning against such readings at face value is Thomas Mark, *What Every Pianist Needs to Know about the Body* (Chicago: GIA Publications, 2003), p. 6: ‘It is important at this point to offer a word of caution to organists (and harpsichordists) about relying on treatises, paintings, woodcuts, or other historic sources as a basis for hand position and/or movement at the keyboard. While these early sources often contain a wealth of important information useful for musical interpretation, it is dangerous to assume that accurate information about movement or hand position can be gleaned from these sources’. As we will see in some detail, pianists and fortepianists should probably also take good note of that.

¹⁹¹ Liley, p. 39. See also *ibid.*, p. 47.

challenge it in any serious way.¹⁹² First, I submit that ‘fingers only’ technique is a straw man argument, that it never did exist as such despite frequent references to it even in the primary sources.¹⁹³ (Crudely put, it constitutes a biomechanical impossibility.¹⁹⁴) Second, that lumping early keyboard instruments together only muddles things further, for differences across the actions of and playing techniques specific to clavichords, organs, harpsichords and pianos are far from negligible.¹⁹⁵ And finally, that we should also take issue with the preposterous implication that keyboard players were somehow ignorant of weight transfer techniques before

¹⁹² One such rare study is Balder Blankholm Neergaard, ‘Schumann as Aspiring Pianist: Technique, Sonority and Composition’ (PhD thesis, Royal College of Music, 2017): ‘[T]his chapter challenges the preconceived notion of a purely finger-based technique by exploring an array of invisible playing agents, which the established still-hand principle of the day did not preclude’ (p. 29). See also *ibid.*, pp. 133, 151. In that sense Christina Kobb’s thesis is antithetical to Neergaard’s in its attempt to follow verbal descriptions from Viennese treatises to the letter. In my view, putting that much faith in the power and accuracy of verbal description led her to a more static conception of technique than was probably the case at professional levels of playing. For an ingenious approach to the study of historical keyboard techniques based on keyboard wear, see Erasmo Estrada, ‘An organological basis for the development of keyboard technique from the sixteenth to the eighteenth centuries, with an emphasis on Johann Sebastian Bach’ (PhD thesis, The University of Edinburgh, 2015). A similar study on nineteenth-century instruments does seem to be worth pursuing—even if only to put the idea of ‘fingers only’ technique to the test under controlled conditions.

¹⁹³ See, e.g., Jean-Louis Adam and Ludwig Wenzel Lachnith, *Méthode ou principe général du doigté pour le forte piano* (Paris: Sieber, n.d. [1798]), p. iv, Adam, *Méthode de piano du Conservatoire* (Paris: Naderman, 1804), p. 5, and Daniel Steibelt, *Méthode de piano ou l’art d’enseigner cet instrument* (Paris: Inbault, n.d. [1805]), p. 21. In contrast, Muzio Clementi, *Introduction to the Art of Playing on the Piano Forte* (London: Clementi & Others, 1801), p. 15, simply states that ‘All unnecessary motion must be avoided’. In the secondary literature, however (e.g., Gerig, 229–30), ‘fingers only’ and ‘finger equalising’ are all too often confused with (or at least thought to lead to) the infamous ‘high finger’ technique popularised decades later by Sigmund Lebert and Ludwig Stark, *Grosse theoretisch-praktische Klavierschule für den systematischen Unterricht nach allen Richtungen des Klavierspiels* (Stuttgart: Cotta, 1858 [1856]). For the chilling consequences of this school of thought to this day, see Mo Xu, ‘The high finger piano technique in China: past, present, and future’ (D.M.A. dissertation, The University of Iowa, 2018), and Ruixi Niu, ‘Types and Causes of Physiological Injury in Piano Playing, with Emphasis on Piano Pedagogy in China’ (D.M.A. dissertation, West Virginia University, 2020).

¹⁹⁴ See, e.g., Jack T. Dennerlein et al., ‘The contribution of the wrist, elbow and shoulder joints to single-finger tapping’, *Journal of Biomechanics*, 40 (2007) 3013–22. Kobb, pp. 57–85 (‘A Historical Prelude: Tracing 18th-Century Finger Motion’) offers an overview of contrasting descriptions in the primary sources between the ‘perpendicular’ and ‘stroking’ finger motions within so-called ‘fingers only’ technique.

¹⁹⁵ As already mentioned, use of the clavichord as a pedagogical tool continued well into the nineteenth century and thus some contact with it cannot be completely excluded in Chopin’s case. See Harald Vogel, ‘The Romantic Clavichord’, in *Proceedings of the Göteborg International Academy 1994* (Göteborg: Department of Musicology, Göteborg University, 1995), pp. 225–33, and Speerstra, ‘Bach, Chopin, and the affordances of keyboard instruments during the long eighteenth century’, in *Bach and Chopin. Baroque Traditions in the Music of the Romantics*, ed. by Szymon Paczkowski (Warsaw: NIFC, 2020), pp. 267–84.

‘arm-weight’ ideas came into wide circulation later in the nineteenth century—a ‘Deppe ex machina’ perspective, if you will.¹⁹⁶

In this chapter and the next I argue that what may pave the way towards more sophisticated understandings of early nineteenth-century keyboard technique are largely the fingerings contained in the pedagogical literature and repertoire of the period, which are often far more illuminating than any verbal descriptions in the treatises proper.¹⁹⁷ This body of (experiential) information gives access to a vast, virtually untapped repository of practices every bit as artistic and technically sound as we could possibly conceive today—perhaps even more so, precisely because of their far greater attention to fingering matters.¹⁹⁸ We have indeed barely scratched the surface of the tacit knowledge these unsung feats of pedagogical ingenuity afford us. Thoughtful practice-led study of them reveals for instance that ‘quiet hand’ means neither fixed nor stiff—it simply stands for holistically calm movement.¹⁹⁹ And, similarly, that ‘fingers only’ simply denotes the most economical use of movement within that technical framework. In light of this, practicing with a coin on the back of the hand would seem to lose any effectiveness as soon as we

¹⁹⁶ The widespread belief that the clavichord has a lightweight action needing a ‘fingers only’ technique is easily refuted by even minimal experience with any real instruments, while ‘revival’ or ‘fantasy’ instruments tend only to reinforce such misconceptions. In actual clavichord playing no weight means, quite simply, no sound. For phenomenologically sound descriptions of clavichord playing on actual historical instruments or good replicas thereof, see Speerstra, *Bach*, and Joan Benson, *Clavichord for Beginners* (Bloomington & Indianapolis: IUP, 2014). Do note that the title of Benson’s book can be quite misleading, as it contains artistic insights of the highest order at almost every corner.

¹⁹⁷ This process involves a constant effort to keep an open mind, however, as quite often historical fingering indications evince results with which we are at present very much unaccustomed—rhythmic inequality and alteration, or alien-sounding phrasing and articulation, to name a few. In other words, we should be ever wary of *premature knowing*. The wonderful phrase originates in Paul Stenner, ‘Heidegger and the Subject: Questioning Concerning Psychology’, *Theory and Psychology*, 8/1 (1998): 59–77 (15): ‘[T]he obstinate obstacle to understanding more fully is typically not *failing* to understand, and not *misunderstanding* but *thinking that we have already understood* (a phenomenon I call ‘premature knowing’). I wish to thank Simon D. Watts for both the concept and reference.

¹⁹⁸ The view that Clementi’s, Cramer’s or Field’s so-called ‘finger-touch’ playing must have been less nuanced or technically effective than twentieth-century playing founded on ‘a sensible middle way’ seems untenable. For forceful opposition to such notions, see Bellman, ‘Frédéric Chopin, Antoine de Kontski and the *carezzando* touch’, *Early Music*, 29/3 (2001), 398–407 (405).

¹⁹⁹ Goebel-Streicher’s book of Müller’s letters illuminates just how essential this overall calmness and *souplesse* was in Chopin’s playing and pedagogy. But, to be sure, admonitions for a ‘quiet hand’ of some form or another appear as early as the eighteenth century, e.g., Jean-Philippe Rameau, *Pieces de clavessin avec une methode pour la mecanique des doigts* (Paris: The Author, 1724), pp. 3–6.

abandon the realm of five-note position exercises and begin using the more complex fingering techniques which appear in any actual music by the very composers (allegedly) advocating the practice.²⁰⁰ But a rather limited range of motion was no doubt also culturally determined by etiquette,²⁰¹ and a (visually speaking) static posture consciously sought after by many players and even some top professionals like, famously, Sigismond Thalberg.²⁰² More to the point, what I am suggesting is that accurate dynamic descriptions of keyboard playing may be as unattainable today as they were in the early nineteenth century, and that this can be as illuminating as it is liberating—and inspiring much experimentation through the extant fingerings.

Some pedagogues around the mid-eighteenth century began including rather profuse fingering indications in some of their music,²⁰³ a practice which became well established by the early 1800s.²⁰⁴ This is fortunate, as it gives present-

²⁰⁰ The coin oddity is most often attributed to Clementi, but the distinction sometimes goes to Field instead, as in, e.g., Antoine Marmontel, *Art classique et moderne du piano. Conseils d'un professeur sur l'enseignement technique et l'esthétique* (Paris: Au Ménestrel, 1879), p. 99, and more recently Rosenblum, 'Introduction', p. xv, ead., *Performance Practices in Classic Piano Music: Their Principles and Applications* (Bloomington & Indianapolis: Indiana University Press, 1988), p. 192, and Chiantore, p. 224. The earliest mention of this sort of practice (that I know of) is Friedrich Wilhelm Marburg, *Die Kunst das Clavier zu spielen* (Berlin: Henning, 1750), p. 8: 'In order to instil good habits in pupils, a piece of lead may be laid upon their hands. If it remains in place, it is proof that the movement is even'. Translation from Bernard Brauchli, *The Clavichord* (Cambridge: CUP, 1998), p. 263.

²⁰¹ For a relevant annotated list of conduct books between 1740-1840, see Erin Helyard, 'Muzio Clementi, Difficult Music, and Cultural Ideology in Late Eighteenth-Century England' (PhD thesis, McGill University, 2011), pp. 94-97. See also Kobb, pp. 226-27.

²⁰² See Emil F. Smidak, *Isaak-Ignaz Moscheles: The Life of the Composer and His Encounters with Beethoven, Liszt, Chopin and Mendelssohn* (Aldershot: Scolar Press, 1989 [1988]), p. 114: '[Thalberg] sits there quite unperturbed, with lips tightly closed, his coat buttoned right up to the neck like a soldier, with an extremely military posture. This he learned, so he tells me, when he used to practise the piano smoking a Turkish pipe whose length made this upright position a necessity!'

²⁰³ Salient examples of this pedagogically-oriented editorial practice in the eighteenth century are Bach, *Probestücke* and *Sechs neue Clavierstücke* (Berlin: The Author, 1753; 1787), i.e., the example pieces featured in two different editions of the *Versuch über die wahre Art das Clavier zu spielen*; id., *Kurze und leichte Klavierstücke mit veränderten Reprisen und beygefüger Fingersetzung für Anfänger* (Berlin: George Ludewig Winter, 1766; 1768); Johann Philipp Kirnberger, *Clavierübungen, mit Bachsichen Applicaturen* (Berlin: F.W. Birnstiel, 1761; 1762; 1763; 1766); Georg Simon Löhlein, *Clavier-Schule, oder Kurze und gründliche Anweisung zur Melodie und Harmonie, durchgehends mit practischen Beyspielen erkläret* (Leipzig & Züllichau: The Author, 1765); Daniel Gottlob Türk, *Zwölf kleine Tonstücke für das Klavier mit beygefüger Fingersetzung* (Halle: The Author, 1795), i.e. the example pieces from the *Clavier-Schule* (Halle: The Author, 1789).

²⁰⁴ In that sense, the practice pieces contained in eighteenth-century *Clavierschulen* were important precursors of the etude genre in the nineteenth century, as pointed out by Ganz, p. 52: '*Handstücke*

day players a means for reconstructing historical techniques to a degree verbal descriptions by themselves in the treatises simply do not. Thus, what has long been a truism in historical performance of eighteenth-century music—that serious engagement with such ‘playing by numbers’ material illuminates many key performance practice issues—turns out to be just as true, if not more, of the music of Chopin and select contemporaries. In short, some of the pedagogical literature and repertoire of the early nineteenth century holds far more practical value than many pianists and scholars have been willing to consider.²⁰⁵

In this connection, descriptions of Chopin’s playing may be in as much need of pinches-of-salt taking as any other. A case in point is A.J. Hipkins’s, who despite being a most reliable first-hand witness seemingly also reckoned ‘fingers only’ technique to be at work:

[Chopin] kept his elbows close to his sides, and played only with finger-touch, no weight from the arms. He used a simple, natural position of the hands as conditioned by scale and chord-playing, adopting the easiest fingering, although it might be against the rules, that came to him. He changed fingers upon a key as often as an organ player.²⁰⁶

Yet Hipkins’s allusion to ‘finger-touch’ and ‘no weight from the arms’ in this context simply contrasts Chopin’s overall quietness with the more conspicuous arm motions that became the norm in the decades following their encounter.²⁰⁷ Such ‘arm-weight’ approaches were not only a reaction to Lebert and Stark’s infamous

more often than not were the practical and illustrative pieces in larger collections of piano playing fundamentals and instructions which were, and still are, published with express pedagogic intent to furnish a methodically graded course of study in the art of playing a keyboard instrument’.

²⁰⁵ Extreme opposing views on the intrinsic value of the pedagogy of this period are best represented here by two recent books, Walter Ponce, *The Tyranny of Tradition in Piano Teaching: A Critical History from Clementi to the Present* (Jefferson, NC: McFarland & Co., 2019), which wholesale maligns it, and Laor, *Paradigm War: Lessons Learned from 19th Century Piano Pedagogy* (Newcastle upon Tyne: Cambridge Scholars, 2016), who deems it not only a rich part of music history but even relevant to today’s pedagogy. Much as I do prefer Laor’s views (vastly more rigorous and coherent, to be sure), Ponce’s show his heart to be in the right place, as a great many of the pedagogical ideas and practices of the period (such as the use of abominable contraptions and a lot of the actual repertoire) are probably best left alone—and kept as far away from piano students as possible.

²⁰⁶ Edith Hipkins, *How Chopin Played. From Contemporary Impressions Collected from the Diaries and Note-Books of the late A.J. Hipkins* (London: Dent, 1937), p. 5. We will return to and address Chopin’s allegedly extravagant use of silent substitution in Chapter 8.

²⁰⁷ *Ibid.*, p. 1: ‘The piano of to-day has to compete with the orchestra, and charm must give way to the modern requirements of force and attack. Present-day speed and power are phenomenal’.

‘high finger’ school,²⁰⁸ but also in keeping with widespread perceptions about the need for more dynamic power to project sound in ever larger concert halls. These trends were well underway during Chopin’s life as a performer, alongside contraptions or physical exercises believed to strengthen the fingers for much the same reasons.²⁰⁹ In sum, what Hipkins seems to have been hinting at is that Chopin abided by Clementi’s dictum that ‘All unnecessary motion must be avoided’,²¹⁰ thus clearly aligning him with the likes of Cramer and Field—the old guard.²¹¹

But it is just as important to note that Hipkins also makes ‘finger-touch’ out to be far more complex under the hood than usually given credit for today. It is certainly striking to read that, almost a century ahead of Swinkin’s assessment of Czerny’s place in the history of keyboard fingering,

[A.J.] Hipkins considered that the corresponding change in playing was due at first to Czerny, who relinquished the touch of the eighteenth century, founded mainly on the individual use of the fingers with their sliding movement, for the percussive touch based on equalization of the fingers.²¹²

Close reading of this passage suggests that Hipkins may have been referring not just to sliding from one key to another but *within* one and the same key—‘from near the back of the key towards the front’.²¹³ Among many other things, such sliding

²⁰⁸ See, e.g., Judith Pfeiffer, ‘Amy Fay and Her Teachers in Germany’ (D.M.A. dissertation, The University of Memphis, 2008), pp. 72–73.

²⁰⁹ See François-Joseph Fétis and Ignaz Moscheles, *Méthode des méthodes* (Paris: Schlesinger, n.d. [1840]), pp. 1–2, for already matter-of-fact recommendations to that effect. (Hereafter: *Mdm.*) Crucially, Chopin himself never gave any such strengthening or equalising exercises at all to his students. See Goebel-Streicher, pp. 284–85, but also p. 231 for Chopin’s less categorically negative thoughts on Friedrich Kalkbrenner’s *guide-mains*: ‘For a child or a student, it’s idiotic, but for someone who already knows how to play it’s a relief for the wrist when playing octaves. For passages and scales it’s not’ (*Pour un enfant, ou une élève, c’est une bêtise, mais pour une personne qui sait joué c’est un soulagement si on veut, pour le poignet, en faisant des Octaves, pour des traits et des games ce n’est pas*).

²¹⁰ Clementi, *Introduction*, p. 15.

²¹¹ See Frick, p. 246 (letter to Tytus Woyciechowski, Paris, 12 December 1831): ‘I amazed Mr Kalkbr[enner], who immediately addressed the question to me whether I wasn’t a student of Field’s, that I have Cramer’s manner of playing, and Field’s touch. (That pleased me deeply)’.

²¹² Hipkins, p. 20. On occasion some otherwise excellent research succumbs to the ‘finger-equalising’ trope, concluding it was Clementi rather than Czerny behind this development, e.g., Rosenblum, ‘Introduction’, p. xv, and McGlynn, pp. 38, 58.

²¹³ Hipkins, p. 23n1. ‘Near the back of the key’ may have been a slight exaggeration on Hipkins’s part just to drive the point home, as the nearer we get to the fulcrum the harder it becomes to play effectively on the clavichord—but can often work beautifully on the piano. See, however, Rosenblum, ‘Chopin among the Pianists in Paris’, in *Chopin and His World*, ed. by Jonathan D.

(whether seemingly ‘fingers only’ or involving a more visibly ample motion) facilitates legato playing by keeping maximum contact with the keyboard—thus also self-awareness. It is no less fascinating to see Hipkins conclude that this aspect of Chopin’s playing may have somehow originated with the clavichord:

Touch was of supreme importance, and a more individual matter than it is to-day. [...] If we inquire into the origin of this quiet intensive *cantabile*, it will be found to derive from the clavichord player.²¹⁴

And indeed, Hipkins’s description of Chopin’s playing bears a striking resemblance to clavichord technique as described for example by Friedrich Conrad Griepenkerl,²¹⁵ and, perhaps not entirely coincidentally, also to Viennese piano technique.²¹⁶ In this regard, Hipkins’s next paragraph is worth quoting almost in its entirety:

It seems evident that, although Chopin’s music founded a new school of piano-playing, the playing of Chopin himself was inherited from tradition and belonged to the older style. There is no evidence that he ever played the clavichord, but it is beyond dispute that all the characteristics of his playing were those of the clavichord player, and he must have had some knowledge of this expressive instrument, once so common in the world of music. The clavichord touch, the most difficult of any to acquire, would naturally have

Bellman and Halina Goldberg (Princeton & Oxford: PUP, 2017), pp. 271–95, who asks, ‘[w]as this sliding a stroking of the key from back to front, about which much has been written, or merely sliding from black to white note or sideways from white to white?’ (p. 288).

²¹⁴ Hipkins, p. 20. Hipkins’s observations on clavichord playing should be taken seriously, for he did have much experience with actual late eighteenth-century instruments through Carl Engel—a student of Hummel’s who came to England in 1846 along with several clavichords on which Hipkins often played concerts. See Paul Simmonds, ‘Carl Engel and the Clavichord’, *The Galpin Society Journal*, 61 (2008), 105–13. A word of caution, however: Engel seems to have succumbed to the equalising-and-strengthening school of thought. See Engel, *The Pianist’s Handbook* (London: Hope & Co., 1853), p. 8.

²¹⁵ Friedrich Conrad Griepenkerl, ‘Einige Bemerkungen über den Vortrag der chromatischen Phantasie’, in *Chromatische Fantasie für das Pianoforte von Johann Sebastian Bach*, ed. by F.C. Griepenkerl (Leipzig: C.F. Peters, 1819), pp. i–iv. English translations can be found in Quentin Faulkner, ‘Griepenkerl on J.S. Bach’s Keyboard Technique: A Translation and Commentary’, *The American Organist*, 22 (1988), 63–65 (also featured in Speerstra, *Bach*, pp. 166–71), and Miklós Spányi, ‘Johann Sebastian Bach’s clavichord technique described by Griepenkerl’, *Clavichord International*, 4/2 (2000), 47–52.

²¹⁶ Mentions of the clavichord connection in the Chopin literature (beside Hipkins’s) are still relatively rare. See, e.g., Bellman, ‘Frédéric Chopin, Antoine de Kontski’, 399, 401, and Inja Davidović, ‘Chopin in Great Britain, 1830 to 1930: reception, performance, recordings’ (PhD thesis, University of Sheffield, 2016), p. 111. See also Rosenblum, ‘Chopin among the Pianists in Paris’, p. 276. Kobb contains probably the most comprehensive commentary on this (*schnellend*) kind of motion as a prominent feature of the Viennese touch, which she observes is ‘perhaps best explained as a slight transformation of the “Bach touch”’ (p. 124).

been transferred to the piano and doubtless formed the foundation of the exquisite *legato* possessed by Chopin and the earlier masters. *Abzug* (the sliding finger for soft effects); *Tragen der Töne* (emphasized legato); and *Bebung* (a *vibrato*). [...] The sliding finger, said by Jean Kleczyński [sic] to be used by Chopin, but anathema for years on the piano, was the true eighteenth-century touch of the keyboards of that period, and it was this soft, sliding touch that gave, and still gives, to the old keyboards their charming *legato*. Modern pianists are quite out of their depth when confronted by instruments of that period.²¹⁷

Thus, it is surely also not irrelevant that some descriptions of playing on Viennese-action instruments are strikingly similar to Hipkins's description of Chopin's playing even on English-action ones. Andreas Streicher's unassuming booklet immediately comes to mind, as it is still one of the best and most attentive to detail (and no wonder it became a model for many later Viennese treatises):

The *arm* should be held *against* the body, without actually being connected to it; for then the hand will assume the correct position of itself. During playing, it must remain calm, and only on the need for upward or downward motion of the hand, gently move with it. [...] In moving the fingers, the hand must lie in the calmest possible position without, however, becoming stiff, or even appearing to be so. [...] The calmer the arm and hand, the surer the motion of the fingers, the greater the dexterity, and the more beautiful the tones.²¹⁸

Note again the insistence on calmness, and that no single element should become fixed—a holistic conception of technique.

While Chopin's playing on and appreciation of Viennese-action instruments growing up in Warsaw (and of course during both his sojourns to Vienna when he seems to have enjoyed unlimited access to Graf's pianos) are well known,²¹⁹ the question of whether Chopin actually did play on the clavichord (and how much) is much thornier due to similarly equivocal usages of *klawikord* in Polish and *Clavier*

²¹⁷ Hipkins, pp. 22–23. There may have been a misunderstanding here: Hipkins seems to have in mind the within-the-same-key type of sliding, while Kleczyński refers exclusively to the *other* kind, that is, from one key to another. See Jan Kleczyński, *Chopin's Greater Works: How They Should Be Understood*, trans. by Natalia Janotha, 2nd edn (London: William Reeves, 1896), p. 19.

²¹⁸ Streicher, *Brief Remarks*, p. 2.

²¹⁹ For a recent overview, see Zbigniew Skowron, 'En route to Paris: New light on Chopin's cultural contacts in Vienna, Munich and Stuttgart between November 1830 and September 1831', in *The Sources of Chopin's Style: Inspirations and Contexts*, ed. by Artur Szklener (Warsaw: NIFC, 2010), pp. 175–209.

in German.²²⁰ The crucial connection to be made in this regard, however, is that Chopin did nevertheless acquire considerable experience playing on the organ, according to some sources as early as 1822,²²¹ but especially during the 1825-26 school year when he fulfilled weekly duties as the Lyceum's organist at Kościół Wizytek (Church of the Nuns of the Visitation).²²² The organ's mechanical action would have correlated fairly neatly with that of the clavichord,²²³ and so, even in the highly unlikely case Chopin never did come across any clavichords, he certainly availed himself of the closest possible experience to them.²²⁴

What emerges from piecing together descriptions of Chopin's early activities at the keyboard is that, rather than the fantastically autonomous learning his biographers seem to be unable to let go of, Chopin had an excellent, all-round kind of keyboard education in Warsaw, one firmly rooted in eighteenth-century practices.²²⁵ This would have included extended fingered examples which he no doubt would have absorbed in record time and numbers, and which could in no small part account for his lifelong preoccupation with fingering. Indeed, fingering eventually became Chopin's preferred method for annotating scores—and often used as a kind of shorthand for rather complex ideas.²²⁶

²²⁰ See, e.g., Speerstra, *Bach*, pp. 15, 29–31.

²²¹ See Goldberg, *Music in Chopin's Warsaw*, p. 33, and Anita Zakin, 'Chopin and the Organ', *The Musical Times*, 101/1414 (1960), 780–81 (781). For Chopin's last known organ performance in Marseille at the funeral service of Adolphe Nourrit (24 April 1839), see Frick, p. 304 (letter to Julian Fontana, Marseille, 25 April 1839).

²²² Presumably at the behest of Vacláv Vilém Würfel, with whom Chopin may have had informal organ lessons. See Zofia Helman, Zbigniew Skowron and Hanna Wrólewska-Straus (eds.), *Korespondencja Fryderyka Chopina, Tom 1, 1816-1831* (Warsaw: University of Warsaw Press, 2009), p. 142.

²²³ The most compelling argument for the historically symbiotic relationship between the clavichord and the organ is still Speerstra, *Bach*, e.g., pp. 3–4, 63.

²²⁴ To be clear, this is not to suggest that Chopin's works (even the earliest ones) are clavichord-friendly, probably quite the opposite. Nevertheless, Anna Maria McElwain, 'A Clavichordist's View of the Chopin Preludes' (written presentation, Sibelius Academy, 2010), a mind-bending tour de force of a study, shows affinities to run much deeper than one would at first think.

²²⁵ See Bellman, 'Chopin and the Cantabile Style', 64, and Felix Diegarten, 'Romantic Thoroughbass. Music Theory between Improvisation, Composition and Performance', *Theoria*, 18 (2011), 5–36 (18–27).

²²⁶ Fingerings in the annotated student scores far outnumber all other types of indications (see *PaT*, p. 198).

The Obscure Benefits of ‘Fingering Interference’²²⁷

A systematic review of the relevant pedagogical materials would constitute a ‘big data’ project and therefore well beyond the scope and aims of the present study.²²⁸ Examining those with a high probability of having been used by Chopin would seem to be more manageable project, but frustratingly little documentary evidence about his formal keyboard studies survives, which makes some speculation necessary. To my knowledge, no serious effort at reconstruction of Chopin’s early keyboard education has yet been made.²²⁹

The basic facts of Chopin’s studies with Wojciech Żywny (Vojtěch Živný) are reasonably well known: they extended from 1816 to 1822 (or 1821),²³⁰ when Żywny ‘decided that there was nothing more he could teach his talented twelve-year-old student’,²³¹ but remained a cherished presence at the Chopin household. In addition, the literature occasionally refers to Chopin’s studies with Václav Vilém Würfel (Wenzel Wilhelm Werfel), a well-known Bohemian composer and keyboard

²²⁷ See Ponce, pp. 153–56. ‘Fingering interference’ is Ponce’s derogatory term for seemingly excessive fingering indications. As usual, Ponce puts the blame for this trend squarely—yet wrongly on almost every count—on Clementi. See *ibid.*, p. 18: ‘In some of the compositions included in his *Introduction to the Art of Playing on the Piano Forte*, he wrote a finger on *each* note—the seeds of dependency on, and unquestioning observance of, printed fingering’. As already mentioned, there are much earlier examples of heavy ‘fingering interference’ than Clementi’s, which Ponce would have done well to know before such bashing.

²²⁸ Such studies, however illuminating in other respects, yield no *phenomenologically* significant insights. And we do need to experience these data, there is no two ways about it.

²²⁹ Even when that is partly the stated goal, as in Philipp Teriete, ‘Frédéric Chopins *Méthode de Piano*: eine Rekonstruktion – Zur Ausbildung der »Pianistes Compositeurs« des 19. Jahrhunderts’, in *Musiktheorie und Improvisation*, ed. by Jürgen Blume, Lutz Dreyer and Konrad Georgi (Mainz: Schott, 2015), pp. 258–312.

²³⁰ As only Chopin’s age is mentioned in reckonings of the duration of his studies with Żywny, it brings up the irksome issue of Chopin’s year of birth. See Goldberg, ‘Notes to Józef Sikorski’s “Recollection of Chopin”’, in Bellman and Goldberg, pp. 81–84 (pp. 81–82n14): ‘Though the accepted date of Chopin’s birth is 1 March 1810, both the day and the year have been questioned because of conflicting reports and historical records. The most recent scholarship supports the date of 1 March (the date always given by the composer and his family) over the oft-mentioned 23 February (the date on the certificates of his birth and baptism). The accepted year, 1810, however, appears to be incorrect. The date of 1809, given by Sikorski, reappears in numerous nineteenth-century publications written under the watchful gaze of Chopin’s mother and sisters, and the year 1810 was not introduced into writings on Chopin until Ferdinand Hoesick’s book of 1904. Numerous other arguments in favor of 1809 as the year of Chopin’s birth have been presented by the genealogists Mysłakowski and Sikorski in *Fryderyk Chopin: The Origins*, a thorough investigation of biographical documents related to the composer, his family, and friends’.

²³¹ Rosenblum, ‘Chopin amongst pianists in Paris’, p. 272.

virtuoso based in Warsaw between 1815 and 1824 and a close friend of the Chopin family as well.²³² Although details on Żywny's teaching are indeed almost non-existent (which has abetted a tradition of flights of fancy in the literature),²³³ and hazy at best in the case of Würfel's, fortunately we can now eavesdrop on Friederike Müller's lessons and hear Chopin emotively confirm *informal* studies with Würfel:

*I studied a lot with Würfel. I wasn't his student [but] I tried to imitate him as best I could. Würfel had a wonderful tone and composed beautifully—I still can't believe he wasn't better understood in Vienna.*²³⁴

Although Würfel's influence and involvement in Chopin's keyboard education probably did have momentous consequences and certainly would merit a separate investigation, let us focus on Żywny as Chopin's first and main teacher much as scholars have consistently dismissed him offhand.²³⁵ Halina Goldberg, for example ventures that

[a]lthough it is true that the ultimate credit for Chopin's extraordinary pianistic and compositional accomplishments must go to Chopin's own musical genius, there was nevertheless much merit in having fine teachers who shaped his musical and aesthetic ideas and nourished his extraordinary

²³² Some attempt to dispel any notion of Chopin's study with Würfel, e.g., Alan Walker, *Fryderyk Chopin: A Life and Times* (New York: Picador, 2017), p. 87n19: 'It is often claimed, without authority, that Chopin took organ lessons from the Czech composer Wilhelm Würfel at this time. Würfel, who was a friend of the Chopin family, had taught organ at the Warsaw Conservatory since 1821. But Chopin was never his pupil'.

²³³ A salient example is Adolf Weissmann, *Chopin* (Berlin & Leipzig: Schuster & Loeffler, 1912), pp. 14–18. A recent article that hits the nail on the head despite dealing with a very different type of myth-production in Chopin scholarship is Barbara Milewski and Bret Werb, 'Chopin's *Żydek*, and Other Apocryphal Tales', *The Journal of Musicology*, 39/3 (2022), 342–70 (369): 'As regards [...] overreliance on precedent writing, the cumulative reappearance of the same points of reference can take on the aspect of scholarly consensus, especially when the information is tied to an attractive or colorful anecdote'.

²³⁴ Goebel-Streicher, p. 237: 'Viel studierte ich mit Würfel sprach er, ich war zwar nicht sein Schüler, ich suchte ihm aber bestens nachzuahmen, Würfel hatte einen wundervollen Ton, componirte hübsch und ich kann nicht begreifen, daß er in Wien nicht besser verstanden wurde'. Indeed, informal studies from Würfel could have continued during both of Chopin's sojourns in Vienna. See Goldberg, *Music in Chopin's Warsaw*, p. 33, and Rosenblum, 'Chopin among the Pianists in Paris' p. 272.

²³⁵ See, however, Marty, *Vingt-quatre leçons*, pp. 12–13, for a refreshing exception: 'We have no doubt much underestimated Żywny's role in Chopin's education, to the point of arrogantly concluding he must fit the very definition of self-taught' (On a sans doute trop sous-estimé le rôle de Żywny dans la formation de Chopin jusqu'à en conclure un peu hâtivement que celui-ci était le type même de l'autodidacte). See also Bellman, 'Chopin and the Cantabile Style', 64: 'He expressed great respect and admiration for Żywny, and though he eventually developed far beyond the training that his teacher could give him there is no sign that he ever rebelled against it'.

innate talent. For instance, while Wojciech Żywny (really a violinist, and by all accounts, a quite ineffectual teacher) cannot be credited with Fryderyk's amazing dexterity at the piano, Żywny's almost daily presence at the Chopin household assured a continual proximity of an experienced musician, who, if nothing else, bequeathed the love of Bach's music to his pupil.²³⁶

Yet what are we to make of Chopin's own words, which fly in the face of such views:

Yesterday Schuppanzigh mentioned that since I'm leaving Vienna so quickly, I ought to return soon. I replied that I would come here to study, to which that baron interjected that in that case there is no point in my coming, and this was confirmed by other voices. [...] No one here wishes to take me for a pupil. Blahetka said that he is surprised by nothing so much as by how I learned this in Warsaw. I replied that with Mr Żywny and Elsner even the greatest jackass would learn.²³⁷

While it is easy to agree with Goldberg that credit and responsibility for progress ultimately falls on the student, we should also note that actively fostering independent curiosity is a far cry from non-interference. Yet non-interference on Żywny's part is the most resilient trope in the scholarship, one which perpetuates notions of Chopin's near-absolute autonomy at the keyboard and thus help proclaim his *Originalgenie*. It is quite unlikely Żywny left the young scholar to his own devices as much as biographers have liked to assume, however, if only because of the greater amount of supervision usually given children at the time.²³⁸ And while the literature also consistently credits Żywny with introducing Chopin to J.S. Bach's music,²³⁹ it is also worth remembering that nobody—not even someone as

²³⁶ Goldberg, *Music in Chopin's Warsaw*, p. 107. There are too many dismissals of Żywny and the *autodidacte* trope to count. But if professional violin playing were any real measure of proficiency in keyboard pedagogy, one could just as well dismiss such luminaries as Löhlein and Türk, both professional violinists and employed at Leipzig's famous *Grosse Konzert* orchestra. See, e.g., Dora Jean Wilson, 'Georg Simon Löhlein's *Klavierschule*: Translation and Commentary' (Ph.D. dissertation, University of Southern California, 1979), pp. 15, 17.

²³⁷ Frick, p. 119 (letter to his family in Warsaw, Vienna, 19 September [1829]). I was glad to find the very same juxtaposition of the Goldberg excerpt and Chopin's letter to Białobłocki in Teriete, p. 262n15. See also *ibid.*, p. 263n22 for a list of like-minded statements classing Chopin as a pure *autodidacte*.

²³⁸ See, e.g., Hummel, *Anweisung*, p. xi, I/p. iii: 'For the first half year, and, if possible, for even the first entire year, every beginner requires one hours [sic] daily instruction, because the pupil is as yet incapable of assisting himself, and if left too long alone, it is to be feared that, by contracting bad habits, he will rather injure than benefit himself.'

²³⁹ Momentous as that exposure surely must have been, it has become yet another truism of Chopin studies. What is seldom if ever broached is the question of what influence J.S. Bach's music might have exerted in terms of keyboard *practice*.

preternaturally talented as Chopin undoubtedly was—starts out on the keyboard with either book of *The Well-Tempered Clavier*.

The crux of the matter is what pedagogical materials Żywny—and, intriguingly, perhaps also Chopin's mother Justyna and his older sister Ludwika—might have exposed him to during earlier stages of learning.²⁴⁰ In any event, it is safe to assume Żywny would have used at least one of the many available *Clavier-Schulen* for lessons.²⁴¹ And we can get an idea of which of those were available in Warsaw around this time from Karol Kurpiński's treatise,²⁴² where at the very end of the section on fingering he 'especially recommend[s] the schools of Messrs Clementi, Cramer, Steibelt, Müller, Dussek and of his student Mr Würfel, whose Exercises will soon be in print' as material for further study in this area.²⁴³

Tempting as it is to entertain Kurpiński's *Wykład systematyczny zasad muzyki na Klawikord* as a candidate for Chopin's very first learning material we should remember that, by the time it was published,²⁴⁴ Chopin was already an

²⁴⁰ On the possibility of such familial reinforcement, see Józef Sikorski, 'Recollection of Chopin', trans. by John Comber, in Bellman and Goldberg, pp. 48–80 (p. 52): '[O]n account of his tender age, his elder sister shared an hour's tuition with him'. As we will see in Chapter 7, although Sikorski is mostly reliable as Chopin's (first) biographer he may have been less immune to flights of fancy as regards Chopin's piano playing and learning than we would like. See also Walker, p. 47: 'According to tradition it was Justyna who started to give Chopin his first piano lessons when he was about four years old. [...] and we are told that he begged to be allowed to clamber onto the piano bench and sit next to his sister Ludwika during her lessons'. Alas, tradition is all there is left on this issue.

²⁴¹ See, e.g., Blasius, p. 11, who reckons over one hundred of them were published in the first four decades of the nineteenth century, and Soderlund, *How Did They Play?*, pp. 14–16.

²⁴² Karol Kurpiński, *Wykład systematyczny zasad muzyki na Klawikord* [*A Systematic Lecture on Musical Principles for the Clavier*] (Warsaw: Klukowski, n.d. [c. 1818]). I am very grateful to Tomasz Górny for first bringing this source to my attention (see Appendix B, pp. 318–43 for a partial translation).

²⁴³ *Ibid.*, p. 59n(*): 'Szczególniey załączam Szkoły Panów Clementi, Cramer, Steibelt, Müller, Dufsek i iego ucznia P^a Würfel którego Exercises w Krótkce z pod prafsy wyida'. Sadly, no copies of the last work mentioned, Würfel, *Zbiór exercycyi w kształcie preludyów ze wszystkich tonów maior i minor* [*A Collection of Exercises in Prelude Form in All Major and Minor Keys*] (Warsaw: L. Letronne, 1821) seem to have survived. On this fact, see Barbara Chmara-Żaczekiewicz, *Václav Vilém Würfel w Warszawie i w Wiedniu. Fakty i hipotezy* (Warsaw: NIFC, 2017), p. 267. As Kurpiński implies, Würfel's collection would have contained enough fingering indications to constitute material for advanced study in that area, and therefore of immense value as he was indeed directly involved in Chopin's musical upbringing and development as a keyboardist.

²⁴⁴ Only one copy among the few housed at Warsaw, Biblioteka Narodowa (PL-Wn, Mus.II.17.726 Cim., p. 64), bears a tiny printed '1818' at the bottom of the very last page. See, however, Maria Prokopowicz, 'La musique imprimée de 1800 à 1831 comme source de la culture musicale polonaise de l'époque', *Fontes Artis Musicae*, 14/1–2 (1967), 16–22 (20), which mentions an inserted advertisement for the forthcoming *Wykład* in *Gazeta Warszawska* already in 1817. In light of this

advanced player and making public appearances in some of Warsaw's aristocratic salons.²⁴⁵ Even if not his first *Clavierschule*, however, Chopin would have surely gotten to know the *Wykład* soon after its publication, perhaps through Żywny. In any case, that Chopin knew it and Żywny adopted it for his own teaching is confirmed by a letter from Chopin's younger sister Izabela:

My music has stopped now, my hands are so swollen from the cold that I cannot play. Young Lasocki substitutes me, for even though he has his own pantaleon [piano], because it is not yet tuned yet he plays yours, or rather at yours he reads Kurpiński's [sic] piano school, which Mr. Żywny has instructed him to give it careful consideration.²⁴⁶

Furthermore, Chopin might very well have received a copy directly from Kurpiński himself, as he was also well acquainted with the Chopin family and kept a watchful eye on the boy's progress.²⁴⁷ As we will see from time to time, to consider the *Wykład* simply derivative of the schools Kurpiński himself recommends would be a mistake for it offers much interesting information on performance practice, and from Chopin's immediate circle to boot.

All in all, the most plausible candidate for Chopin's earliest training is arguably Muzio Clementi's *Introduction* (1801), especially as regards its fifty 'Lessons' with 'a finger on *each* note'—that is, the 'fingering interference' that so irritates Walter Ponce.²⁴⁸ The *Introduction* remained the preeminent pianoforte school for decades to come, and enjoyed countless translations and reprints,

information, an earlier publication date than 1818 cannot be entirely ruled out. I must also thank Otis William Beasley who at a relatively late stage of this writing pointed me towards an even earlier source, Jan Dawid Holland, *Traktat akademicki* (Wrocław: Grass & Barth, 1806). Although unlikely to have been Żywny's *sole* instruction cue for Chopin's lessons, the facts that it is in Polish and that Holland was most likely a 'Bachist' (see pp. 81–82 below) all make it a very plausible candidate for use among several.

²⁴⁵ See, especially, Goldberg, *Music in Chopin's Warsaw*, pp. 156–59.

²⁴⁶ Izabela to Fryderyk in Paris, Warsaw, 27 November 1831. Translation from Vogel, 'The Young Chopin's Domestic Pianos', p. 59.

²⁴⁷ See, e.g. Frick, p. 152 (letter to Tytus Woyciechowski, Warsaw, 10 April 1830): 'I've been invited the day after tomorrow for the Easter meal to Minasowicz's; Kurpiński will be there as well. I'm curious what he will say to me, because you won't believe how affectionately he always greets me'.

²⁴⁸ Ponce, p. 18. What Ponce makes of Chopin's etude 2—a case of 'fingering interference' if ever there was one—is anyone's guess.

especially of the fifth edition (1811),²⁴⁹ whose *Appendix*, in addition to increasing the number of ‘Lessons’ already present in the first edition, included ‘scale-exercises’ in all keys which later enjoyed much independent success as *Preludes et exercices doigtés* (hereafter: *Ped*). Chopin seems to have been especially fond of these ‘scale-exercises’, and Clementi’s three books of *Gradus ad Parnassum* (1817, 1819, 1826, hereafter: *GaP*) would have also offered him plenty of practice material with high-quality fingerings for assimilation later on as well, though the third book contains much less ‘fingering interference’ than the other two.²⁵⁰ In short, attempts to map Chopin’s fingering practices in the context of his time would greatly benefit from as much in-depth, practice-led study of Clementi’s many example pieces in the aforementioned collections.

Chopin must have been quite conversant with the pedagogical literature and repertoire well ahead of his arrival in Paris. Juxtaposing two very contrasting letter excerpts may prove informative in this respect. The first is from Chopin’s father, who expresses concern about Kalkbrenner’s proposal for a three-year program of study with him:

You know I have done all that lay in my power to encourage your talents and develop them, and that I have never put an obstacle in your way: you know also that the mechanics of piano-playing occupied little of your time and that your mind was busier than your fingers. If others have spent whole days working at the keyboard you rarely spent an hour playing other men’s music.²⁵¹

This letter is of course a godsend to the ‘fully formed pianist from the get-go’ school of thought, as it reinforces the idea of fully autonomous learning. But Chopin’s father may have been too worked up to care much over factual detail in his efforts to dissuade Fryderyk from accepting Kalkbrenner’s offer.²⁵² As readily seen from the

²⁴⁹ See Rosenblum, ‘List of Editions’, in Clementi, *Introduction*, pp. xxi-xxxix. For an updated list, see ead., ‘Clementi’s Pianoforte Tutor on the Continent’, *Fontes Artis Musicae*, 27/1 (1980), 37–48.

²⁵⁰ Goebel-Streicher, *passim*, offers much evidence for Chopin’s frequent use of *GaP* in his teaching.

²⁵¹ Arthur Hedley (ed.), *Select Correspondence of Fryderyk Chopin* (London & Others: Heinemann, 1962), p. 94 (letter from Nicolas Chopin to Fryderyk in Paris, Warsaw, 27 November 1831).

²⁵² Ludwika and Józef Elsner also sent Fryderyk letters for this purpose on the very same day. See Hedley, pp. 95–97.

next letter, addressed to his school friend Jan ('Jasio') Białobłocki, the domestic reality was likely very different back in the mid 1820s:

And besides, how many shelves await me, how many cupboards, drawers, how many hundreds of scores lying in disorder on the piano, a real hodgepodge (even with affront to the Hummels, Rieses and Kalkbrenners, whom fate has probably allotted a place in such a great republic next to Pleyel, Himmerlein, Hoffmeister)!²⁵³

Though this image may be as hyperbolic as much of the rest of the letter (Jasio was seriously ill and in much need of entertainment), it does portray a highly motivated and engaged learner of 'other men's music'.²⁵⁴

To clarify, what I am suggesting is that Chopin's activities as a teacher may be extremely revealing of Chopin the student—unless, that is, we take the view that he put together his entire pedagogical approach only upon arrival in Paris in early October 1831.²⁵⁵ And indeed, there are countless references in the literature alluding to Chopin's opinion that Clementi's works were particularly useful for technical development, a view now amply corroborated by Müller's letters:

I expressed my astonishment at how advanced keyboard playing already was in Clementi. *What, you thought Czerny invented all that?* he asked me, laughing. Oh no Sir, I continued, I don't have such a favourable opinion of Czerny myself, but I thought Mozart was the first to give any importance to the piano. *You're right, but Mozart was an excellent harmonicist while Clementi was more of a pianist, and so he took an interest in the fingers that Mozart never had any inclination for.*²⁵⁶

²⁵³ Frick, p. 63 (letter to Jan Białobłocki, Warsaw, 29 September 1825).

²⁵⁴ See also Goebel-Streicher, p. 211: *[A]nd above all get to read a lot [of music], everything that went through the ancient masters' heads, as well as modern frivolities, everything' ([E]t surtout voyez beaucoup, tout ce qui passe par la tête des maitres anciens, et les frivolités moderne, tout).*

²⁵⁵ There is no trace of such propaedeutics, and he seems to have had very sporadic teaching experience before then.

²⁵⁶ Goebel-Streicher, p. 121: *'Ich sprach wie ich erstaunt sei, daß schon unter Clementi das Clavierspiel so weit vorgerückt war, Vous avez donc cru que Czerny à inventé tout cela, fragte er mich lächelnd. oh non, Monsieur erwiederte ich, je n'ai pas une opinion aussi favorable de Czerny, mais j'ai cru, que Mozart fut le premier qui ait donné quelque importance au piano. Vous avez raison, mais Mozart était excellent harmoniste, tandis que Clementi n'était qu'un pianiste, donc il prenait des soins et des soucis pour les doigts auxquels Mozart n'avez jamais le desir de faire attention'. See also PaT, p. 290, for August Kahlert's opinion that 'Chopin's method of playing is a little related to Clementi's, in which he was surely trained in the beginning'.*

Mikuli relates that ‘scales with many black keys (*B*, *F* sharp, and *D* flat) were first studied, and last, as the most difficult, *C* major. In the same sequence he took up Clementi’s *Préludes et Exercices*, a work which for its utility he esteemed very highly’.²⁵⁷ More specifically, ‘however advanced, [pupils] were required, besides the scales, to play with care the second book’.²⁵⁸ All of which of course betrays Chopin’s oft-quoted preference for ‘commencing with studies involving many black keys (thus in keys with many sharps or flats), and finishing with *C* major’.²⁵⁹ The secondary literature, however, has tended to omit Mikuli’s suggestion that pupils progressed to the greater technical challenges of *Ped I* following work on *Ped II*, preferring instead to dwell on Chopin’s use (and order of introduction) of just the scales in his teaching.

The ‘scale-exercices’ in *both* books transcend mere scale practice because of the variety of sensitive and sophisticated fingering ideas they offer—and moreover in realistic musical contexts. Indeed, Chopin’s alleged admonition to ‘play with care’ hints at Clementi’s most plausible pedagogical aim at work: careful assimilation of as many of the prescribed fingerings as possible. Once again, what I am suggesting is that this may be what Żywny and Würfel instilled in Chopin as a young boy, and which he then kept using in his own teaching. Many fingerings in Clementi’s *exercices* undeniably resonate with Chopin’s, and serious practice of them makes for an extraordinary experience in and of itself—so much so one wishes such conjoined approaches were reinstated in today’s keyboard pedagogy, thus making scale practice not just more enjoyable but incredibly more useful.

As readily seen in **Example 3.1** below, through Clementi’s *exercices* Chopin’s students learned to negotiate many *alternative* scale fingerings, even though scales were already well on their way to standardisation. Such standardisation is something Clementi may have perhaps unwittingly helped promote, in fact, as

²⁵⁷ As quoted in Frederick J. Niecks, *Frederick Chopin as a Man and Musician*, Vol. II (London: Novello & Co., n.d. [1888]), p. 184.

²⁵⁸ Zofia Zaleska-Rosengardt, as quoted in *PaT*, p. 60. See also *ibid.*, pp. 60–61, for Camille Dubois-O’Meara’s comments.

²⁵⁹ See, e.g., *ibid.*, p. 134n131.

many readers would not have been as inclined to consult supplementary materials as the rules so succinctly set forth in the treatise proper.²⁶⁰

Allegro
8^{va} ----- loco

The image shows a musical score for an exercise in F major, measures 1 through 8. It is written in a 2/4 time signature and consists of three staves. The first staff is in treble clef, and the second and third staves are in bass clef. The tempo is marked 'Allegro'. Above the first staff, there is a dynamic marking '8^{va}' followed by a dashed line and the word 'loco'. The score includes various fingering numbers (1-5) and articulation marks such as accents and slurs. The piece concludes with a double bar line.

Ex. 3. 1 Clementi, F major exercise,²⁶¹ 1–8

Note that this piece contains even *more* alternative fingerings to the standard F major scale than are shown in the example.²⁶² But this is unsurprising, as in Clementi’s day it was still a well-known fact that the fewer alterations there are, the more alternative fingerings can be found for scales—as clearly explained in C.P.E. Bach’s *Versuch*, a major influence on Clementi.²⁶³

Through alternative scale fingerings and, even more importantly, *elaboration* of scale patterns, one also learns the rudiments of diminution in realistic musical

²⁶⁰ Hummel may have addressed this very problem preemptively by withholding the customary fingerings for scales, arpeggios and double notes for well over one hundred pages into the *Anweisung*. Kurpiński’s *Wykład* had previously also delayed introducing such information until well into the treatise, a parallel which may not be entirely coincidental—hints that Hummel could have been familiar with the *Wykład* are too many to ignore, as we will see from time to time. Although Hummel’s family was Austrian, growing up in Pressburg (today’s Bratislava) he was likely fluent in several languages other than German, including Slovakian—a close relative of Polish.

²⁶¹ Clementi, *Preludes et exercices doigtés dans tous les tons majeurs et mineurs pour le Piano-forte* (Leipzig: C.F. Peters, n.d. [1813-1814]), p. 6. (All transcriptions of *Ped* hereafter from this edition.)

²⁶² In contrast, the treatise proper (Clementi, *Introduction*, p. 17) offers only a tiny variant related to whether one wants 4 or 5 at the change of direction. One simply would not get much variety without also working on this supplementary material.

²⁶³ Clementi acknowledges his indebtedness to Bach explicitly: ‘Whatever I know about fingering and the new style, in short, whatever I understand of the pianoforte, I have learned from this book’. As quoted in William J. Mitchell, ‘C.P.E. Bach’s “Essay”: An Introduction’, *The Musical Quarterly*, 33/4 (1947), 460–80 (472).

contexts. This constitutes probably the most basic class of contingent fingerings, as through this process scales cease to be mere abstractions and become actual music:

[Moderato]

The image shows a musical score for a piece in B minor, 3/8 time, marked [Moderato]. The score consists of two systems of music, each with a treble and bass clef. The right hand (RH) plays a series of semiquaver runs, while the left hand (LH) plays a steady bass line. Fingerings are indicated by numbers 1-4 above or below notes. The first system covers measures 45-48, and the second system covers measures 49-53. The key signature has two sharps (F# and C#), and the time signature is 3/8.

Ex. 3. 2 Clementi, B minor *exercise*, 45-53

Even this simple elaboration is rich in finger choice combinatorics. The RH semiquavers fill in and thus prolong the underlying parallel thirds, for which we now need to decide when (and especially why) to use 2 3 4 or 1 2 3, and whether to use one or the other repeatedly or in alternation (as Clementi does). As a general principle already put forth in the previous chapter, different ways of moving *between* sounding notes affect (however subtly) the player's perception and hearing, moment-by-moment. Here, the amplitude of movement is greater and more laterally-oriented when using 2 3 4 in succession, and more static when using 1 2 3 and 2 3 4 in alternation, though the latter option potentially allows for more 'digging in' at chosen points should we wish to, especially with 1 2 3.

In view of how much one could learn about touch through such practice, perhaps it is not too much of a stretch to compare Clementi's *exercices* to J.S. Bach's two-part *Inventions*, as they appear to have fulfilled similar pedagogical aims in

updated fashion.²⁶⁴ In fact, Chopin often mentions Bach and Clementi in the same breath during Müller's lessons—especially in the context of perfecting legato playing and overall calmness:²⁶⁵

*Only two things are still not how I'd like to hear them: your touch, and a calmer demeanour. The first thing you've already learnt from Clementi, and you will learn it even more from Bach. The second will take care of itself with the metronome and experience. How do you practice with the metronome? Unfortunately I don't have one at the moment [to show you].*²⁶⁶

Indeed, Clementi ingeniously encourages a quiet hand in ways that may seem (to modern players) quite unusual, such as:

[Canone perpetuo]

Ex. 3.3 Clementi, B major exercise, 12-19

Although it may feel strange at first to have the RH thumb on b^2 for much of the sequence,²⁶⁷ this ensures a smooth, expressive rate of movement leading to 'now

²⁶⁴ See Rowland, 'Nineteenth-Century Pianists and Baroque Music', *Musurgia*, 21/1 (2014), 79–90, for Clementi's prominent role in promoting and raising 'significant awareness of Baroque music among students of the period' (81).

²⁶⁵ Goebel-Streicher, *passim*.

²⁶⁶ *Ibid.*, p. 168: 'Il ne vous manque maintenant que deux choses Votre touché – n'est pas toujours comme je l'entends, et il vous faut plus de calme. La première chose, Clementi vous l'a déjà appris, et Bach vous l'apprendra mieux encore, la seconde chose fera le metronom et l'expérience. Comment étudiez vous avec le metronom? Je n'en ai pas par malheur pour le moment'. Frustratingly, there is no description of how to practice with a metronome in Müller's letters, just admonitions to do so.

²⁶⁷ Incidentally, this is such a favourite technique of Clementi's it should probably be considered part of his performance style.

and then SWELLING some notes' as suggested by the *dolce* marking which heads the piece.²⁶⁸ This tucking under of the thumb happens a number of times in slightly different ways throughout (see the RH *1 4 1* in bars 26–27, **Example 3.4** below)—and thus largely what the *exercice* 'is about'.²⁶⁹

[Canone perpetuo]

Ex. 3. 4 Clementi, B major *exercice*, 26–30

But note how one could also exploit the *opposite* effect through the very same means. That is, contracting the hand when descending (RH bars 27–28, *1 5* on $e^{\sharp 2}$ - $f^{\sharp 2}$) will be necessarily quicker if one uses the same tempo as in the above, because the little finger simply cannot be placed ahead of time as snugly as the thumb can in ascending—it has to make up for it, in other words. This could result, perhaps, in a *willed* accent and a more articulated arrival on $f^{\sharp 2}$ on the downbeat of bar 28, if one so wishes. Yet this same passage could also be rendered more agogically instead, for instance by taking noticeably more time around the downbeat of bar 28 so that there is no brusque change in the rate of movement.

These possibilities may represent just two extremes of a vast continuum for creative, individual expression, which naturally also hinge much on tempo and beat modification.²⁷⁰ It is up to the player to decide which avenue to explore, and

²⁶⁸ Clementi, *Introduction*, p. 10.

²⁶⁹ Yet this is precisely what modern editors feel the urge to change. Next to the original, for example substituting *1 3 1* for the original *1 4 1* or *1 5 1* throughout feels stiff and prosaic in comparison—in a word, mechanical.

²⁷⁰ The likelihood of anyone from Clementi's generation blindly adhering to an external metronomical beat as the expressive baseline is very low. Given that all the pianists in the earliest historical recordings were born well after the invention of the metronome, but nonetheless betray unbelievably flexible approaches to tempo and rhythm, are we really to assume *more* metronomically-driven performance from players born well before it? See, especially, Hill, 'Overcoming Romanticism', e.g., p. 42: '[A] performance practice of pre-romantic literatures (going back at least to the end of the Renaissance, that is, the birth of the *secunda prattica*) without a fully

whether plan for it or make it more spur-of-the-moment. Either way, this contingent fingering makes the player kinaesthetically aware of the issue in real-time, by directing our attention to a specific musical feature while also offering an array of expressive possibilities. Note, incidentally, how in these types of situations ‘hand position’ loses some of its direct meaning, at least that which some writers ascribe to it in their yearning for the most synoptic view of the evolution of technique. In other words, the hand throughout most of this *exercicio* is as dynamically pliable and shape-morphing as to render the term “position” meaningless.

We can find a more extreme example of ‘keeping the thumb under’ in the *Alla polacca* of Chopin’s Variations on *Là ci darem la mano* opus 2, a fingering which appears in both extant autographs as well as in the Haslinger first edition:

[Alla polacca]

8^{va}-----*loco*

Ex. 3. 5 Variations Op. 2,²⁷¹ 313–15 (AFE)

The fingering for the first three RH notes in bar 314 of the working autograph clearly reads 5 4 1,²⁷² while both the AFE and the Vienna autograph *Stichvorlage* lack

integrated aesthetic of tempo and beat modification (one appropriate for each style as the music and the written evidence suggest), is unimaginable’. Contrarian views persist, however, e.g., Kobb, pp. 214–15: ‘It is not that a brilliant touch, depending on the pedal to create some sustain, or an agogic performance, gently stretching the time to allow for rounding off the skips and position changes may not be beautiful or interesting to listen to, but it is highly unlikely that such interpretations were heard in the early 19th century’.

²⁷¹ Chopin, *Là ci darem la mano varié pour le piano-forte* (Vienna: Haslinger, n.d. [1830]), p. 20.

²⁷² New York, The Morgan Library and Museum, Robert O. Lehman deposit (US–NYpm: C549.L139, p. 55). This autograph contains many interesting markings (including fingerings) also in pencil—a telltale sign of use in performance. See Kallberg, ‘Chopin’s Pencil’, in *Chopin 1810–2010: The Third International Chopin Congress, 1*, ed. by Irena Poniatowska and Zofia Chechlińska (Warsaw: NIFC, 2017), pp. 101–10 (p. 105): ‘[T]he rare instances of Chopin’s pencil appearing in any of his manuscripts occur more often in his public manuscripts, and seldom in his sketches. When these pencil markings

the 4 1.²⁷³ Despite the slight textual trouble, the fingering clearly results in tucking the thumb away to keep the quietest and most compact hand possible. This would now be considered a last resort as it disrupts the sacrosanct 5-finger position for longer than many modern players would feel comfortable with. On reflection, this technique often creates the illusion of a 6-finger position as it obviates passing-over or crossing-under for the longest possible stints. A useful and highly relevant concept to bring up at this point is what Schenker calls ‘long’ and ‘short’ fingerings:

By “long” Schenker refers to those fingerings in which the passing under of 1 or the crossing over of 3 or 4 is avoided as much as possible; “short” fingerings are those in which the passing under or crossing over is used more than would actually be necessary.²⁷⁴

The little delving done so far clearly indicates that the fingering rules by themselves and as encoded in the treatises will not take us even remotely close to artistic practice—countless useful exceptions cannot be readily codified, as Clementi himself points out.²⁷⁵ A single example from Clementi’s G# minor *exercice* should suffice to make this clear:

occur, they usually supplement performing indications notated in ink. [...] Chopin’s pencil provides evidence that the composer actively performed from these manuscripts’.

²⁷³ Vienna, Österreichische Nationalbibliothek (A-Wn: Mus.Hs. 16789, p. 15). See Chopin, *Variations on ‘Là ci darem la mano’, Op. 2. Facsimile*, ed. by Zofia Chechlińska (Warsaw: NIFC, 2017).

²⁷⁴ *AoP*, pp. 89–90n4.

²⁷⁵ Clementi, *Introduction*, p. 14: ‘But the combinations of notes being almost infinite, the art of fingering will best be taught by examples’. See also Hummel, *Anweisung*, p. 105n*), II/p. 1n*: ‘I consider this subject, therefore, as one of the most important of my treatise, and have endeavoured to elucidate it in every possible case, rather by numerous examples than by words’.

[Canone infinito]
[Moderato]

Ex. 3. 6 Clementi, G# minor *exercice*, 45-49

If Chopin really was as radically and singlehandedly breaking the rules as is generally thought, what are we to make of the above passage, which predates Chopin's earliest forays into composition and, in addition to many seemingly awkward 'short' 1 2 1 2 fingerings, breaks at least two cardinal rules of fingering in scale playing: the avoidance of the thumb on black keys and of passing the thumb under the little finger (RH, bar 48).²⁷⁶ Even in a predominantly legato touch context, which Clementi certainly advocated, this passing-under is possibly much too complex to describe—that is, it could also involve subtle shifting of the whole hand. In any event, the technical exercise here would seem to suggest the smoothest possible realisation through a quietly controlled hand and, importantly, also congruent with the player's desired expression.

In sum, what Joan Benson writes of the fingerings in C.P.E. Bach's *Probestücke*, that '[i]t can be both fascinating and rewarding to study these pieces,

²⁷⁶ For the most oft-quoted reference in recent times, see *PaT*, p. 40: 'Chopin marked fingering on his scores liberally, especially the type peculiar to himself. Here pianoforte playing owes to him great innovations which, through their expediency, were soon widely adopted, notwithstanding the horror with which some authorities, like Kalkbrenner, at first regarded them. Thus Chopin unashamedly used the thumb on black keys, or passed it under the fifth finger (with a decided inward turn at the wrist, to be sure), if it helped to facilitate performance and lend it more evenness and quietness'.

searching for the reasons for their fingering as if on a musical treasure hunt',²⁷⁷ is just as applicable to much early nineteenth-century pedagogical repertoire—and a most necessary mindset if we are to understand many of the rationales behind Chopin's own fingering usage.

²⁷⁷ Benson, p. 91.

CHAPTER 4

On Context and Influence (II): ‘In the Artist’s Gloves’

*With art [...] it is the individual work that provides the life-changing experience, not the entire genre. The patient study of musical works one at a time, the same way they are learned, performed, and heard, offers individual insights that the forest of other works too easily obscures.*²⁷⁸

—Jonathan D. BELLMAN

So far we have seen how, contrary to widespread belief, Chopin’s early musical upbringing clearly did include keen study of the repertoire and whatever technical innovations it had to offer.²⁷⁹ His syncretism in matters of fingering should therefore come as no surprise. For example, despite being hugely influenced by the so-called ‘London School’ of Clementi, Dussek and Cramer, who tended to do away with ‘archaic’ features such as crossing long over short fingers,²⁸⁰ Chopin used them unabashedly from very early on.²⁸¹ His most likely influences in this particular regard were the ‘Bachists’ (that is, followers of C.P.E. Bach),²⁸² and the Viennese

²⁷⁸ Bellman, *Chopin’s Polish Ballade: Op. 38 as Narrative of National Martyrdom* (New York: OUP, 2010), p. 175.

²⁷⁹ A short but invaluable article in this regard is George S. Golos, ‘Some Slavic Predecessors of Chopin’, *The Musical Quarterly*, 46/4 (1960), 437–47.

²⁸⁰ W. Glyn Jenkins, ‘The legato touch and the “ordinary” manner of keyboard playing from 1750–1850: some aspects of the early development of piano technique’ (PhD thesis, Cambridge University, 1976), pp. 63–65.

²⁸¹ The literature occasionally alludes to Chopin’s penchant for this device, though almost exclusively in relation to etude 2 (e.g., Goldberg, *Music in Chopin’s Warsaw*, p. 36). It is surely worth pointing out in this connection that Part II, Chapter 7 of Hummel’s *Anweisung* deals with such crossing-over thoroughly. Thus, despite countless assertions to the contrary, Chopin clearly was not a lone advocate. See, e.g., Hélène de Montgeroult, *Cours Complet pour l’enseignement du Forté Piano, Première Partie* (Paris: Pelicieu, n.d. [1830 [1820?]]), p. 93: ‘[...] we cannot approve the old method of teaching which forbade this fingering, because [if] the goal is to play with facility, with graceful hands, and avoid any jerking of the fingers, then all that is conducive to these is necessarily good’ ([...] on ne peut approuver l’ancien mode d’enseignement qui remettait ce doigté, puisque le but à atteindre, étant de jouer avec facilité, de donner de la grâce à la main et d’éviter le sautillerment des doigts, tout ce qui peut y conduire est nécessairement ce qui’il y a de mieux).

²⁸² See Barbara Wiermann, ‘Die „Bachische Schule“ – Überlegungen zu Carl Philipp Emanuel Bachs Hamburger Lehrtätigkeit’, in *Carl Philipp Emanuel Bach als Lehrer: die Verbreitung der Musik Carl*

keyboard pedagogy literature up to Hummel's *Anweisung*.²⁸³ Despite the scant documentary evidence on Żywny's and Würfel's teaching,²⁸⁴ given their strong ties to the Bachists it is quite likely they encouraged this kind of usage early on, possibly even before tackling Clementi's 'Lessons' from the *Introduction* or more advanced pieces in *Ped* and *GaP*—or, indeed, any written music at all.

This chapter will explore further how the pedagogical literature and repertoire can take us well beyond basic problem-solving through short fingered excerpts and eventually furnish a sense of what performance of substantial whole pieces can feel like in the hands of a master—perhaps even in the absence of one. Although most of the sources discourage keyboard study without supervision, wholly fingered pieces or excerpts may have been an exception since checking whether the student uses appropriate fingerings or not can be incredibly time-costly. Seen in that light, pedagogical materials ripe with 'fingering interference' were invaluable teaching aids rather than vaguely supplementary material.

Striking as it may be for any artistic activity to afford such notational precision, this kind of 'shadowing' can lead to precise imitation of (typically) thousands of motions originating in another person.²⁸⁵ (Perhaps the art of calligraphy comes closest in that regard, as even though movements are highly stereotyped during the early stages of learning they usually give rise to more

Philipp Emanuel Bachs in England und Skandinavien, ed. by Hans-Günter Ottenberg and Ulrich Leisinger (Frankfurt (Oder): Musikgesellschaft Carl Philipp Emanuel Bach, 2005), pp. 119–34, Christopher Hogwood, "Our Old Great Favourite": Burney, Bach, and the Bachists', in *C.P.E. Bach Studies*, ed. by Annette Richards (Cambridge: CUP, 2006), pp. 221–64 (especially the annotated list of Bachists, 'Appendix', pp. 251–64), and Bradley Brookshire, 'Chopin and the Legacy of Carl Philipp Emanuel Bach', in Paczkowski, pp. 231–65.

²⁸³ Mainly, the treatises of Johann Georg Albrechtsberger—another Bachist (see Hogwood, pp. 240, 244, 251), Andreas Streicher, and Friedrich Starke. See Kobb, pp. 130–31 for a useful table which compares the most salient features of six Viennese treatises with which Chopin was likely familiar.

²⁸⁴ Würfel studied with Dussek, another Bachist also classed as belonging to the 'London School'. See, e.g., Chmara-Żaczekiewicz, pp. 21, 318, and Hogwood, p. 253.

²⁸⁵ See, e.g., Andor Foldes, *Keys to the Keyboard: A Book for Pianists* (New York: Dutton & Co., 1948), p. 40: 'Josef Hofmann once said that in the course of a piano recital—actual playing time approximated eighty minutes—a pianist makes well over a hundred thousand different motions'. Yet even this striking estimate may turn out to be too low, for it likely excludes motions other than those directly thought to be part of the playing apparatus but which are nevertheless essential.

individual styles of expression later on.²⁸⁶) Indeed, at its best such shadowing approaches the illusion of being ‘in the gloves’ of a great artist—a far cry from the idea that fingering indications are mere ‘piano for dummies’ aids. This aspect of keyboard education seems to have been largely abandoned by the mid-nineteenth century,²⁸⁷ which is unfortunate given how much it could affect the development of any performer.

Or, as William Rothstein observes in a different context, at the very least ‘point the performer—the performer, that is, who chooses to be so pointed—in the direction of the proper performance’ of a given work.²⁸⁸ In that regard the etude genre from the first decades of the nineteenth century offers a window onto performance practices which, absent fingering indications, we might never suspect existed.²⁸⁹ The evidence suggests Chopin to have conceived of his Etudes in that very same pedagogical spirit and tradition,²⁹⁰ and all the more reason to consider them through a ‘classical’ lens—that is, in the footsteps of Clementi and Cramer, whose etudes Chopin thought ‘*the only admirable ones*’.²⁹¹ Indeed, as Eigeldinger insists, ‘Chopin remained attached to the tradition of Classical pianists: Hummel, Clementi, Field, Cramer, and — more distantly — Moscheles, who represents the transition between the post-Classical and Romantic generations’.²⁹²

²⁸⁶ Taking the analogy further, historical fingering practices would seem to be closer to calligraphy, modern fingering systems to typing. The latter proximity is not imaginary, as demonstrated by publications such as Tobias Matthay, *The problems of agility: a summary of the laws governing speed in reiteration and succession, for wireless operators, telegraphists and typewriters, and for pianoforte and organ students* (London: Anglo-French Music Co., 1918).

²⁸⁷ Arguably, the shift to fully utilitarian systems went hand in hand with the idea that indicating fingering serves mainly to facilitate particularly challenging passages or disclose otherwise opaque ‘tricks of the trade’ rather than to communicate expressive options in their own right.

²⁸⁸ William Rothstein, ‘Heinrich Schenker as an Interpreter of Beethoven’s Piano Sonatas’, *19th-Century Music*, 8/1 (1984), 3–28 (24). I take ‘proper performance’ in the context at hand to suggest not prescription of outcome, but the attempt to relive certain gestural *conditions* which individuals may then realise in their own personal ways.

²⁸⁹ It is thus somewhat ironic that the very first set of etudes published under that denomination, Anton Reicha’s *Etudes ou Exercices pour le Piano-Forté* Op. 30 (Paris: Imbault, n.d. [c. 1800]) should include fingerings for just a single number (*ibid.*, pp. 54–55), moreover in six isolated bars.

²⁹⁰ Rather than as ‘concert studies’, much as they do lend themselves wonderfully to that end as well.

²⁹¹ Goebel-Streicher, p. 277: ‘*Clementi et Cramer, se sont les seuls qui sont admirables dans leurs etudes*’. It is crucial here to note that even as late as the 1840s by ‘etudes’ Chopin could also be referring to *Ped*, not just *GaP*. See, e.g., Clementi, *24 Études sur les Gammes suivies d’un Grand Exercice dans tous les Tons majeurs et mineurs* (Paris : E. Chailiot, 1844).

²⁹² *PaT*, p. 104.

We should note in passing that there is considerable overlap in the primary sources between the terms “exercise” and “etude” (from the very first collection of etudes, in fact),²⁹³ whereas in recent times the former is almost exclusively reserved for didactic pieces of a negligible nature.²⁹⁴ Thus, Simon Finlow proposes that

Developments in didactic keyboard music engendered three varieties of composition which may be classified briefly as follows: (i) *exercises*, in which a didactic objective – the isolation and repetition of a specific technical formula – is assigned primary attention, any musical or characteristic interest being incidental; (ii) *etudes*, wherein musical and didactic functions properly stand in a complementary and indivisible association; and (iii) *concert studies*, in which the didactic element is mostly incidental to the primary characteristic substance (though the music will invariably involve some particular exploitation and demonstration of virtuoso technique).²⁹⁵

Although Finlow’s classification is surely useful, it is worth insisting that at least some of Clementi’s ‘scale-exercices’ should be considered bona fide etudes: their musical and pedagogical value go well beyond the merely ‘incidental’ if one considers the fingering indications together with the music—which may be their very *raison d’être* regardless whether one thinks of them as exercises or etudes. Indeed, whereas Clementi classed all pieces in *GaP* as ‘Exercices’, most players today surely view them as etudes. But if we are to move past negligible terminological quibbles we will need to explore how ‘playing by numbers’ learning and any influence therefrom on Chopin extends to more substantial pieces than some of the shorter ‘scale-exercices’ in *Ped*.

Individual influences in that respect run much deeper than usually thought. A perfect case in point is that of Cramer, a name we would hitherto not too often

²⁹³ See p. 83n289 above. Chopin himself referred to at least the first two of op. 10 as ‘Exercices’. See, e.g., Frick, p. 145 (letter to Tytus Woyciechowski, Warsaw, 14 November 1829). This overlap is most evident in German, as *Übung* by this time had a long history of referring to *musical* exercises such as, famously, J.S. Bach’s four-part *Clavierübung*.

²⁹⁴ In, e.g., M. Castil-Blaize, *Dictionnaire de musique moderne, tome premier* (Paris: Magasin de musique La lyre moderne, 1821), pp. 223–24 (‘ÉTUDE’) and p. 226 (‘EXERCICE’), we learn that the most significant difference between the two is that *exercices* can be vocal while *études* are the exclusive domain of instrumental music. Almost as an afterthought, both entries add that *exercices* tend to be of a more elementary nature.

²⁹⁵ Simon Finlow, ‘The twenty-seven etudes and their antecedents’, in *The Cambridge Companion to Chopin*, ed. by Jim Samson (Cambridge: CUP, 1992), p. 53.

associate to Chopin's choice of teaching repertoire.²⁹⁶ In 1841 Chopin explicitly singles him out thus:

*Of all those pianists there's just one who, already in his seventies, will never age and whose playing will remain young as long as he plays—Cramer. [...] He either plays magnificently or not at all. Also, you can't imagine how much I worked on Cramer!*²⁹⁷

To be sure, doing justice to Cramer's or any other individual's influence on the young Chopin—even that circumscribed to the Etudes—is well beyond the scope of this thesis.²⁹⁸ This chapter will focus rather on Hummel's *general* influence through the *Anweisung* as well as its implicit companion the *Études* opus 125, which are 'practical application pieces for all problems mastered through the *Anweisung*'.²⁹⁹

²⁹⁶ See Eigeldinger (ed.), *Frédéric Chopin: Esquisses pour une méthode de piano* (Paris: Flammarion, 1993) p. 114. A monograph which does broach this line of influence is Mark Kruger, 'Johann Baptist Cramer's 84 Studies as Preparation for the Performance of Frédéric Chopin's Etudes' (DMA thesis, University of Melbourne, 2006). Kruger does conclude that 'the case for direct influence is very strong' (p. 70), which is right on the mark and now amply corroborated by Müller's letters in Goebel-Streicher.

²⁹⁷ Goebel-Streicher, pp. 162–63: '*De tous ces pianistes, il n'y a qu'un, qui quoique déjà agé de soixant et dis ans ne vieillira jamais, dont le jeu restera jeune tant qu'il jouera – et c'est Cramer. [...] s'il est en train de jouer c'est à dire, puisque Cramer joue supérieurement ou – pas du tout. Aussi comment – ai-je étudié Cramer!*'.

²⁹⁸ The most comprehensive study of the genre in the first half of the nineteenth century is still Finlow, 'The Piano Study from 1800 to 1850: Style and Technique in Didactic and Virtuoso Piano Music from Cramer to Liszt' (PhD thesis, University of Cambridge, 1989). Yet Finlow also buys into some of the old received ideas as regards Chopin's uniqueness. For instance, Chopin is conspicuously absent from an influence chart of composers of etudes (ibid., pp. 22–23). See also id., 'The twenty-seven etudes', pp. 50–51: 'In assessing the influences that may have helped Chopin achieve the degree of musicianship evident in Op. 10, it is difficult to avoid the feeling that he accomplished it mostly on his own', and ibid., p. 51: 'With the etudes of Op. 10 Chopin realised not only his own music potential but also that of the genre; and the manner in which he did both appears to have owed very little to precedent'. To be fair, Finlow focuses mainly on Chopin's *compositional* achievements in the genre, though again obviating any paths to such mastery that do not involve sheer talent, like his excellent, all-around musical education in Warsaw. But Finlow is indeed right in that there is a significant gap between Chopin's etudes and those of his predecessors—from a compositional standpoint they surely are quite avant-garde.

²⁹⁹ Ganz, p. 158. The amount of quotation from Hummel, *Études pour le piano-forte* Op. 125 (Vienna: Haslinger, n.d. [1833]) and Part II of the *Anweisung* in Chopin's own works would warrant a separate study. To the best of my knowledge, the only monograph dealing squarely with Hummel's influence on Chopin to date is Jessica Yam, 'An Examination on the Influences and Establishment of Chopin's Personal Style Through the Comparative Analysis of His Concertos and Hummel's A and B Minor Concertos' (D.M.A. dissertation, University of Arizona, 2013). Studies touching upon isolated aspects of influence are Jarl Olaf Hulbert, 'The Pedagogical Legacy of Johann Nepomuk Hummel' (Ph.D. dissertation, The University of Maryland, 2006) and Sun-Im Cho, 'Johann Nepomuk Hummel's Piano Etudes, Op. 125: A pedagogical analysis' (D.M.A. dissertation, City University of New York, 2012). Elise Lemmer, 'The historical and pedagogical relevance of the 24 *Grandes Études* op. 125 by Johann Nepomuk Hummel (1778-1837)' (DMus thesis, University of Pretoria, 2013) unfortunately

Note that even though Hummel's opus 125 and Chopin's opus 10 were published very closely together chronologically, the two artists may have exchanged ideas well in advance of both publications—there will always be, in other words, 'the question of whose études influenced whom'.³⁰⁰ Yet the deeper issue here is not whether Hummel's études may have inspired some material in opus 10 (which they may well have), but rather that Hummel and Chopin both partook of fingering practices already on the wane because of the burgeoning standardisation and mechanisation.³⁰¹

After impatiently awaiting its release, when Chopin finally perused Hummel's *Anweisung* he apparently quipped something to the effect of it being 'incomplete'—obviously joking about its title and sheer bulkiness.³⁰² But, Chopin's trademark irony aside, internal musical evidence and direct commentary in *Pdm* suggests that he may have studied Hummel's fingering practices as seriously and as avidly as he did Clementi's.

Seeing Beyond 'A Journey through the Arabian Desert'³⁰³

In possibly the most oft-quoted passage from Chopin's *Pdm*, we read:

contains far more free association and repetition than (novel) concrete information. See also Kroll, *Hummel*, pp. 309–30, and id., 'Hummel and the Romantics: The Classical Composer and Keyboardist Influenced a Whole Generation of Younger Artists', *Early Music America*, 13/2 (2007), 20–23 (22–23).

³⁰⁰ Kroll, *Hummel*, p. 329n35.

³⁰¹ See *ibid.*, pp. 276–78, for a partial translation of Robert Schumann's mostly negative review of Hummel's op. 125, a review which may have retroactively assisted in making Hummel's *Études* fall even farther into oblivion in the twentieth and twenty-first centuries. See also Eric Frederick Jensen, 'Schumann, Hummel, and "The Clarity of a Well-Planned Composition"', *Studia Musicologica Academiae Scientiarum Hungaricae*, 40/1–3 (1999), 59–70, for Schumann's possible axe-grinding.

³⁰² As Chopin's friend and amanuensis Julian Fontana is supposed to have related to A.J. Hipkins. See Eigeldinger, *Esquisses*, p. 77n55.

³⁰³ George Hogarth, *Musical History, Biography and Criticism, Volume II*, 2nd edn (London: Parker, 1838), p. 189. The full passage reads: 'A few years ago, Hummel published a great work of studies for the piano-forte, which must have cost him years of labour, and must be of infinite value to those who have resolution enough to get through it. But its ponderous bulk, and mass of contents, afford a prospect somewhat similar to that of a journey through the Arabian desert, and are sufficient to terrify any one who has not the dogged perseverance of a German student'. Incidentally, Schumann seems to have fit the bill of dogged perseverance quite well, as he copied out many selections and at one point even projected to go through the entire work. He seemingly only completed study of Part I, however. See Neergaard, p. 94.

Everything is a matter of knowing good fingering. Hummel ~~has done~~ was the most ~~complete~~ laborious [?] on this subject (Le tout c'est de savoir bien doigter. Hummel a ~~fait~~ été le plus ~~complet~~ laborieux [?] à ce sujet.³⁰⁴)

Although the word above ~~complet~~ keeps eluding scholars,³⁰⁵ two related ideas clearly emerge. First, that in his original train of thought Chopin credits Hummel with *putting together* the most comprehensive study of fingering theretofore, obviously referring to the gargantuan Part II of the *Anweisung*.³⁰⁶ Second, that he believes Hummel to have been the one who had worked the most and given the most thought to fingering matters. And indeed, at 1,000+ examples it is unlikely anybody will ever come to know Part II of the *Anweisung* exhaustively.³⁰⁷ The massive number was clearly aimed at something other than exercising the fingers in technically challenging passages. As James Q. Davies observes, in my view not too far off the mark,

The plethora of exercises covering every conceivable combination of finger and hand movement [...] was less the result of Hummel's mild insanity than evidence of his determination to further the acquisition of fine inner sensibilities.³⁰⁸

An anecdotal fact may best illustrate how poorly known Part II of the *Anweisung* still is. The short, unfingered Hummel 'Étude' featured in *Mdm*, which now bears the catalogue number S 191, had been there for anyone to see all along (with fingerings to boot) in Chapter 9.³⁰⁹ A plausible explanation is that Hummel may

³⁰⁴ US-NYpm: C549.S6277, fol. 10^r. As a working hypothesis, I take the illegible word there to be not *savant* (learned, knowledgeable) as it is usually rendered (e.g., *PaT*, p. 40, 195), but rather *laborieux* (laborious). In any event, despite scratching out of the verb *faire* (to do), Chopin does seem to be stressing an *activity* rather than abstract knowledge.

³⁰⁵ And will probably continue to do so until *Pdm* is studied under UV light, which hopefully could uncover many other scratched-out parts in the manuscript. For the only currently available facsimile (in black and white and reduced size), see Eigeldinger, *Esquisses* (unpaginated).

³⁰⁶ Part II, exclusively devoted to fingering, nears 300 pages. The consensus seems to be that the *Anweisung* could have some practical value today only if abridged (e.g., Gerig, p. 70).

³⁰⁷ Marion Phyllis Barnum, 'A comprehensive performance project in piano literature and an essay on J.N. Hummel's treatise on piano playing' (D.M.A. dissertation, University of Iowa, 1971), p. 47, reckons Part II consists of 1,193 exercises.

³⁰⁸ James Q. Davies, *Romantic Anatomies of Performance* (Berkeley & Others: California University Press, 2014), p. 55.

³⁰⁹ Hummel, *Anweisung*, p. 376–77, II/p. 295 ('Ex. 21'), *Mdm*, p. 73. The catalogue number is given in Joel Sachs, 'A Checklist of the Works of Johann Nepomuk Hummel', *Notes*, 30/4 (1974), 732–54 (738). For some unknown reason, Kroll, *Hummel*, p. 356, gives c. 1831 as its date of composition.

have been too ill to honour Fétis and Moscheles's request and ended up sending a rehash (without explanation as to its origin) rather than an ad hoc composition for inclusion in *Mdm*—but neither author seems to have noticed.³¹⁰ That Moscheles appears on the list of subscribers for the English translation of the *Anweisung* and even assisted in the negotiations for its publication also does not make the incident any less surprising.³¹¹

The *Anweisung* is indeed compendium-like in its conception, 'a veritable dictionary of Hummel's own pianistic style'.³¹² As Marion Phyllis Barnum further points out,

The examples are not original exercises, per se, conceived of as a deliberate technical method; rather, most of the exercises are based on passages or figures taken from or suggested by actual pieces by Hummel or by other composers.³¹³

In other words, it consists of reference material (mostly garnered from actual works) for practice—in improvisation and composition as well as in written works—rather than a stupefyingly long set of exercises aimed at acquiring finger technique, as many are still prone to believe today.³¹⁴ Even just the care with which Hummel went about classifying fingering techniques strongly suggests a reference work with no expectations of anyone labouring over it whole.

Indeed, Part II of the *Anweisung* is so terrifyingly packed with fingering information that here we can only afford a quick overview and mention of a few salient points. Let us first point out that it features most if not all the fingering

³¹⁰ See *ibid.*, p. 247.

³¹¹ See Charlotte Moscheles, *Life of Moscheles, with Selections from his Diaries and Correspondence, Vol. I*, trans. by A.D. Coleridge (London: Hurst & Plackett, 1873), pp. 192–93.

³¹² Barnum, p. 48. See also Hulbert, p. 22: 'Even from the earliest pages, it is clear that the treatise is formatted more like a reference text for a teacher or adult student than as an exercise book for a child'.

³¹³ Barnum, p. 68.

³¹⁴ See, e.g., Ponce, p. 40: 'Studying Hummel's exercises has all the attractiveness of self-flagellation'. But Ponce concludes that after (obviously) barely glancing at the first few exercises of Part I, which are indeed more basic and mostly in C major, aimed at learning various kinds of figurations falling under the same hand configuration—but which Hummel then encourages students to transpose as needed. Unsurprisingly, there is no mention in Ponce of the 60 practice pieces (i.e., actual music) which end Part I of the *Anweisung*, all filled with 'fingering interference'.

techniques that, as such, appear in Chopin's practice, despite widespread belief in some being his own daring innovations.³⁵ And it should be pointed out that, compared to Clementi's discussion of fingering in the *Introduction* (which, as we may remember only tackled the breaking of any rules tacitly through the appended *Ped*), the *Anweisung* is quite explicit about it. Thus, to give a single example, 'the thumb may be passed under the 2nd, 3rd, 4th, or even the 5th finger', and 'the 2nd, 3rd, 4th, and in some cases the little finger may pass over the thumb'.³⁶ So what is it, then, that the *Anweisung* has to offer as to fingering practices over most if not all of his contemporaries?³⁷

Hummel's most important pedagogical contribution may be that he approaches fingering descriptively rather than prescriptively, in great contrast to most later fingering systems up to this day. Indeed, due to the vast amount of quotation (much of it from Hummel's own works such as the F# minor sonata opus 81) 'it would be valuable to have this large compendium specifically annotated for reference and practical purposes'.³⁸ It was therefore more likely intended for advanced players dipping in for concrete ideas than for relatively novice players progressing straight from Part I. That is, experienced players would have intuitively prioritised qualitative dynamics of movement resulting from finger choice over abstract rules which often do not chime with much of the actual repertoire. For

³⁵ In general, people find it difficult if not impossible to let go of received ideas of Chopin's uniqueness in that regard. See, e.g., Lapointe, p. 20: '[...] in a very important sense, Chopin's fingerings are unique. [...] C.P.E. Bach, Türk, Fétis and Moscheles never wrote about the use of fingering for musical effect. [...] Only once in their piano method [sic] do Hummel and Clementi suggest using a particular fingering for the purpose of obtaining a musical effect'. Leaving the *Mdm* aside for the time being, Lapointe's assessment of the other treatises is simply misguided—arguably most of the fingerings in those treatises are there *but* to illustrate particular musical effects. Clearly, ignoring the tacit dimensions of the keyboard pedagogy of this period is just business as usual.

³⁶ Hummel, *Anweisung*, pp. 167, 169, II/pp. 67–68. Note again that for the sake of clarity, throughout this thesis the now universal nomenclature of fingering will tacitly substitute for the English system.

³⁷ Barnum goes as far as to write that '[f]ew, if any, of the principles on which Hummel based his fingering system can be called new; the system is basically an adaptation of old principles to new technical problems created by the changes in the style of figuration, passage-work, and embellishment in the piano music of Hummel's time' (p. 71–72). Do note Barnum's confirmation bias as to fingering 'systematics' here, i.e., her assumption that all the principles in the *Anweisung* 'were intended to fit together and complemented one another', as Gellrich and Parncutt (10) would have us believe.

³⁸ Barnum, p. 69. Indeed, that would be an extremely valuable project, possibly yielding many repertoire-specific performance practices.

example, very often standard fingerings—even some from the early nineteenth century—cannot help crossing-over or passing-under from sounding (and feeling) too conspicuous, that is, resulting in unwanted lurches and accents. Conversely, non-standard historical fingerings help highlight somewhat irregular articulation, accentuation or phrasing in more organic ways precisely because they depart from the rather static feel of the five-finger position. The key, as usual, lies in studying fingered examples in specific musical contexts, and the *Anweisung* does that aplenty.

While the conspicuous difficulties just mentioned may seem negligible and to hinge more on individual ability than on the fingering process itself, they actually open a huge can of worms. That is, the question of whether to mask crossing-over and passing-under or to make them audible for expressive purposes tends to be equivocal already in some pedagogical writings of the late 1790s: it often becomes impossible to tell whether they refer to legato articulation or admonish to mask finger motion. For example, Louis Adam and Wenzel Lachnith insist that

[w]hen passing the thumb under the fingers, or the fingers over the thumb, we should bind the tones so that these changes are not heard. There should be no interruption whatsoever in passage-playing or in *cantilena*, and all notes should have the same degree of force.³¹⁹

Although such talk of binding and not making changes heard seem clear enough ideas, throwing in the bit about applying the same degree of force does complicate understanding. In the second part of the same volume (the *Dictionnaire des passages*) we see how this might apply in practice (compare **Examples 4.1** and **4.2**), as, whether consciously or not, the authors do seem to suggest making some of those very motions somehow *heard* for expressive purposes:

³¹⁹ Adam and Lachnith, *Méthode*, p. v: ‘En passant le pouce par-dessous les doigts, ou les doigts par-dessus le pouce, on doit lier les tons de manière qu’on n’entende pas ce changement de doigts ; il faut qu’il n’y ait aucune interruption dans le trait ou dans le chant, et que tous les tons soient égaux en force’. Adam, *Méthode*, p. 10, contains basically the same statement with negligible changes in wording.

Ex. 4. 1 Adam & Lachnith,³²⁰ *Dictionnaire des passages* No. 293

Ex. 4. 2 Adam & Lachnith,³²¹ *Dictionnaire des passages* No. 294

The second fingering for the same passage is for ‘giving it more expression’ (pour y mettre plus d’expression), which does seem to call for those shifts to be heard—or, at the very least, *felt*. That is, although such shifts are to some degree unavoidable in double-note playing, it is presumably this more conspicuous off-beat turning that characterises the second fingering option as more expressive. In fact, the first

³²⁰ Ibid., p. 110, fingerings for Dussek’s Sixth Concerto op. 26 (there listed as op. 27).

³²¹ Ibid.

one seems clunky in comparison, as all shifting slavishly coincides with the beat and thus leaves virtually no leeway for inflection.

Crossing-over and passing-under—and the five-finger position at large—were increasingly taken to be the most fundamental principles driving finger choice,³²² a seemingly natural outgrowth thereof being the idea that any deviation should be subservient to them. Hence the usual exposition in the treatises: first the fingerings for scales, arpeggios and double notes (sometimes for all keys), followed by a few cursory examples and guidelines dealing with ‘the rest’—unless, as already insisted upon, they also happened to append a number of practice pieces illustrating issues too complex to encapsulate in the text proper. Thus, strong faith in the five-finger position increasingly went head-to-head with those time-honoured expressive devices which required more unusual movements or hand configurations.³²³ These were slowly becoming arcane knowledge as the virtuosic nature of some piano compositions forced a gradual shift to more surefire approaches to finger choice.

Seen in this light, Jean-Louis Adam’s approach in his 1804 solo treatise is even more antithetical to Hummel’s (or Clementi’s, for that matter). He cockily proclaims that,

[b]ecause of the great variety of passages in PIANO music, giving invariable principles for fingering on this instrument was long held to be impossible. Yet, thanks to the experience and inquisitiveness of the best masters, we now have arrived at them.³²⁴

³²² As Bach already maintains, however awkwardly, in his *Essay*: ‘Change of fingers [*Die Abweschelung der Finger*] is the most important element in our study. Our five fingers can strike only five successive tones, but there are two principal means whereby we can extend their range as much as required, both above and below. They are the turning of the thumb and the crossing of the fingers’ (pp. 45–46).

³²³ We saw several examples of one such technique at the end of Chapter 3, whereby the thumb remains under the hand and close to the fourth and fifth fingers thus keeping a calm hand in situations where standard passing or turning simply cannot. Note that I use ‘hand configurations’ here very reluctantly as an over-simplification of highly animated phenomena even when the hand is at its quietest in performance.

³²⁴ Adam, *Méthode*, p. 34: ‘La multiplicité des traits qu’on est obligé d’exécuter sur le PIANO a longtems fait croire à l’impossibilité de pouvoir donner des principes invariables pour le doigter de cet instrument ; cependant, aidé des recherches et de l’expérience des meilleurs maitres, on y est

To be fair, Adam’s faith in the rules for fingering scale-, arpeggio-, or double note passages does not extend to the complexities present in real works (and perhaps because of this, his treatise now featured whole example pieces much as Clementi had done a few years prior):³²⁵

These are the principal rules of fingering, which must be followed to the letter. We will abstain from giving those secondary rules which would complete this part of the Method, because the extreme multiplicity of observations required would extend beyond the confines projected for our work.³²⁶

Yet mentioning potentially codifiable ‘secondary rules’ while dodging any discussion of them does feel like a cop-out. The fingerings in Adam and Lachnith’s earlier *Dictionnaire de passages*, though for the most part not unmusical and often quite comfortable, do not illuminate such subtleties either, for they deal almost exclusively with formulaic, brilliant passagework, rather than with how fingering may be inherently expressive *even* in such passages—as they themselves vaguely imply by including a single case of this (see **Examples 4.1** and **4.2** above) in the whole treatise. In contrast, Part II of Hummel’s *Anweisung* accomplishes arguably just that very ‘multiplicity of observations’ Adam conveniently avoids.

As I hope to be making increasingly clear, the enduring bias against the *Anweisung* as a kind of monstrosity may be not just completely unwarranted but even counterproductive. Much reassessment, critical editing, and much further research on Part II of the *Anweisung* do seem to be in order—if anything else for how it bears directly on Chopin’s own practices, but also on much lesser-known other music which may be worth exploring.³²⁷

parvenu’. Note that *trait* is somewhat equivocal, as it can mean simply ‘scale’ but also more vaguely ‘sequence’ or ‘passage’.

³²⁵ Contrary to Clementi or Hummel, however, in the example pieces Adam does seem to follow his own rules to the letter, occasionally with disastrous results. See p. 132 for a direct comparison.

³²⁶ Adam, *Méthode*, p. 66: ‘Telles sont les règles principales du doigter, celles qu’il importe de suivre exactement, nous nous abstenons de donner les règles secondaires qui compléteroient cette partie de la Méthode, parceque l’extrême multiplicité des observations qu’elles nécessiteroient nous entraineroit au delà des bornes de notre ouvrage’.

³²⁷ Even Kroll, *Hummel*, pp. 252–60, an overview of the *Anweisung*, tip-toes around and dispatches Part II in two short paragraphs (pp. 255, 257), and id., “La Belle Exécution”: Johann Nepomuk Hummel’s Treatise and the Art of Playing the Pianoforte’, in *Historical Musicology: Sources*,

Further (Tacit) Lessons Learned from Early Nineteenth-Century Fingerings

Absent fingering indications, many etudes and etude-like pieces in the pedagogical repertoire would somewhat fail to convey precise information as to 1) what physical means were intended save for the most obvious and unequivocal of situations, and 2) to what musical effects those physical means could be applied (and thus also extrapolated).³²⁸ Yet, even when there *are* fingerings to work with, zooming in past surface similarities and getting to the heart of usages specific to any individual (or a more general style) poses quite a challenge. As Bellman's epigraph opening this chapter makes clear, such study is best done on a case-by-case basis: the mind-numbing combinatorics involved in (artistic) contingent fingering processes unavoidably requires much *experiencing* them. Rule-based systematic approaches are simply no match for such experience.

If, for example, we assume near-absolute equality of timing in passagework (increasingly normative in mainstream classical music performance since about the 1920s) we may miss some remarkable rhythmic alteration inherent in some of the fingerings.³²⁹ We would then naturally discard them as 'ineffectual', 'not good for

Methods, Interpretations, ed. by Roberta Montemorra Marvin and Stephen A. Crist (Rochester: University of Rochester Press, 2008), pp. 234–55 (pp. 243–46) devotes less space to Part II than it even purports to—the discussion tacitly and inexplicably switches to Part III less than halfway through p. 244 (so in total only about ½ page deals with Part II). To the best of my knowledge, the most detailed commentary of Part II appears in Cho, and it is of the most interest for our purposes as her discussion is directly connected to Hummel's op. 125. Another respectable study, but which aims to rekindle the *Anweisung's* more basic pedagogy (i.e., Part I), is Natalie Catherine Landowski, 'Practical Hummel: A Guide for Pianists and Piano Teachers on How to Use Johann Nepomuk Hummel's Treatise Today' (D.M.A. dissertation, University of Iowa, 2018). A recent positive re-appraisal is Arthur Schoondevoerd, 'Die wahre Art, Clavier und Piano-Forte zu spielen bei Carl Philipp Emanuel Bach und Johann Nepomuk Hummel', in *Zur Entwicklung des Klavierspiels von Carl Philipp Emanuel Bach bis Clara Schumann*, ed. by Christian Philipsen, Monika Lustig and Ute Ormonsky (Augsburg: Wißner, 2017), 87–98, though it adds little of substance to the above. Most recently, Kobb does occasionally discuss Part II, but mostly through the lens of the verbal admonitions occasionally embedded within the musical examples—which, in any event, *also* deserve much more in-depth treatment than hitherto given, as do the fingerings in the examples themselves.³²⁸ See Peter Szendy, *Phantom Limbs*, trans. by Will Bishop (New York: Fordham University Press, 2015 [2002]), p. 51: 'It is with fingering rather than with tablature that music for keyboard is truly enriched with a *new* dimension: that of the digital articulation of a phrase. Emancipated from their role as a *notation table*, the fingers, *untied* from the notes, add a supplementary staff to the work where several possible narratives or recitations are told for the music noted above or below'. The observation is certainly worth its salt.

³²⁹ The only (passing) reference in the literature as to this potential function of fingering is, to my knowledge, Hiebert, 17.

our hand', 'impractical', 'not as good as modern or standard fingerings', etc.—again betraying presentism. A great example of such inequality stemming from fingering is Hummel's opus 125 number 9 (see **Example 4.3** below), which makes use of so many unusual an 'omission of one or more fingers' throughout that it would certainly impede today's normative equality, and probably the main reason why modern editors would promptly substitute their own fingerings.³³⁰

Allegro

The musical score for Hummel's Etude 9, measures 1-5, is presented in two systems. The first system shows measures 1 and 2, and the second system shows measures 3, 4, and 5. The right hand (RH) is the primary focus, with numerous fingerings indicated above the notes. The left hand (LH) provides a simple accompaniment. Dynamics include forte (f), piano (p), and crescendo (cresc.).

Ex. 4.3 Hummel, etude 9,³³¹ 1-5

Indeed, expectations of temporal and timbral uniformity are so powerful today that players naturally tend to regard finger choice as subservient to it—and rarely, if ever, to consider that any part of the process could assist in *willful* inequality. For example, to draw *notes inégales* types of effects organically one could simply choose fingerings which lend themselves to it—as Hummel does quite subtly in the above example. In that regard, note especially the awkward-looking RH 2 4 2 4 in bars 3–

³³⁰ See Hans Trneček (ed.), *Études pour le pianoforte par J.H. Hummel Oeuvre 125* (Vienna: Universal, n.d. [c. 1901]), pp. 2–3 (no. 1 in Trneček's ordering). The frequently bizarre editorial fingerings in this 17-etude selection and revision are most extreme for etude 3 (no. 15 in Trneček's ordering), pp. 42–44.

³³¹ Hummel, *Études*, p. 22. All transcriptions hereafter from the Haslinger edition (Vienna: n.d. [1833]).

4.³³² The last 2 4 pair seems straight out of A.E. Müller's booklet on the Mozart concertos, in fact, though it is more likely Hummel got such fingering ideas directly from Mozart himself (if that was indeed the line of influence).³³³

At issue here is also the projection of modernist ideas of uniform, continuous legato playing onto this music. That is, in addition to rhythmic inequalities, fingerings in the pedagogical repertoire reveal plenty of leeway within predominantly legato playing for subtle articulation and gesture—*articulated legato*, even if the treatises proper are mostly silent on the matter of how to effect it. Again, absent fingering indications we would not be able to know how animated the notes subsumed under slurs could get in performance, probably to *any* degree.

Let us now take a look at **Example 4.4** below, bearing in mind Hummel's own ideas of performance from the *Anweisung* that the pedal should be used very sparingly, if at all—certainly not in situations where binding would be relatively easy through good fingering.³³⁴ Surely, the disjunct fingerings in the LH (bars 22–23) are there for a particular musical reason. That is, if literal legato throughout the slur were the aim, there would have been much better options than:

³³² See Hummel, *Anweisung*, p. 250, II/p. 152 ('Ex. 2') for the exact figuration and fingering (e.g., bars 2, 4). A note above the staff says: '(a.) The hand is drawn together closely, so that the actual percussion of the finger lying out of its natural order, and about to be substituted for the one omitted, may take place with facility and certainty'. The more compact and slightly awkward hand configuration, in other words, adds weight to notes taken with 2 while lightening those taken with 4—a perfect way to render, for example, *notes échapées* unequally (both rhythm and dynamics).

³³³ August Eberhard Müller, *Anweisung zum genauen Vortrage der Mozartschen Klavierkonzerte*,^[1] *hauptsächlich in Absicht richtiger Applicatur* (Leipzig: Schmiedt & Rau, 1796), e.g., pp. 3, 4, 8. For Hummel's studies with Mozart, see, e.g., Kroll, *Hummel*, pp. 11–18.

³³⁴ Hummel, *Anweisung*, p. 152, III/p. 62.

[Allegro non troppo]

Ex. 4. 4 Hummel, etude 2, 20–25

Here the slur simply indicates to keep the hand on the keys as much as possible.³³⁵ Yet, while Sun-Im Cho is surely right in pointing out that a ‘gliding technique’ is to a very large extent what this etude is about,³³⁶ how are we to slide or glide the LH into the last beat of bar 22, or, for that matter, the RH upwards from g^2 to ab^2 with 5 in bars 20 and 24? While sliding (and slightly crawling) d^1 - c^1 is probably doable for the LH thumb, the little finger has a much harder (if not impossible) time in both situations. I surmise that in addition to achieving an expressive, beautiful legato whenever possible, the fingering in this etude makes varying articulation within a predominantly legato touch possible, which very likely also leads to subtle (or not so subtle) uses of rhythmic inequality. A case worthy of comparison in this regard is Chopin’s prelude 21 in $B\flat$ major:

³³⁵ Hummel’s admonitions in the *Anweisung* to keep the hands on the keys (and to gliding on them for that purpose) are legion. Chopin’s affinity in that regard is unmistakable. See Dana Gooley, ‘Between *Ésprit* and *genie* – Chopin in the field of performance, in *Chopin’s Musical Worlds*, ed. by Artur Szklener (Warsaw: NIFC, 2008), pp. 141–56 (p. 255): ‘The only recurrent impression of his performing body points to hands gliding delicately over the keys’.

³³⁶ Cho, p. 35111.

Cantabile

Ex. 4.5 Prelude Op. 28 No. 21,³³⁷ 1-5 (Stirling)

In a revealing letter, Müller writes:

Then I played the second prelude [number 21], which has a fingering that's like Greek to me. All the upper notes of the left hand are to be played by the thumb, which I didn't know. I played the left hand, he the right. I can't even tell you how he plays. He can't stand to hear any percussion: a tone arises, sounds and floats away without you even suspecting it came from a finger. His *crescendos* and *diminuendos* are inconceivably beautiful.³³⁸

As hinted at by the hand redistribution in the Stirling exemplar, bar 4 (see **Example 4.5** above), we probably should not take Müller's words on fingering all that rigidly here. And yet the idea is clear: the thumb glides singingly through *most* of the upper LH part as smoothly as possible, and whatever exceptional redistributions we make should not disturb that. Much as in the previous Hummel example, since we cannot literally bind some of the notes we might as well ensure that our gestures are as smoothly connected as possible.

An even more extreme case of the phenomenon—let us provisionally call this 'gestural' legato as a more subjective sort of binding than a literal overlapping of sounds—appears in Hummel's etude 11, last beat of bar 25:

³³⁷ Paris, Bibliothèque nationale de France (F-Pn: Rés. Vma 241 (IV, 28, II)), p. 19.

³³⁸ Goebel-Streicher, p. 56: '[I]ch spielte dann die zweite, wo aber die linke Hand einen spanischen Fingersatz hat. Die XXI hat Doppelgriffe die [recte: da] werden alle obere Noten mit den Daumen gespielt, daß wußte ich nicht, ich spielte dann die linke Hand und er die rechte. Könnte ich nur sagen wie er spielt. Er kann nicht leiden, wenn man einen Ton anschlagen hört, der Ton entsteht, klingt und verschwebt ohne daß man etwas von einem Finger nur ahnt; seine *crescendo* und *diminuendo* sind unbegreiflich schön'.

[Allegro, ma cantabile]

The musical score shows two staves. The right hand has a complex sequence of notes with various fingerings (1-5) and slurs. The left hand has a simpler accompaniment. Dynamics include *p*, *cresc.*, and *f*. The tempo is marked [Allegro, ma cantabile].

Ex. 4. 6 Hummel, etude 11, 22–26

Here on-the-keys playing and therefore actual legato overlapping of $f\sharp^2$ - $a\sharp^1$ is clearly impossible, as the fingering forces the whole hand to brush sideways through the air. But one can still bring about the *illusion* of connection (especially for the player) by keeping down and pivoting on the thumb so 5 crosses over 1 (or 4 pass under 5 if that is how we prefer to conceptualise it), which many players today would take much trouble to avoid through silent substitutions or pedal (or both) instead. Reaching towards and resolving the tritone in a satisfying manner makes for a striking gesture indeed, one demanding extremely sensitive timing, touch and hearing—all of which may suggest mimicking of vocal portamento.

Discussion of articulated legato ideas is still quite rare in the modern literature on Chopin performance, despite his by now obvious influence from Hummel's pianism. Virtually a lone voice in that regard,³³⁹ Swinkin proposes that

legato is not incompatible with localized phrasing and articulation if applied on a small scale—*legato* within a gesture rather than an overarching, long-line *legato*. [...] For example, a slur does not necessarily mean to play the notes it subsumes completely *legato*, using a linear fingering, because sometimes a passage sounds most connected when a disjunct fingering is used. [...] Thus, disjunct fingerings and a sense of connectedness were not incompatible for Beethoven, Chopin, and Schenker.³⁴⁰

³³⁹ Here Swinkin may have been inspired by George Barth, *The Pianist as Orator: Beethoven and the Transformation of Keyboard Style* (Ithaca & London: Cornell University Press, 1992), e.g., pp. 113–19.

³⁴⁰ Swinkin, 'Keyboard Fingering', 21–22. Note that Kobb, pp. 199–201, takes issue with Swinkin's views on fingering and technique more generally (see also *ibid.*, p. 197). But while Kobb is certainly right in pointing out that some of Swinkin's arguments rely too much on 'modern' piano technique (i.e., on 'arm dropping', etc.), some of the objections she levels against Swinkin's ideas of fingering as indicative of interpretation are (in my view) somewhat misguided. There is much to be learned from the writers she criticises along with Swinkin, however limited their experience with period instruments may be. The most relevant of Kobb's criticisms, however, may be this: '[I]t is interesting

And moreover, that

use of *legato* did not preclude the delineation of local gestures, nor the use of “disjunct” fingerings by which to execute those gestures. Similarly, Chopin advocated finger evenness, while also claiming that each finger is inherently different, and, like Beethoven, providing disjunct fingerings.³⁴¹

Swinkin then goes on to argue that what these pianists ‘referred to as connectedness or evenness was more the unity of a given gesture—its singular, decisive effect—than *legato per se*. Theirs is a form of evenness that allows ample room for difference’.³⁴² The driving aesthetic, in other words, is ‘unity-by-difference’ rather than homogeneity.³⁴³ This approach accommodates varieties of articulation and surface detail that modern fingerings, coupled with an insistence on uniform, continuous legato playing tend to iron over. Clearly, despite the deafening silence of the treatises on this kind of practice during the early nineteenth century, some (pedagogical) repertoire from the period is ripe with examples for our taking.

Hummel’s *Anweisung*, Part II, Chapter 10: Some Practical Observations

One would be hard-pressed to find better examples with which to practice advanced ‘shadowing’ than the three fugues culminating Hummel’s Part II of the *Anweisung* (‘On the Distribution of Parts between the Two Hands, and on Licences of Fingering in the Strict Style’).³⁴⁴ These fingering indications show astonishing

to notice that, while there is a wealth of articles on Beethoven’s relatively few fingerings, the discussion of Hummel’s seminal treatise – with a chapter [sic] on fingering exceeding 250 pages – and its possible relevance for Beethoven’s music is nowhere to be seen’ (p. 178). Arguably, the observation would apply even more to Chopin—despite there being no ‘wealth of articles’ on Chopin’s relatively *many* extant fingerings. That we may have also missed Hummel’s value as a guide to Chopin’s practices seems clear enough.

³⁴¹ Swinkin, ‘Historical Versus Modern’, p. 21.

³⁴² *Ibid.*, 22.

³⁴³ *Ibid.*

³⁴⁴ Hummel, *Anweisung*, pp. 379–89, II/297–309. The fugues in question are J.S. Bach’s C# minor BWV 849 from *The Well-Tempered Clavier I*, Handel’s E minor from the Suite HWV 429, and Hummel’s F# minor op. 7/3. (The reader can refer to their complete diplomatic transcriptions in Appendix A, pp. 297–316.) To my knowledge, other than the brief generic overviews in Barnum (pp. 105–06, which focuses on the Bach fugue only) and Krawitz (p. 53, which dispatches all three in a short paragraph), no published commentary of any kind on these fingerings exists. This is a serious gap, as they may be the closest we will ever get to Chopin’s own approach in polyphonic contexts.

sophistication for *any* period, and in my view constitute one of the most important documents of early nineteenth-century practices. Even if pianists ignore the rest of the treatise, thoughtful study of them would still prove invaluable,³⁴⁵ though they may have to get past the tendency to dismiss fingerings in the first two fugues (Bach's and Handel's) out of purist concerns.³⁴⁶ It is essential to keep an open mind in that regard, however: this set of fingerings is still the most sustained and most detailed we have from the period and possibly the closest to Chopin's own pianistic ideals. The gestural information they contain may point to keyboard deportment as valued by Hummel and therefore quite likely sought after by Chopin as well, albeit in his own unique ways.

First, the fingerings immediately dispel notions of Hummel espousing a generally 'dry, staccato touch' approach to piano playing, as it is sometimes thought.³⁴⁷ In that regard, Hummel's own words for this (verbally) shortest of chapters deserve quoting nearly in full:

§1. In the strict style of composition,³⁴⁸ all kinds of fingering may be said to take place; whoever desires to play a fugue properly, must before hand [sic]

³⁴⁵ While surely one could use Hummel's fingerings for these fugues to good effect even on a clavichord, harpsichord or organ, they are clearly pianistic specimens: being less bound to local details of articulation, they lend themselves to much more variety of gesture within a predominantly legato touch.

³⁴⁶ Not to mention scorn for Hummel's own fugue: a scribble on the margin of a (Boosey) copy at Washington, D.C., The Library of Congress (US-Wc: MT222 .H956) reads: 'Oh! What a falling off! Hummel after Bach & Handel!!!' (II/p. 306).

³⁴⁷ See, e.g., Goldberg, *Music in Chopin's Warsaw*, p. 51: 'The sound cultivated by pianists associated with the *stile brillant*, most notably Hummel, was characterized by a drier, staccato touch and sparing use of the pedal'. For an earwitness to Hummel's beautiful legato playing see, e.g., Marmontel, p. 99. The problem, as ever, seems to be the presentist tendency to equate legato playing with our own conceptions thereof.

³⁴⁸ Note that 'strict style' in English does not quite convey *gebundenen Styl*, for it misses the connotation of binding, i.e. *legato* playing. See Thomas Spacht, 'Winds of Change: From Ordinary Touch to *Style lié*', *Newsletter of the Westfield Center*, 21/5 (2009), 5–13, which traces the perceived requirement of 'absolute legato' for the performance of J.S. Bach's music in the early nineteenth century to Fétis (7–8). See also *ibid.*, 10: 'Whatever the exact interpretation of *gebundene* ought to be with reference to chorale or hymn accompaniment, it seems clear that Fétis and others understood this Germanic term as a kind of absolute legato appropriate to the works of Bach, but in particular the most contrapuntal works. Thus, phrases such as "the serious, fugal style" became building blocks for early nineteenth-century organ technique in France'. Although a popular conception in France (and probably England as well), this trend was by no means universal. See, e.g., Moscheles, *Études pour le Piano Forte* (Leipzig: H.A. Probst, n.d. [1827]), pp. 10, 44, where *gebundenen Styl* translates into French simply as '*style legato (ou lié)*'. Incidentally, Barnum, pp. 45–46, posits Thomas Boosey Jr as the translator of the *Anweisung* into English, while Sachs, *Kapellmeister Hummel in England and*

be intimately acquainted with them, and have the entire mechanism of fingering perfectly at his command.

§3. The performance must throughout be connected and flowing, and the entrance of the subjects must be somewhat forcibly marked, that they may not escape the observation of the ear.³⁴⁹

Again, it is necessary to stress that familiarity with ‘all kinds of fingering’ and ‘the entire mechanism of fingering’ does not necessarily mean having all preceding nine chapters under one’s belt, but to have used Part II of the *Anweisung* as reference material often enough, or to have enough independent experience already on a large variety of fingering techniques. In any event, what is most telling is that within these superb examples of ‘shadowing’ Hummel chose to give no verbal advice other than to occasionally clarify whether it is the left or the right hand that is to play certain notes. This is clearly in contrast to the rest of Part II, where he does occasionally embed clarifying comments into the musical examples.

What is probably the most fascinating practical finding from these fingerings is, again, confirmation that within the *gebundenen Styl* lies an incredibly varied and nuanced approach to articulation—that is, ‘articulated legato’. For instance, they very quickly bring into question the idea that dissonances require a literal legato connection for their resolution, for in most cases both are carried out by one and the same finger. This was probably already quite old-fashioned by the time of

France (Sterling Heights, MI: Information Coordinators, 1977), p. 62, names Mary Ann Bacon matter-of-factly (see also Hulbert, p. 19n36).

³⁴⁹ Hummel, *Anweisung*, p. 379, II/p. 297. See, however, Goebel-Streicher, p. 318, for Chopin’s more subdued attitude towards fugal entrances: ‘I’m not saying that you’re wrong, he said, on the contrary: there are many people who would approve, even demand that the theme be clearly announced to prove each voice. But I confess, that’s just not my taste. For me, while I admire the work that goes into a fugue, I don’t like proving calculations—I love forgetting that I’m playing a fugue, and what charms me is to hear but pure and profound thought’ (*Je ne dis pas que vous ayez tort, sprach er, au contraire il y a beaucoup de personne, qui vous approuveront, et même qui exigent, que le thème soit annoncé clairement, pour prouver le chant de chaque voie. – Mais je vous avoue, ce n’est pas selon mon gout, pour moi, tout en admirant le travail d’une fugue, je n’aime pas de prouver le calcul, j’aime à oublier que je joue une fugue, et de n’entendre qu’une pensée pure et profonde qui me charme*). The spirit is remarkably close to Rothstein, ‘Analysis and the act of performance’, in *The Practice of Performance*, ed. by John Rink (Cambridge: CUP, 1995), pp. 217–40 (p. 218): ‘Perhaps the clearest conflict between “analysis” and “synthesis” occurs in fugues, above all the fugues of J. S. Bach. [...] Bach delights in weaving his subjects into every part of his musical argument – beginnings, middles and ends – and he often goes to great lengths to conceal their entries. To “bring out” such hidden entries would be to reveal not erudition, but boorish pedantry’.

Hummel's *Anweisung*, but exactly what J.S. Bach's fingering in the *Applicatio* BWV 994 does, that is, 'a repeated finger is used from the suspension to its resolution [...] precluding a [literal] legato performance'.³⁵⁰ Moreover, the consonance which prepares a suspension sometimes *also* partakes of the same finger, thus ensuring (among other things) enough energy to successfully carry the dissonance to its resolution. For Hummel the technique of consecutive use of the same finger therefore has (at least) two very different functions, which may even be antithetical to each other:³⁵¹ 1) to resolve dissonances, presumably through some *diminuendo*, which does seem quite distinct from using it so that 2) 'it facilitates the crescendo', that is, in cases where 'the repetition of a finger or fingers necessitates dropping arm weight, thus producing emphasis'.³⁵²

We could also take advantage of a couple of happy coincidences for our learning purposes in the case of the Bach fugue. A copy of the Richault edition of *The Well-Tempered Clavier I* exists with Chopin's annotations for his student Pauline Chazaren.³⁵³ And even though the C# minor fugue is devoid of fingering indications in Chopin's hand (other than the vague suggestion for hand distribution in bars 25–26), it does carry dynamic markings and a metronome mark of ♩ = 112. While these two keyboard giants surely had very personal approaches to the performance of this fugue, their affinity cannot be discarded either. Taken together, all these factors should take us far closer to Chopin's own deportment at the keyboard than, say, Adam's or Czerny's fingerings for this fugue.³⁵⁴

³⁵⁰ Soderlund, *Organ Technique: An Historical Approach*, 2nd edn (Chapel Hill: Hinshaw Music, 1986), p. 124.

³⁵¹ As we will see in more detail in Chapter 8.

³⁵² Swinkin, 'Keyboard Fingering', 8. See p. 99n340 for Kobb's misgivings on Swinkin's perhaps less than historically accurate technical description. *Pace* Kobb, however much weight one applies when using the same finger consecutively, the device certainly does seem to allow (if not unequivocally encourage) some kind of gestural *amplification*.

³⁵³ In Eigeldinger (ed.), *J.S. Bach: Vingt-quatre préludes et fugues (Le Clavier bien tempéré, Livre I). Annoté par Frédéric Chopin*, 2nd edn (Paris: Publications de la Société française de musicologie, 2020 [2010]), pp. 18–21.

³⁵⁴ Thus, the suggestion in Rosenblum, 'Chopin among the pianists of Paris', pp. 275, 282–83, that the so-called 'French School' founded by Adam should have much to bear on Chopin's playing does ring a bit odd.

Something else to keep in mind is that although Hummel explicitly indicates (through asterisks) the overholding of particular notes countless times throughout Part II of the *Anweisung*, he denies us this courtesy in Chapter 10—perhaps considering it by that point either superfluous or best left to the discretion of the player. In any event, fingering is a top determining factor in that regard as it hints at the degrees to which one can actually ‘hand pedal’ any notes, even in a rather brisk tempo as in the Handel and Hummel fugues.³⁵⁵ Thus, however much the player is able to fill-in stylistically speaking, actual degrees of rhythmic inequality and quantitative accentuation suggested by the fingerings will necessarily remain a matter of speculation—and, perhaps even more importantly, of individual exploration and taste.

³⁵⁵ I will hereafter use ‘hand pedal’, Schenker’s term for this technique (*AoP*, p. 11–12). Most other terms (e.g., ‘finger pedalling’, ‘overholding’, ‘overlegato’, ‘prolonged touch’) seem less suggestive and more confusing in the long run. The number of primary sources which discuss this is high, though the degree of specificity differs greatly. As to secondary sources, in addition to *AoP*, the reader may also wish to consult Dimitris Karydis, ‘Beethoven’s Annotations to Cramer’s Twenty-One Studies: Context and Analysis of Performance’ (PhD thesis, City University London, 2006), a highly relevant monograph also in view of Cramer’s great pianistic influence on Chopin. Interestingly, Hipkins (p. 21) already notes how ‘Beethoven’s annotations on some of Cramer’s studies, ignored to-day, contain the key to the elusive clavichord’.

CHAPTER 5

On Taxonomy and Other Problems: Actual Classification or ‘Fingersplaining’?

Following the demystifications of the last two chapters, it would only be fair now to ask how Chopin’s practices may differ from those of Clementi, Cramer, Dussek, Field, Moscheles or Hummel—all great pianistic influences on him. To be clear, questioning received ideas of radical innovation on Chopin’s part should not deter appreciation, but for reasons other than those usually put forth. To appreciate them we will again need to question some long-standing assumptions.

The absolutely most basic distinction we can make is that between fingering *techniques* (i.e., the various dynamic features finger choice results in) and fingering *function* (i.e., the various effects of those techniques, including those of a more subjective nature). To my knowledge, the only two pedagogical works in the early nineteenth century which attempt any serious classification of fingering techniques are Kurpiński’s *Wykład* (c. 1818) and Hummel’s *Anweisung* (c. 1828), both of which were known to Chopin to some degree.³⁵⁶ Importantly, both also show the interdependence of techniques and functions, however tacitly or implicitly. Oddly enough, Kurpiński’s classification stands out as proto-phenomenological, for his ‘variations of finger position’ (*Odmiany pozycyi palców*) denote obviously dynamic events and focus on their resulting kinaestheses (see **Figure 5.1** below).

³⁵⁶ See Appendix B, pp. 318–43, for a translation of the section on fingering from the *Wykład*. A useful (if understandably also incomplete) checklist of historical keyboard pedagogy sources is Soderlund, *How Did They Play?*, pp. 14–16. On that list, the only other prominent treatises from the late eighteenth and early nineteenth centuries featuring some crude or incipient classification of fingering techniques seem to be Türk (1789), Milchmeyer (1790) and Starke (1819–1821). Note that Adam and Lachnith’s *Dictionnaire de passages* (1798; rev. edn, 1801) does not classify fingering techniques at all, as it consists almost exclusively of technically challenging passages, moreover organised by composer. The trend to think in terms of rules and abstractions for scales, arpeggios and double notes as *the* basis for fingering decisions appears to have been set in stone by the time of Czerny (1839) and is still going strong—even Banowetz (2021), the most recent monograph on fingering as of this writing, sternly focuses on fingering rules as overwhelmingly covert utilitarian tools, with little if any regard for congruence between means and effects.

Hummel

Chapter Headings³⁵⁷

1. *Proceeding* with the same succession of fingers when a passage consists of progression of similar groups of notes.
2. *Passage* of the thumb *under* the other fingers, and of other fingers *over* the thumb.
3. *Omission* of one or more fingers.
4. *Substitution* of one finger for another on the recurrence of the same note.
5. *Extensions* and *Skips*.
6. Use of the *thumb* and *little finger* on the black keys.
7. *Crossing* a long finger over a shorter one, and *passing* a short finger *under* a longer one.
8. Changing one or more fingers on the same key upon the immediate repetition of a note; and the successive application of *one* finger to two or more different keys.
9. *Placing* the hands *under* each other, so that the fingers of one hand fall between those of the other; and crossing one hand over the other.
10. *Distribution of several parts* between the two hands; and *licences* of fingering allowable in the strict or fugue style.

Kurpiński

'Variations of Finger Position'³⁵⁸

1. Variation by approach (*Odmiana przez podejście*)
2. Variation by shift (*Odmiana przez przłożenie*)
3. Variation by chase and escape (*Odmiana przez pogoń i ucieczkę*)
4. Variation by finger under (*Odmiana przez opuszczenie palca*)
5. Variation by extension or reaching (*Odmiana przez rozszerzenie czyli dosięganie*)
6. Variation by takeover (*Odmiana przez odebranie*)
7. Variation by skip (*Odmiana przez skok*)
8. Variation by hand takeover (*Odmiana przez odebranie ręczne*)
9. Variation by hand crossing or shifting (*Odmiana przez Krzyżowanie czyli przłożenie ręczne*)
10. Variation by hand entanglement (*Odmiana przez splątanie ręczne*)

Fig. 5. 1 Hummel's and Kurpiński's classifications of fingering techniques

³⁵⁷ Hummel, *Anweisung*, p. 105, II/ pp. 1–2.

³⁵⁸ Kurpiński, pp. 49–51.

The ad hoc overview of fingering function that follows explores the interrelatedness of fingering, musical content, and expressive intent, and thus prepares the reader for the extended case studies in the remaining chapters. Although fingering function tends to resist taxonomy at least as much as the techniques themselves do, a minimum is needed if we are to form a more sophisticated sense of variety of purpose as regards Chopin's original indications. In short, while telling functions apart from techniques will probably not take our analysis very far, it is nonetheless an important start.

An Overview of 'Handing'³⁵⁹ or Fingering Function in General

As Bamberger observes, Beethoven's fingerings are 'nearly always musically significant, functioning as either an expressive device or an explication of the structure, or both'.³⁶⁰ This no doubt applies to Chopin's fingering indications as well, for they often betray several overlapping musical functions.³⁶¹ Thus, a classification of fingering function along the following lines seems necessary even if just as basic orientation:

One can [...] categorize the fingerings under four headings, according to their function: 1) balance—where the fingering indicates the importance of a particular line in the texture; 2) grouping—where the fingering indicates which notes belong together and, in turn, the separation of groups of notes; 3) touch—where the fingering provides a means for generating specific dynamics, legato, staccato, or stress; and 4) character.³⁶²

Taking the above into consideration, perhaps the most popular misconception of fingering function is best exemplified by Ekier and Kamiński's espousal of an 'expressive vs technical' dichotomy for fingering in the Etudes:

³⁵⁹ Bamberger, 243: 'In his lessons [Artur] Schnabel often spoke of "handings" rather than fingerings. He emphasized that the "handings" must reflect phrasing (grouping)—whenever possible one group should be fingered so as to fall within the compass of a single hand position. Schnabel's terminology and the concept underlying it are useful in understanding Beethoven's own fingering'. We could easily extend the concept of 'handing' here to include not just grouping 'within the compass of a single hand position', but even compound gestures resulting from finger choice.

³⁶⁰ *Ibid.*, 238.

³⁶¹ *Ibid.*, 239.

³⁶² *Ibid.*, 249–50.

In the case of “technical” fingering it is necessary to first test the usefulness of Chopinesque fingering. If discomfort occurs, the pianist should try editorial fingering or supplant it by his own.³⁶³

Yet Ekier also believes that

there exists a certain type of Chopin fingering independent of the player and characteristic of the composer’s musical-performance thinking (so-called ‘expressive fingering’), which should be observed on an equal footing to his authentic interpretational instructions.³⁶⁴

By taking the ‘technical’ type to be dispensable while insisting the ‘expressive’ be observed, they indirectly assume these types to be discrete and readily identifiable—as well as an intellectualist kind of access to Chopin’s intended musical effects, that is, *independently* of the bodily means involved in producing them. These assumptions are problematic, as arguably even the most virtuosic figurations in the Etudes may be bodily expressive—and often the reason why fingerings are there as guides *for* rather than to assist with predetermined outcomes; and, conversely, those indications Ekier and Kamiński perceive as being of the ‘expressive’ kind may involve superb technical control of historical fingerings quite unlike those most pianists trained today may be accustomed to (or have much inclination to explore).

Turning their view on its head, then, we could say that experimentation with every kind of Chopin fingering is a *sine qua non* if we are ever to understand—much less reconstruct, to the extent that may be possible—Chopin’s approach to bodily expression. Such experimentation poses quite the challenge, however, given not only (probably) wildly contrasting aesthetics to ours but also because of today’s largely unquestioned emphasis on dependability and accuracy. In other words, it would entail a willingness to engage with aesthetics and approaches to technique which may strike us as alien,³⁶⁵ while also needing to consciously bracket any

³⁶³ Ekier and Kamiński, p. 3.

³⁶⁴ Ekier, *Introduction to the Polish National Edition of the Works of Fryderyk Chopin*, trans. by John Comber (Krakow: PWN, 1974), p. 119n267.

³⁶⁵ If for instance we have been taught that the most ‘scientific’ approach to posture is to keep the arms noticeably away from the torso so that the wrists are kept perfectly parallel to the keyboard at all times, or to play as close to the edge of the keys as possible save for exceptional circumstances,

notions of authentic style even when espousing an explicitly historical approach to performance through use of period instruments. That is, despite the common perception that ‘many aspects of style depend directly on the physical properties of the instruments themselves’,³⁶⁶ style (general or individual) hinges at least as much on *body management* as it does on ‘the instruments themselves’, however dependent and interrelated the two may be. Needless to say, we have no direct access to early nineteenth-century musicians’ body management—only some vague musical inscriptions and verbal descriptions remain.

Aesthetic unknowables notwithstanding, the body’s involvement is epistemologically paramount and is not to be sidestepped. Thus, developing a bodily understanding of ‘handing’ or fingering function beyond technical facilitation may be akin to what Emily Worthington observes about developing fluency on an instrument, that it ‘arises not just from repeated physical action, but from an increasingly intimate attunement to the nuances of its response, which allows us to produce the effects we desire with increasing reliability’.³⁶⁷ Ideally, this would take place before progressing to more permanent habits and individual styles.³⁶⁸ In some sense, then, we could say that learning historical fingering techniques can be as tentative an affair as when approaching an unfamiliar instrument or instrument type. In that regard, Worthington also observantly proposes

[...] retracing a path through a musical ‘terrain’ that eighteenth or nineteenth century musicians traversed, as best we can, using the traces left by past lives to guide our own journey. The objective of the exercise, however, cannot be to establish the ‘truth’, or to import their knowledge as an ‘already constituted, self-contained entity’, into our own practice. The point of it is

then Chopin’s fingerings (and those of many contemporaries) will make little sense indeed. The more serious corollary here may be that some current methods ‘scientifically proven’ to be ergonomically sound may in fact go *against* some built-in features of Chopin’s kinaesthetic conceptions.

³⁶⁶ Breitman, p. 11.

³⁶⁷ Emily Worthington, ‘Towards a new epistemology of Historically Informed Performance’, unpublished paper read at the conference ‘Early Music in the 21st Century’, Amsterdam Conservatory, 15-17 October 2021 (15 October).

³⁶⁸ In this connection, it is worth noting that even a treatise as bent on fingering systematisation as Adam, *Méthode* (p. 233) insists that ‘[p]layers, as composers, should have their own style’ (Les exécutans, comme les compositeurs, doivent avoir chacun un style particulier).

the process itself: the development of an enhanced perception, a greater sensitivity to our musical ‘surroundings’ and the ability to respond to them in a more nuanced way.³⁶⁹

Now since most of Bamberger’s basic function categories will be nearly self-evident when tackling the case studies that follow, the functions demanding the most elucidation at this point are probably those of a more subjective nature, and which the literature on fingering has largely neglected. Knowledge of such functions is precisely what is needed to come to grips with some of the more striking cases of Chopin’s fingering usage.

Remarkably, Bamberger does touch upon phenomenological issues, though ultimately leaves the reader to further investigate them for himself:

A particular performance is dependent both on the pianist’s abstract hearing (i.e., his understanding of the inner relationships of a given passage as well as its function in the larger context) and on his kinesthetic impression of the passage (i.e., the way the passage feels to his hands). In this way the physical gesture of the performer’s hand becomes a sort of sound analogue: the gesture *reflects* his understanding and also *influences* his understanding—the performer directs his fingers toward achieving what he hears, *but his hand movements also direct his hearing*.³⁷⁰

The importance of this gestural feedback loop cannot be overstated, as it offers not just a different perspective as regards connections between analysis and performance, but perhaps even a glimpse into the workings of emotional engagement in performance. And in that regard there may be much more to Chopin’s famous insistence on calmness and *souplesse* than just a didactic preoccupation with optimal, healthy technique—that is, it may also reflect a deliberate effort on his part to instil greater receptivity to and awareness of ongoing ‘orchestrations of movement’ during playing as a means to enhance emotional engagement.³⁷¹ And this process, as we have already seen, hinges to a large extent on

³⁶⁹ Worthington, *op. cit.*

³⁷⁰ Bamberger, 245 (last emphasis added). For a strikingly similar description stemming from Chopin’s student Joseph Schiffmacher, see Aline Tasset, *La Main et l’Ame au Piano. D’après Schiffmacher* (Paris: C. Delagrave, 1908 [1899]), p. 4.

³⁷¹ See, e.g., Eigeldinger, *Esquisses*, p. 65n33.

finger choice. In this connection, one again wishes Chopin had expanded upon another couple of popular statements in *Pdm*:

Just as we need to use the conformation of the fingers, we need no less to use the rest of the hand, the wrist, the forearm and the upper arm. One cannot try to play everything from the wrist, as Kalkbrenner claims.³⁷²

A supple hand; the wrist, the forearm, the arm, everything will follow the hand *in the right order*.³⁷³

Indeed, Chopin seems to hint at the importance of just that very sort of bodily choreography. I surmise that, though in that sense probably not so radically different from that of the players he was most influenced by, Chopin had a natural proclivity for a holistically calm approach, which then became a lifelong preoccupation. That mindful attention to fingering played a major role in his development both as a performer and as a teacher should be clear enough at this point.

Gesturally Expressive Expansion and Contraction³⁷⁴

Let us now briefly return to our archetypal quiet hand in the context of such conscious receptivity. Despite widespread ideas to the contrary, we saw how it is in fact a highly dynamic conception, always on the move as any animate body is wont—and one of the main reasons why speaking of ‘hand position’ is so

³⁷² *PaT*, p. 18. It is important to point out that, though in common parlance for centuries, expressions such as ‘playing from the wrist’ are incorrect, however much *visual* sense they may make. See, e.g., Deahl and Wristen, *Adaptive Strategies*, p. 28: ‘Pianists commonly speak of the wrist or elbow leading a motion, but this is a misnomer because both are joints. Joints are acted upon during movement; they do not initiate movement’.

³⁷³ *PaT*, p. 194.

³⁷⁴ Again an over-simplification for the purposes of this discussion, which will hopefully become clearer as we go. See Sheets-Johnstone, ‘Phenomenological Methodology’, pp. 42–43: ‘[T]he phenomenological analysis of movement discloses four fundamental qualities: tensional quality, linear quality, areal quality, and projectional quality. *These qualities can be separated analytically but only analytically; they inform any movement holistically, from beginning to end*’ (emphasis added). Incidentally, Edward Miller, *Institutes of Music, or Easy Instructions for the Harpsichord* (London: Longman & Broderip, 1771), p. 22, already contains the phrase ‘contracting of the fingers’ as a fingering technique. That is obviously not the meaning intended here, but rather something like a combination of ‘chase and escape’ (Kurpiński) and ‘omission of one or more fingers’ (Hummel).

misleading.³⁷⁵ Note also that the pedagogical repertoire of the period makes clear that a quiet hand generally tends towards a grouped rather than an extended arrangement. This is not just for ergonomic reasons, but also because of the potential expression resulting from any expansions or contractions, however small they may be.³⁷⁶ Chopin's arch-famous suggestion of RH E-F#-G#-A#-B (and its LH mirror-image C-Bb-Ab-Gb-F) as a template for ideal hand 'position' may thus reflect a single, fixed frame within infinitely fluid motion and shaping. In other words, it reflects actual hands in action only to a very limited extent—it is first and foremost an archetype.³⁷⁷

Pianists' hands are clearly in a constant state of exploratory flux, and not just while composing or improvising but even during performance of works they may know inside out.³⁷⁸ Any expanding and contracting, no matter how simple, is potentially expressive, as this activity helps with not just whatever emotions the performer wishes to project but to some extent also self-induce them.³⁷⁹ (To clarify, this is not to say that such movements necessarily result in emotional expression, only that the player may allow herself to perceive them, however small they may be, *as* expressive. Thus, at least for the time being, it is best also to bracket the issue of

³⁷⁵ In a copy of the *Pdm* made by Ludwika Jędrzejewicz (Chopin's older sister), the word used is indeed "arrangement". See Eigeldinger, *Esquisses*, p. 42, and Marty, *La méthode de piano de Chopin*, p. 26.

³⁷⁶ See *AoP*, p. 89n2. Chopin appears to have been quite averse to gratuitous extensions, especially between the index and middle fingers as Lapointe points out (p. 25).

³⁷⁷ Some take this template much too far, e.g., Verbalis, pp. 155–69. Though purportedly containing discussion of Chopin's 'Fundamental Pattern' as Verbalis calls it, that section offers next to no Chopin at all, just more of the same forced consistency that much of the rest of the book professes.

³⁷⁸ See p. 31n13.

³⁷⁹ See *PoM*, p. 7n16: "The term "expansive," for example, describes a generous, open person, one who is affectively sympathetic toward others, a usage clearly tied to movement, i.e. to an expansive — open, generous — spatiality of a body in motion'. And *ibid.*, p. 74: 'Affects may well be "better captured by dynamic, kinetic terms" than special feeling terms because they have their origin in the tactile-kinesthetic body. From this perspective, complexity of affect may be tied to complexity of movement. If this is so, then the evolution of affect might be studied from the viewpoint of the richness and variability of tactile-kinesthetic bodies, and not just from the viewpoint of a social world'. See also *ead.*, 'Emotion and Movement: A Beginning Empirical-Phenomenological Analysis of Their Relationship', *Journal of Consciousness Studies*, 6/11–12 (1999), 259–77, especially 269–71 on the issue of dynamic congruency.

whether any affective qualities felt by the player do or do not transmit to listeners.³⁸⁰)

For one thing, players in the early nineteenth-century used long and short fingerings (in combination or isolation) to elicit various expressive effects, rather than using either type simply whenever the number of notes in a passage demand it.³⁸¹ In that regard, crossing-over or passing-under do not just organise a passage ergonomically, they also create distinct qualitative dynamics of movement which in turn favour some expressive traits over others. For example, a succession of awkward-looking short fingerings—some involving relatively large intervals—may direct the player’s attention to the *Waldhorn* topos embedded in the following figuration:

[Andantino ♩ = 108]

The musical score shows a single melodic line in 3/8 time, key of D major. It begins with a piano (*pp*) dynamic and a tempo marking of [Andantino] ♩ = 108. The score consists of six measures. The first measure starts with a piano (*pp*) dynamic. The second measure has a piano (*pp*) dynamic. The third measure has a piano (*pp*) dynamic. The fourth measure has a piano (*pp*) dynamic. The fifth measure has a piano (*pp*) dynamic. The sixth measure has a piano (*pp*) dynamic. The score includes various fingering patterns, including many short fingerings and some large intervals. The score is written on a grand staff with treble and bass clefs.

Ex. 5. 1 Moscheles, etude Op. 70 No. 17,³⁸² 13–18

These can, for example, lead the player to effect a very noticeable (yet organic) dragging with respect to the overall tempo, as well as (in this case) paired articulation, subtle shading and rhythmic alteration. (Incidentally, Chopin used Moscheles’s opus 70 often in his teaching.³⁸³) Such short fingerings could also signal a more caring, finer grouping than one would tend to give some chromatic lines

³⁸⁰ See, however, Sheets-Johnstone, ‘Bodily resonance’, in *Moving Imagination*, ed. by Helena De Preester (Amsterdam & Philadelphia: John Benjamins, 2013), pp. 19–36.

³⁸¹ As already mentioned, one could occasionally think of the ‘hidding thumb category’ as abetting an extreme kind of ‘long’ fingering, as it helps delay any shifts for as long as possible—a kind of ‘six-finger position’ if you will.

³⁸² Moscheles, *Études*, p. 72.

³⁸³ But perhaps primarily the first book, as we may gather from Goebel-Streicher, p. 415: ‘Take a look at the second book [of Moscheles’s opus 70]. You’ll find few that you’ll like, maybe one or two’ (*Voyez le second cahier, il y a peu qui vous feront plaisir, mais une ou deux cependant*). Surely he meant no. 17, as not only is it quite beautiful but its figuration closely resembles Chopin’s op. 28/5 prelude, which may suggest Chopin used it as a model.

(see **Example 5.2** below). Note also how the same approach seems to imply two-note groupings for the LH as well in bars 31–32.

[Andantino ♩ = 108]

Ex. 5. 2 Moscheles, etude Op. 70 No. 17,³⁸⁴ 31–34

Another beautiful example of a short fingering put to expressive use can be found in the Dubois exemplar:

[Sostenuto]

Ex. 5. 3 Prelude Op. 28 No. 15,³⁸⁵ 14–18 (Dubois)

Here, the short 2 1 2 on the turn in bars 15 and 17 (as opposed to, for example, a more expedient 4 3 2 1) forces a slower, more ‘speaking’ delivery by taking advantage of the time and effort it takes for 2 to cross over 1 and back—which echoes the quaver movement right before.

As briefly touched upon in the previous chapter, whether the hand expands or contracts on or off the beat is another crucial recurrent question in much of this repertoire. Indeed, the two situations elicit drastically qualitative dynamics of movement even in simple scale passages—something Clementi demonstrates exhaustively in *Ped.* A case in point is whether crossing-over or passing-under

³⁸⁴ Moscheles, *Études*, p. 72.

³⁸⁵ F-Pn: Rés F. 980 (I, 4), p. 5.

coincides with the beat or not in order to highlight harmonic features or prioritise melodic flow, respectively.³⁸⁶ Indeed, some players even well into the twentieth century bemoaned how unthinking adherence to standardised fingerings can obliterate such subtleties (both subjectively and objectively), for musical content often will not bend to such predetermined arrangement without also suffering for it.³⁸⁷ Incidentally, classing passing-under and crossing-over under a single category (as both C.P.E. Bach and Hummel do, presumably to simplify things) is inherently problematic, for they are indeed quite distinct kinaesthetically: the thumb is either on the move or it acts as pivot. Kurpiński's two separate categories for these was an extraordinary move for its time, and yet another reason to take an interest in the *Wykład*, even besides its connection to Chopin (which in any case may be more tenuous than one would wish).³⁸⁸

Perhaps because the historical performance movement has tended to focus mostly on pre-1800 repertoire (at least as far as keyboard music is concerned),³⁸⁹ the secondary literature usually dwells more on how fingering assists with various types of detached articulation, that is, with making the effects of any passing-under or crossing-over explicitly *heard*. Thus, to give just the most celebrated example, crossings of long over short fingers to effect crisp-sounding slurred note pairs. Yet the gradual establishment of a predominantly legato touch during the late eighteenth century, associated especially with English-action instruments, brought about a sophistication in deliberate uses of fingering for expressive detachment (as well as various kinds of gestural legato) that go well beyond such clear-cut uses. Once again, the pedagogical repertoire is the vehicle of choice to explore the many grey areas this phenomenon affords. The secondary literature tends to take this articulated legato to be simply 'a stage in the overall progression between the more detached style and one that was fully connected',³⁹⁰ which 'became consolidated

³⁸⁶ Clementi's E minor *exercice* is quite worth learning because of the great variety it affords in that regard.

³⁸⁷ See, e.g., Artur Schnabel, *My Life and Music* (New York: St. Martin Press, 1963 [1961]), p. 129.

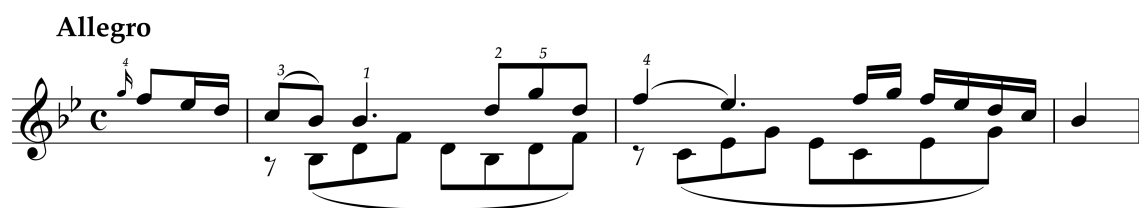
³⁸⁸ See Izabela Chopin's letter above, p. 69.

³⁸⁹ For an excellent overview of this persistent gap in the research, though mostly from an organological perspective, see Ziad Kreidy, *Les avatars du piano* (Paris: Beauchesne, 2012).

³⁹⁰ McGlynn, p. 8.

over the next two decades'.³⁹¹ This is arguably a premature—and mistaken—conclusion. The fingering evidence points to much of the repertoire routinely thought today of as more or less 'fully connected' to be in fact not quite so straightforwardly so—it is really not an 'either off or on' kind of situation where only sonic results count, but one which subtly includes gesture and kinaesthesia as indispensable elements. Thus, somewhat against current conventional wisdom, many other contemporaneous fingering indications corroborate Schenker's assertion that certain kinds of *artikulierendes Legato* would still apply to Beethoven's late-period sonatas—and even to much music by Chopin.

Let us begin with an earlier case where a simple hand shift makes all the difference in terms of basic expression:



Ex. 5. 4 Mozart, Sonata KV 333 (315c) (I),³⁹² 0–3 (Autograph)

Though perhaps more Hummelian than Mozartian and thus (possibly) more legato-oriented than Mozart's original conception,³⁹³ the proposed fingering affords not just grouping the upbeat semiquavers but also an organic *silence d'articulation* by virtue of making the crossing-over coincide with shifting motion towards the downbeat.³⁹⁴ The case for finger choice as aligning musical content, bodily expression and kinaesthesia could not be clearer, though of course the effect works

³⁹¹ Ibid., p. 102. For a contrasting view, certainly much closer to that being presented here, see Rothstein, 'Heinrich Schenker as an Interpreter', 21.

³⁹² Berlin, Staatsbibliothek zu Berlin (D-B: Mus.ms. autogr. W.A. Mozart 333, fol. 1^r), transcribed into a single staff for convenience. Coincidentally, the first three digits of the proposed fingering match those in Mozart, *Sonaten für Klavier zu zwei Händen*, ed. by C.A. Martienssen and W. Weismann (Leipzig: Peters, n.d.[c. 1938]), p. 204.

³⁹³ See, e.g., Jenkins, p. 102: '[...] the "ordinary" touch of the eighteenth century will be defined as that in which two consecutive notes in a scalic passage are never held at the same time'.

³⁹⁴ A term for audible silence between notes which first appears in Marie-Dominique-Joseph Engramelle, *La tonotechnie, ou l'art de noter les cylindres* (Paris: Delaguette, 1775), p. 20. A most useful overview is Jenkins, pp. 223–26. Incidentally, Schachter, '20th-Century Analysis and Mozart Performance' amply demonstrates how slurs in music of the Classical period do not always imply a decrescendo within them.

best with the quicker decay of Viennese-action instruments of the period. Almost regardless of instrument type, however, and certainly subtle even with ideal listeners in mind, the main point here is that the effect of this hand shift proves unmistakable *on the player*. For example, starting the upbeat with 5 while aiming for the same articulation effect would result in drastically different kinaestheses. The point here is not to argue for the correctness of any one fingering (though I do have a preference), but rather to show how these possibilities make a difference phenomenologically.

In this connection, the potentially expressive hand shift in the opening of the first movement of Chopin's Sonata opus 58 (meant of course for a quite different type of piano) does ring similar. Though the only extant original fingering in these few bars is the 3 on $f\sharp^1$ in Chopin's hand (and a similar lone 3 on another $f\sharp^1$ in bar 5) which appears in the Dubois exemplar, arguably Chopin implied something like the following:

Allegro maestoso

Ex. 5.5 Sonata Op. 58 (I),³⁹⁵ 0-4 (Dubois)

Note that, in contrast to the Mozart example, the slur goes over the barline and thus raises the possibility of articulated legato. Whatever the player's decision in that regard, he may still want to use the crossing-over shift expressively by riding its distinct qualitative dynamics. Now compare the fingering solutions in **Examples 5.4** and **5.5** above with the following:

³⁹⁵ F-Pn: Rés F-980 (I, 7), p. 2.

Allegro maestoso

Ex. 5. 6 Sonata Op. 58 (I), 0–4 (F2) with Banowetz’s fingering superimposed

Banowetz resorts to this fingering because ‘starting the piece cold, being a bit tense, or having a slight amount of dampness on the tip of the third finger can easily result in slipping off the F-sharp’.³⁹⁶ However dependable the outcome, his solution does feel impossibly static and pedestrian in comparison—to be perfectly blunt, what is the player to express if *all* movement busies itself with accuracy and security?

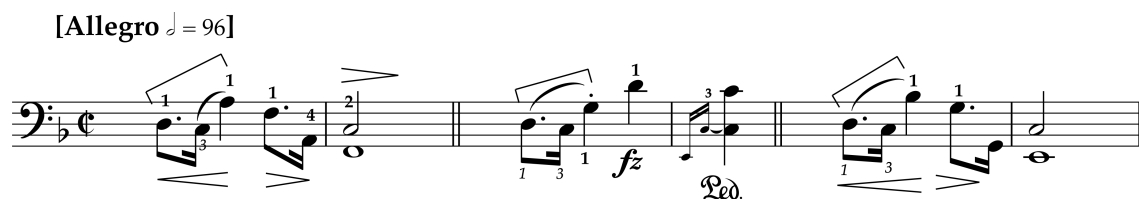
An example of the very opposite situation takes place at the closing of etude 8, where it would be more temptingly comfortable to shift within the final RH arpeggio instead of using all fingers successively (see **Example 5.7** below). To be sure, a shift would likely result in more power, but at the cost of breaking the gesture. As we will see in Chapter 7, the proposed fingering should cause very minor if any discomfort when using a noticeable outward tilt of the hand.

[Allegro ♩ = 88]

Ex. 5. 7 Etude 8, 93–95 (F1)

³⁹⁶ Banowetz, p. 82.

Incidentally, one of the most important fingering traits of this etude is in fact an expansion of the LH to varying degrees of expression:



Ex. 5. 8 Etude 8,³⁹⁷ 2–3; 4–5; 6–7 (*Stichvorlage*)

If pressed to speculate on the intended expression here, I would probably bet on some dislocation for the goal of every expansion (i.e., a, g-d¹ and b^b), that is, to play (at least) those notes somewhat late with respect to the rest of the texture. Making the most of the expansions themselves by noticeably taking time for them (as the hairpins may also suggest) does also seem worth considering. Indeed, *pace* Banowetz, why *else* use these expansions when a more static fingering with the hand right above the notes would deliver them perfectly metronomically and slip-free?

Leaving aside for a moment the historical performance movement's predominant focus on eighteenth-century repertoire, it seems fair to say that in general piano pedagogy has long maintained evening out *all* passing-under or crossing-over activity to be the soundest technical approach. Indeed, the historical performance literature remains mostly silent on the many different ways one could handle predominantly legato playing of this period—despite how fingerings in the pedagogical repertoire make such variety abundantly clear.³⁹⁸ There seems to be a big gap in the research here, one which greatly matters because it would be hard to argue that such kinaesthetic variety does not also bleed through in performance. Yet that is precisely the utilitarian disconnect that Banowetz and many others

³⁹⁷ Warsaw, The Fryderyk Chopin Museum (PL-Wmfc: M/195, p. 1). I suspect Chopin meant the first slur to be as long as the others, which would make more sense motivically (cf. *ibid.*, p. 2, bar 16).

³⁹⁸ Even Jenkins, the classic study on the rise of predominant legato playing, does not give much thought to such subtle gradations, preferring instead a schematic progression from ordinary touch through a (brief) transitional phase of articulated legato to a fully legato pinnacle around 1800—and from then on basically the same as today's. But the story told by the fingerings themselves is quite a bit more complex—and the articulated legato phase quite a bit longer.

propose—and similar attitudes are not unheard of in historical performance circles either.

As a direct illustration of this problem, the reader may want to try out both the original and the alternative fingerings over them in **Examples 5.9** and **5.10** below. Keeping a quiet hand and an overall calm deportment does seem far more challenging when using the latter.

[Allegro vivacissimo]

The musical score for Example 5.9 consists of three staves of music in E major, 12/8 time. The first staff begins with a treble clef and a key signature of three sharps (F#, C#, G#). The tempo marking is [Allegro vivacissimo]. The music features a series of eighth and sixteenth notes with various fingering numbers (1-5) indicated above the notes. The second staff includes a dynamic marking of *p* (piano) and a fingering of 'ou 3 4' at the end. The third staff continues the melodic line with further fingering indications.

Ex. 5. 9 Clementi, E major *exercise*, 17–24

[Canone perpetuo]

The musical score for Example 5.10 is in E major, 6/8 time. It begins with a treble clef and a key signature of three sharps (F#, C#, G#). The tempo marking is [Canone perpetuo]. The music features a series of eighth and sixteenth notes with various fingering numbers (1-5) indicated above the notes. The score includes several slurs and dynamic markings.

Ex. 5. 10 Clementi, B major *exercise*, 12–18

That is, the original kinaesthetics turn out to be irreproducible by more standard means, as the player would need to make extra efforts to mask crossing-overs and passing-unders to approximate the sonic results the original fingerings tend to promote. While there is of course no *moral* obligation to use these original fingerings (or any other for that matter), giving this repertoire its due seems to demand at the very least asking ourselves what any indications are there for. Indeed, it is shocking how much of a determining factor fingering can be when assessing the quality of any given music *as performance*—as is clearly very often the case with *Ped.*

Summing up: as regards much early nineteenth-century pedagogical repertoire 1) some of the expected variety of articulation within predominantly legato playing we simply would not have access to absent fingering indications, and 2) because of fingering indications, even absolute or near-absolute legato situations involve more gestural and therefore kinaesthetic variety than usually thought. We should also bear in mind that these tenets are extremely challenging to generate: it is very doubtful anybody today (even those with vast knowledge of and practical experience with fingerings from this period) could approximate the sophistication shown by Clementi's and Hummel's indications.

The (So-Called) Rule of Regularity³⁹⁹

Neither referring to a technique nor a function *per se*, this sub-heading nonetheless vaguely suggests there to be an alliance between finger choice and perfectly even passagework playing. While this connection may be a generalisation, it is important to recognise it as a widespread aesthetic assumption in today's piano performance world before constructing a critical response. Thus, let us first briefly overview the issue of regularity mainly in terms of finger *order*, postponing more in-depth discussions of inequality of outcome for the case studies that follow.

The term refers to the use of 'a similar fingering [...] when the same or similar passages recur within a single piece of music', even if it conflicts with some

³⁹⁹ The term's very first (and very much in passing) appearance in English seems to be Parncutt et al., 'An Ergonomic Model of Keyboard Fingering for Melodic Fragments', *Music Perception*, 14/4 (1997), 341–82 (375): 'The principle, sometimes called the "rule of regularity," also played an important role in the system of Kullak (1876) and was central to that of Werkenthin (1888), a pupil of von Bülow'. Note that this article does not trace the term's origins any further, though the authors acknowledge Martin Gellrich 'for this information' (ibid., 375n37). For a more fleshed-out discussion (though still vague as to origins) see Gellrich and Parncutt, 12. I surmise the term to be possibly Gellrich's own, and its alleged historical status as portrayed in Parncutt et al. to be the result of a misunderstanding or a mistranslation. But the term is certainly useful, whatever its origin. The passage Gellrich most likely conveyed to Parncutt et al. is Adolph Kullak, *The Aesthetics of Pianoforte-Playing*, 5th edn, trans. by Th. Baker and ed. by Hans Bischoff (New York: G. Schirmer, 1898 [1861]), p. 161: 'For one characteristic rule regulates the fingering in all these passages. This rule is based on strict regularity, on the consistent recurrence of the same series of fingers. Nothing so develops the confidence of the fingers in running passages as the fixed track of their course of movement'.

rule.⁴⁰⁰ Barnum credits Hummel with first stating this concept explicitly while also deeming it ‘so obvious that one wonders why Hummel places it first among his fingering categories’.⁴⁰¹ But the concept seems to predate even Hummel’s *Anweisung*, as a crude version of it appears as early as 1797:

In more than half the [major and minor] keys it is necessary to place the thumb on a narrow key, if one wants to avoid a poor fingering. Therefore, I consider it more intelligent to use the same fingers in all keys, and in this to preserve uniformity. Thus the beginner has a secure rule on which he can depend, and he will not go astray.⁴⁰²

Probably even older descriptions or examples obtain. In any event, and nearer the topic at hand, Hummel’s categorisation states precisely the kind of hurdles players are likely to encounter if they stick to passing-under and crossing-over at any cost, for

the too frequent employment of it is injurious, particularly when it recurs too speedily. To avoid this, we must employ the same succession of fingers when a passage consists of a progression of similar groups of notes.⁴⁰³

While that may strike Barnum and many others as too obvious, the particulars are not, and are better confronted on a case-by-case basis.

We need to briefly take issue with a couple of common misconceptions once again. First, as already touched upon, the belief that such regularity of finger choice should *also* result in rhythmic or timbral equality. And second, that finger choice in most such situations is to be ‘masked’, that is, its features not *heard*—at the very least in terms of timing. Ironically, the roots of these views may harken back to a romantic idea James Q. Davies aptly dubs ‘metapianism’,⁴⁰⁴ and which, hard as it may be to believe, still has some currency today:

A whole raft of institutions, conservatories, music teachers, and even academic scholarship has long been devoted to this faintly ridiculous idea:

⁴⁰⁰ Parncutt et al., 375.

⁴⁰¹ Barnum, p. 73.

⁴⁰² Robert Rhein, ‘Johann Peter Milchmeyer’s *Die wahre Art das Pianoforte zu spielen*: An Annotated Translation’ (D.M.A. dissertation, University of Nebraska, 1993), pp. 38–39. See, however, *ibid.*, p. 197, for a contemporary review which negatively singles out this aspect of Milchmeyer’s treatise.

⁴⁰³ Hummel, *Anweisung*, p. 106, II/p. 3.

⁴⁰⁴ Davies, p. 171.

that hands have little to do with pianistic expression, interpretation, or “the music itself.”⁴⁰⁵

And so, many a rule-of-regularity situation would seem to come down to this choice: either go along with effectively dematerialising the ‘body behind the music’ (to use Doğantan-Dack’s phrase),⁴⁰⁶ or consider employing finger choice deliberately to effect rhythmic or dynamic *inequality*. Purposely going down the latter route may not come naturally to many players today, however, for such unevenness—especially in passagework—tends to come across as incompetence or whimsy. Indeed, conveying said inequality as perfectly willed rather than the result of technical incompetence may be one of the greatest challenges facing research-led historical performance today.⁴⁰⁷ A further difficulty involves mustering the necessary conviction from within rather than from historical recordings or writings on performance (however informative or inspirational those may be as guidelines) when using such (perceived to be) obsolete techniques of expression.⁴⁰⁸ Thinking as pragmatically as possible here, then, the expectation of near-absolute-equality-in-passagework through the rule of regularity may be worth challenging only if and when alternatives actually ring true with our personal individuality—in other words, when the need to express the latter overrides any desire for superficial dependability and note-perfection.

Subtle inequality in passagework is in fact one of the most salient characteristics of Chopin’s fingering usage in the Etudes, and which the indications eventually lead us to through assiduous practice. To be sure, artistic research practitioners should probably also let Chopin’s well-known insistence on calmness and *souplesse* be their guide (together with some of the pedagogical repertoire discussed in the preceding chapters) in their tryouts. That should make one

⁴⁰⁵ Ibid., p. 176.

⁴⁰⁶ Doğantan-Dack, ‘The Body Behind the Music’, 450: ‘Performance is traditionally the means through which works of music reach audiences, and it is performance that makes the physicality of the body behind music immediately evident to listeners’.

⁴⁰⁷ See Snedden, p. 19.

⁴⁰⁸ See, however, Keith Hill and Marianne Ploger, ‘The Craft of Musical Communication’, in *Orphei Organi Antiqui: Essays in Honor of Harald Vogel*, ed. by Cleveland Johnson (Orcas, WA: The Westfield Center, 2006), pp. 229–49, a book chapter deserving a much wider readership in that regard.

receptive to any potential rhythmic inequality resulting from finger choice—equality does not necessarily follow even in seemingly obvious rule-of-regularity situations.

Take for example the opening of etude 4, where most of the original sources show a clear preference for the rule of regularity:

Ex. 5. 11 Etude 4,⁴⁰⁹ 0–3 (Stirling)

In addition to the annotation in the Stirling exemplar, Zaleska-Rosengardt's also features 1 on the same notes of beats 2 and 3 (though probably not in Chopin's hand).⁴¹⁰ The usual argument for temporal equality in such cases is that a uniform fingering pattern leads to automatism through 'chunking', thus precluding conscious awareness and control.⁴¹¹ Yet, while part of the activity certainly lies outside our conscious awareness during performance, much of the movement involved during such a succession of chunks in fact does not: when using the fingering shown in **Example 5.11** above, the player frequently needs to move the whole upper extremity slightly into and away from the nameboard (which also adds some of the momentum needed at, or close to the indicated tempo) to adjust for

⁴⁰⁹ F-Pn: Rés. Vma 241 (I, 10), p. 15.

⁴¹⁰ Paris, Bibliothèque Polonaise de Paris (F-Ppo: FN 15818 (a), p. 15). For some works, Zofia Zaleska owned copies of German and French editions, the latter being more likely to carry any indications originating from Chopin. The exemplar as a whole, however, is usually excluded from discussion (see *PaT*, p. 234–38). But a case for some of the annotations can be made when (as here) her French copy shows a change of mind over previous ones in her German copy. In other words, even though the writing may not be in Chopin's hand, they could still have been shown or even dictated by him.

⁴¹¹ See, e.g., Chaffin, Imreh and Crawford, pp. 67–68: 'When we see a familiar word, we recognize it as a unit, not as individual letters. This is called *chunking*. [...] The ability to chunk information allows us to recall much more information in a memory span task for familiar materials than in the same task with unfamiliar materials. It is not that our working memory capacity has changed [...]. It is just that we are able to handle information in bigger chunks when we have more experience with it'.

the thumb on the black keys. Even this tiny detail in and by itself would warrant noticeable temporal inequality for expressive purposes should we wish to pursue it, because such movement certainly *can* be felt and experimented with despite the chunking. We would of course need to be on a more rhetorical wavelength, one where such temporal flexibility would not only not be condemned, but celebrated: if anything, it takes *more* kinaesthetic finesse and artistic imagination to effect such irregularities meaningfully than does keeping to an externally imposed beat and robotically equalise the figuration.

Other more or less obvious examples in the Etudes are:

[Allegro $\text{♩} = 88$]

Ex. 5.12 Etude 8, 78–79 (F1)

[Allegro $\text{♩} = 88$]

sempre legatiss

Ex. 5.13 Etude 8, 85–86 (F1)

[Allegro $\text{♩} = 120$]

*

Ex. 5.14 Etude 15,⁴¹² 69–70 (Dubois)

Another, related characteristic of Chopin's usage is the omission of one or more fingers to elicit a kind of rhetorical hesitation.⁴¹³ That is, if we keep to a quiet

⁴¹² F-Pn: Rés F. 980 (I, 2), p. 12. Note also the potential hand redistribution here: the fingering below the staff may be a suggestion to end the trill with the LH, which would avoid some awkward turning with 2 and thus liberate the RH for the ensuing flourish.

⁴¹³ See *PoM*, p. 73n16: 'One might claim that terms such as swift and weak describe movement directly, while terms such as "hesitant" describe an affective state derivative from movement. The claim is a provocative one, bearing out the etymology of the word "emotion".'

hand (one thus free of any jolts or contortions) while also stay clear of a slavishly metronomic beat, this fingering technique can facilitate a perfectly timed little tweak because, well, it *takes* time. The barely noticeable effort of the fingers ‘getting there’, yet without trying to do so by mechanically keeping in time, does make a huge qualitative difference. Below are some examples, organized from most obvious to slightly contentious:

[Vivace ♩ = 116]

Ex. 5.15 Etude 5, 22–24 (F1)

[Allegro ♩ = 88]

Ex. 5.16 Etude 8, bars 27–29 (F1)

[Allegro ♩ = 88]

Ex. 5.17 Etude 8, bars 79–80 (F1)

In addition to hesitation (and more than a hint of syncopation), the last two cases strongly imply some hand-pedalling which gesturally connects the non-consecutive 2 2. In that regard etude 8, bar 79 (see **Example 5.17** above), is the most striking, and a highly unlikely choice to arrive at on our own: the 2 2 on c^3-bb^2 on the second beat parallels the couple of similar specimens in bar 28 (see **Example 5.16** above), despite being embedded in a different figuration altogether. Note once again the off-beat inflection points in all these examples, and how momentous a decision it

can be whether to make whatever the fingering ‘event’ is coincide or not with metrically strong points. Both possibilities have their uses and are contingent upon the *interaction* of (structural) content, desired expression, and kinaesthesia.

As to the more contentious kind, I submit that the 2/4 on the downbeat of bar 25 in etude 4 may also belong to the ‘hesitation’ category:⁴⁴

[Presto ♩ = 88]

Ex. 5. 18 Etude 4, 25–27 (F1)

Many pianists do away with the original fingering in this passage (along with its implied distribution of two parts per hand),⁴⁵ a habit which probably makes the argument for the original fingering much harder to make than it should. There is much more indeed to discuss about this passage, a veritable mine of performance practice information to which we will return in full in Chapter 6.

Let us end this section with a more obvious example (though no less effective) of omission of fingers from etude 8:

⁴⁴ A strange proposition, to be sure, if we take temporal equality to be paramount. A more usual reading would take this 2/4 to be a misprint instead, e.g., Howat, p. 58: ‘[F]ingering ‘2’ to upper note RH chord 1 (doubtless misprint for ‘3’); here by analogy with bars 26, 27’.

⁴⁵ Ekier and Kamiński (p. 4), and Badura-Skoda (p. 20) all suggest taking three parts with the left hand, probably assuming that this can lead to the same effect despite the radically different kinaesthetics.

Ex. 5.19 Etude 8,⁴¹⁶ 13–15 (Dubois)

This purposely effortful fingering ensures our awareness of the broken parallel thirds and the top line c^4 - b^3 - a^3 (especially of the passing tone b^3) on the last beat of bar 14.⁴¹⁷ Although it can surely lend itself to many individual kinds of expression, very likely some temporal expansion would score high if one were to draw concrete statistics. In addition, the fingering may also hint at subtle quotation of Maria Szymanowska's opening number from *Vingt exercices et Préludes*, also in F major, a fairly well-known thread of influence.⁴¹⁸

Mnemonic

An extremely important (though somewhat neglected) general function of fingering has to do with memory in performance, as already discussed at some length in Chapter 2.⁴¹⁹ The simplest illustration is a phenomenon we could term 'signalling', whereby some fingering feature acts as a signpost by contributing key kinaestheses during performance.⁴²⁰ Compare for example the following two excerpts, which exhibit extremely similar material but purposefully contrasting fingerings:

⁴¹⁶ F-Pn: Rés F. 980 (I, 1), p. 32.

⁴¹⁷ Note the similarities in terms of fingering usage with Hummel's etude 9, last beat of bar 4, RH (Example 4.3, p. 95).

⁴¹⁸ See, e.g., Golos, 443.

⁴¹⁹ See pp. 35–40 ('The Role of Finger Choice in Kinaesthetic Memory'). 'Mnemonic' here also refers less to recalling 'the music itself' or bolstering 'muscle memory' than to real-time awareness of the choreography of movement needed in and for performance.

⁴²⁰ In addition to the late eighteenth- and early nineteenth-century examples cited so far, Schenker's fingerings for the Beethoven Sonatas contain masterful examples of fingering used for this purpose (e.g., different fingerings for identical bits in first and second endings).

[Allegro]

Ex. 5.20 Handel, Fugue in E minor,⁴²¹ 50–52, Hummel's fingerings

[Allegro]

Ex. 5.21 Handel, Fugue in E minor,⁴²² 65–67, Hummel's fingerings

Even when playing from the score, anticipating the slightly different (and awkward) hand distribution in the latter due to the fingering prevents unwittingly slipping into the former. To show a single example of this phenomenon in Chopin:

[Presto ♩ = 88]

Ex. 5.22 Etude 4,⁴²³ 9–11 (Dubois)

The deceptively straightforward 1 3 2 on the downbeat of bar 10 helps accomplish at least two mutually related things: it prepares for some of the differences in articulation and dynamics as compared to the opening (where 3 took the first

⁴²¹ Hummel, *Anweisung*, p. 384, II/p. 304.

⁴²² *Ibid.*, p. 385, II/p. 305.

⁴²³ F-Pn: Rés F. 980 (I, 1), p. 15.

semiquaver of bar 2 instead) should we wish to effect them,⁴²⁴ but it also signals these differences kinaesthetically thus reinforcing our place in the music. Though these two cases may seem trivial, such signposting through fingering does prevent many a ‘wrong turn’—possibly a more common occurrence and therefore cause for performance anxiety than many pianists would like to admit.⁴²⁵ Note once again how this notion deviates somewhat from seemingly established views of memory in piano performance, which hold that reliance on standard fingering patterns considerably lightens cognitive load. We could contend that, even though standard fingerings may occasionally do just that, if they do not also relate organically to musical content and expressive intent they can and often do *derail* our awareness during performance. In this regard, I submit that keeping 1 3 for the last e²-f² in bar 9 (see **Example 5.22** above) provides not just ergonomic pivoting for the short fingering 1 3 1, but quite memorable kinaesthetics as well. That is, even though it would seem more natural there to use 1 2 1 (thus heeding the more or less implied rule of regularity up to that point as well as the indicated fingering in bar 10), 2 on the last f² in bar 9 could (depending on our level of concentration at that instant) easily make us default to the opening’s fingering and play 3 again instead of the indicated 1 on the next downbeat g²—presumably what we set out to do in the first place if we wished to follow Chopin’s indication. In short, to use 1 2 1 there may be just too close to the other fingering for comfort and security.

⁴²⁴ All the first editions show marked differences in that regard. Sadly, the only surviving (working) autograph, PL-Wmfc: M/3249, contains no fingerings whatsoever.

⁴²⁵ Fending off inattention is a very prominent feature of professional piano playing, especially of the conventional score-less variety. With or without a score, we *do* need as much bodily awareness and ‘consciousness handrailing’ as possible, not fingerings which may potentially lead to perilous mind-wandering. For a plausible evolutionary explanation of our very poor immediate memory as compared to some non-human primates (known as the ‘cognitive trade-off hypothesis’), see Tetsuro Matsuzawa, ‘Cognitive development in chimpanzees: A trade-off between memory and abstraction’, in *The Making of Human Concepts*, ed. by Denis Mareschal, Paul C. Quinn and S.E.G. Lea (Oxford & New York: OUP, 2010), pp. 227–44 (pp. 239–40). That the acquisition of language in humans may have also led to diminished—impaired, even—bodily awareness and immediate memory is an unsettling idea, to put it mildly.

Analytic

This function tends to be the most startling and to draw the most scepticism, especially when it collides head-on with pianists' eagerness for utilitarian dependability through various redistribution techniques.⁴²⁶ And yet finger choice can not only prod *audible* 'performer's analyses' but occasionally even act as structural disambiguation devices,⁴²⁷ much as diacritic marks do in some written languages. We will see in some detail how this works in practice in Chapter 6.

Arguably, the most obvious and frequent case of analytic fingering involves some kind of part-crossing, yet even the most innocent-looking thumb interlocking can make some players scramble for redistributions which end up upsetting key voice-leading or gestural elements, or both.⁴²⁸ Take the following example from Adam's *Méthode* (which undoes the part-crossing on the downbeat of bar 6) as compared to Hummel's solution:

⁴²⁶ Judging here mostly from many conversations (and occasional arguments) with some outstanding pianists. Redistribution is worth briefly touching upon now and then (especially in Chapter 8), if not to devote as much space as does the most recent 'mainstream' monograph on piano fingering, Banowetz, pp. 63–93. Exceptionally perceptive views on the matter can be found in Ana Telles, 'Piano Fingering Strategies as Expressive and Analytical Tools for the Performer', in *Contemporary Piano Music: Performance and Creativity*, ed. by Madalena Soveral (Cambridge: Cambridge Scholars Publishing, 2021), pp. 151–81. Interestingly, however, many of the 'unconventional [fingering] techniques' Telles describes (pp. 156–60) as being the bread and butter of contemporary music specialists were commonly in use already in the early nineteenth century. The most recent monograph on note distribution, Michael Clark, 'A History of Keyboard Hand Division: Note (Re)Distribution in Keyboard Music from the Renaissance to the Twentieth Century' (D.M.A. dissertation, Rice University, 2021) is certainly the most comprehensive to date.

⁴²⁷ A relevant discussion on this function of finger choice can be found in Swinkin, 'Keyboard Fingering', 13–15.

⁴²⁸ See, e.g., Banowetz, p. 79.

[Allegro]

Ex. 5. 23 Handel, E minor Fugue, 4-7,⁴²⁹ with Adam's fingerings

[Allegro]

Ex. 5. 24 Handel, E minor Fugue, 4-7,⁴³⁰ with Hummel's fingering

Incidentally, detailed comparison of these two sets of fingerings in their entirety would prove very instructive to the curious player, as Hummel may have been motivated by a desire to improve upon Adam's occasional awkwardness and

⁴²⁹ Adam, *Méthode*, p. 204.

⁴³⁰ Hummel, *Anweisung*, p. 382, II/p. 302.

weaknesses.⁴³¹ For example, even obviating radically different ways of playing Adam's redistribution in bar 6 (and the different ways listeners might perceive it), it does seem to undermine a key contrapuntal element while restricting the player's overall expressive range of movement. Adapting Bamberger's words for the occasion, one could say that Adam's fingering here results in movement that not only does *not* 'direct the player's hearing' or 'direct his fingers toward achieving what he hears',⁴³² but positively confuse him.

The eleven notated instances of thumb interlocking in etude 13 (see **Example 5.25** below) represent a glorified case of this type of analytic fingering.⁴³³ It makes for radically different experiences for the performer—which should ultimately convey, *however subtly*, also to the listener:

⁴³¹ See also Carl Czerny, *Supplement (oder 4^{ten} Theil) zur grossen Pianoforte-Schule* (Vienna: Diabelli, n.d. [1846]), pp. 150–55. Readers could in turn judge for themselves whether Czerny's are an improvement over Hummel's (and/or Adam's) or not.

⁴³² Bamberger, 245.

⁴³³ Here 'analytic' again refers more to the performer's body management than structure, as these fingerings force ample movement which redistribution would cancel out. It is up to players to decide for themselves whether such restrictions of motion match their desired expression (and hearing) or not. Arguably, if Chopin's notation is somewhat prescriptive in this case, it is certainly *not* to make things unnecessarily difficult for the player.

[Allegro sostenuto ♩ = 104]

The image shows a musical score for a piano etude. It is in G major (one sharp) and 3/4 time. The tempo is marked 'Allegro sostenuto' with a quarter note equal to 104 beats per minute. The score is divided into three systems. The first system features a right-hand melody with triplets and a left-hand accompaniment with 'Red.' markings. The second system includes a 'cres' (crescendo) marking. The third system includes 'cen-' and 'do' markings. Dynamics include 'f' and 'p'.

Ex. 5. 25 Etude 13,⁴³⁴ 7–9; 28–29; 32–35 (Dubois)

Let us now briefly consider an analytical type of fingering standing right at the edge of the purely subjective: the simultaneous use of two fingers on the same key. Given his background, knowledge, and use of the pedagogical repertoire in his own teaching, it would be indeed strange if Chopin did not make use of this effect, so dear to clavichordists.⁴³⁵ Using two fingers on the same note occurs most naturally with unisons in a polyphonic context, as Türk points out:

The unison is played with one finger only when it occurs in a two-voiced combination to be played by only one hand [...]. If both hands come together

⁴³⁴ F-Pn: Rés F. 980 (I, 2), pp. 1, 3–4.

⁴³⁵ Arguably, the effect of this technique is even more noticeable on a clavichord than on any type of piano because of the need to maintain pressure on the key and thus contact with the tangent and string vibration.

in unison, then the key is played by one finger of the right hand and also one of the left hand (consequently with two fingers).⁴³⁶

Closer to our topic, here is a nice example from Hummel:

[Allegro]

Ex. 5. 26 Handel, E minor Fugue,⁴³⁷ 12–13, with Hummel's fingerings

Although Chopin's Etudes probably do not lend themselves to this technique too often due to the mostly very brisk figurations, there are a few situations where it does prove useful and likely implied by Chopin himself (in the following taken by one and the same hand, *pace* Türk):

[Allegro $\text{♩} = 69$] *8^{va}* -----
loco

Ex. 5. 27 Etude 18, 47–49 (F1)

Note, incidentally, how Czerny's only use for this technique is merely quantitative and devoid of analytic implications, that is, simply a means to increase dynamic power.⁴³⁸ But occasionally Chopin's music does also lend itself to such quantitive

⁴³⁶ Türk, *School of Clavier Playing*, trans. by Raymond H. Hagg (Lincoln & London: University of Nebraska Press, 1982), p. 156. See also Kurpiński, p. 48, for a couple of explicit examples.

⁴³⁷ Hummel, *Anweisung*, p. 382, II/p. 302.

⁴³⁸ Czerny, *Complete Theoretical and Practical Piano Forte School, Volume 2*, trans. by J.A. Hamilton (London: R. Cocks & Co., n.d. [1839]), p. 169: 'Cases occur in which a particular key must be struck with such unusual force, that a single finger would run the risk either of not being sufficiently strong for the purpose, or of hurting itself in the attempt. [...] This duplication of the fingers can only be

use of the technique, the most obvious being probably the simultaneous use of 4 and 5 (especially on black keys) in octave-playing involving fast skips:

[Presto $\text{♩} = 88$]

ff con piu fuoco possibile

Ex. 5.28 Etude 4,⁴³⁹ 71–73 (Dubois)

Or, in many other cases, whenever it is possible to provide some healthy support (in addition to force) by adding 5 to 4, which may also assist with some hand-pedalling:

[Allegro $\text{♩} = 88$]

f

grava ----- loco

Ex. 5.29 Etude 8, bars 89–93 (F1)

There seems to be no documentary evidence for this usage in Chopin, however. (The above couple of examples are merely personal preferences at present and only

used in some such peculiar case; and we must take care to calculate our strength, so as not to injure the key, put the strings out of tune, or break them altogether’.

⁴³⁹ F-Pn: Rés F. 980 (I, 1), p. 19.

meant to illustrate the point, rather than to exclude any other fingering possibilities.)

Let us now close this discussion by looking at a rather startling use of two fingers on the same key, one unrelated to either unisons or any strengthening of dynamic power:

[Allegro $\text{♩} = 100$]

Ex. 5.30 Clementi, *Gradus ad Parnassum* No. 28,⁴⁴⁰ 10–12

When used *successively*, no matter how quick and unobtrusive we may wish the (apparent) finger substitution in bar 11 to be, at the indicated tempo it inevitably results in a jerking kind of motion (and feeling).⁴⁴¹ The indication is simply shorthand for 5 and 1 arriving basically *simultaneously*, which also manages to quietly morph the hand into a very compact arrangement. All in all, this accomplishes an expressive octave expansion while keeping our proverbial quiet hand and forcing some hand-pedalling of the lower note as well—not too bad for a meagre single indication, one might say.

Although Chopin appears not to have explicitly notated this kind of practice either, the principles involved are certainly applicable in many situations. For example, in the F minor *nouvelle étude*:

⁴⁴⁰ Clementi, *Gradus ad Parnassum, or The Art of Playing on the Piano-Forte, Vol II* (London: Clementi, Collard & Collard, n.d. [1819]), p. 3. (All transcriptions of *GaP* hereafter from this edition.)

⁴⁴¹ This etude appears to have been another favourite in Chopin's own teaching. See Goebel-Streicher, p. 156: 'He let me play the Etudes from Clementi's 2nd Book [of *GaP*], especially the first [No. 28 in B major], which I had to play really fast and light as a feather, and with such original emphasis that it was wonderful' (Er ließ mich die Etüden aus den 2ten Heft von Clementi spielen, besonders die erste, die mußte ich sehr schnell und federleicht und mit einem so originellen Nachdruck spielen daß sie wunderschön wurde).

[Andantino]

cresc.

dim.

Ex. 5. 31 *Nouvelle étude* in F minor,⁴⁴² 9–21 (Autograph)

This use of two fingers is radically different from Czerny's: in addition to the effects given in the previous example, here the much more delicate situation may *also* induce the player to move in the slowest, pianistically most Tai Chi way possible lest the extra mass results in too much acceleration and unwanted accents.⁴⁴³ (The example shows a 'finger on *every* note', much to Ponce's chagrin but necessary to show how the effect might work in the context of a long cantabile line—while arguably also making quite *excessive* use of the simultaneous use of two fingers in the process.⁴⁴⁴)

The Chopin 'Problem'⁴⁴⁵ and Fingering Indications in the Etudes

Before moving on to the case studies, we need to consider a last couple of brief caveats. The existence of several authentic textual variants in the original sources of

⁴⁴² Chopin, *Manuscripts autographe musicaux Valldemossa*, 2nd edn (Valldemossa: Ferrà-Capllonch, 2019 [2003]), unpaginated facsimile. Note that, unlike the others, the proposed substitution in bar 14 is obviously of the successive kind.

⁴⁴³ See Howat, p. 11, for a fingering annotated into bars 9–17 of a *dépôt légal* copy of the *Mdm* (F–Pn: L-6598 (2)). This copy appears to have been mistakenly thought to be part of the Dubois exemplar by Bronarski's editorial team in the 1940s. After exhaustive detective work, Howat feels 'fairly safe now in opining that the fingerings in L-6598 (2) are not Chopin's' (pers. comm., 3 November 2021).

⁴⁴⁴ Note the wildly different effect of the variant fingerings in bars 19–20.

⁴⁴⁵ See Kallberg, 'The Chopin "Problem": Simultaneous Variants and Alternate Versions', in *Chopin at the Boundaries: Sex, History, and Musical Genre* (Cambridge, MA & London: Harvard University

the Etudes besets the transmission of original fingering indications almost as much as it does the rest of the musical text, to the point where we cannot rule out the possibility that some of the indications in the original editions may not be actually Chopin's.⁴⁴⁶ If, as Kallberg argues, a good grasp of this transmission 'problem' may be essential to understandings of Chopin's compositional process, the transmission (and evolution) of his thoughts on fingering may play a similar role in our understanding of Chopin's approach to performance. As the problem is pronounced enough even when narrowing things down to printings dating from Chopin's lifetime (therefore potentially supervised by him), it is probably best to refrain as much as possible from reference to later editions. Thus, if post-Chopin era editions are brought into the discussion it is mainly to help illuminate some isolated point. It would take several, overly dense volumes to compare fingerings of just the Etudes in the main editions from the post-Chopin era—much as such 'big data' projects could be of interest. Some commentary in the remainder of this thesis will, however, attempt to clarify some of the editorial quagmires involving fingerings, as occasionally even critical editions side with conventional ideas of 'what fingering is or should be there for' and are all too eager to change or 'update' Chopin's indications accordingly.

The existence of variants across sources (manuscript, printed, and student annotated copies) certainly does raise many thorny questions. Although many details of the transmission process are obviously of great interest to editors of Chopin's music—and performers curious to know (or anxious to adhere to) a good text, the question that concern us most here is that of *intent* laying behind any such

Press, 1996), pp. 215–28, and id., 'Chopin in the Marketplace: Aspects of the International Music Publishing Industry in the First Half of the Nineteenth Century', *Notes*, 33/3-4 (1983), 535–69, 795–824. See also Schachter, *The Art of Tonal Analysis: Twelve Lessons in Schenkerian Theory*, ed. by Joseph Strauss (New York: OUP, 2016), p. 32: 'One of the challenges in analyzing Chopin's music is that the problem of establishing a definitive text is more difficult with Chopin than with any other of the great composers of tonal music. In fact, one might say it ceases to be a problem because it's simply an impossibility'.

⁴⁴⁶ Thankfully, the problem does not seem to be as pronounced as in Hummel's op. 125, where the fingerings in the Haslinger, Farrenc, and Cramer, Addison & Beale editions occasionally differ wildly, perhaps hinting at the possibility that the process may have been left to in-house editors to some extent.

changes or variants. Indeed, such knowledge should be of great interest to the practical, imaginative musician as well. A key question is, then, do differences in fingering in the various annotated scores reflect Chopin's attention to individual students' strengths and limitations (as one could all too easily conclude), or rather point to a more flexible (even improvisatory) attitude to performance and expression than the 'paradigm of reproduction' would seem to dictate these days?⁴⁴⁷ In other words, could the extant fingering variants, beyond exemplifying solutions to various pianistic problems, also represent various *expressive possibilities* for performance of the very same musical material and even by the very same performer at different times? This bears reflection, because it could suggest that the (occasionally valid) argument in favour of individual anatomies may not hold as much water as usually thought.⁴⁴⁸ Such flexibility towards fingering would only seem to confirm Chopin's famously improvisatory attitude to performance, that he somehow '*never played his own compositions twice alike*'.⁴⁴⁹ Although the annotated scores hold plenty of promise in that regard, comparative study of them has perhaps focalised too much on local detail as opposed to how whole *sets* of fingerings unfold in time at the level of the individual student for whom the annotations were tailored. The latter approach should be of more interest to practice-led research for the simple reason that it reveals far more qualitative aspects of personalised performance than any isolated case of finger choice could.

'How Chopin Played' vs 'How to Play Chopin'

To be perfectly clear, and without wishing to downplay the merits and usefulness of tracing various traditions of Chopin performance through analysis of past editorial practices and/or sound recordings, this study attempts to come to terms with Chopin's *own* playing, however dim (and lacking in any comparably palpable data)

⁴⁴⁷ Cook, *Beyond the Score*, p. 3: 'The idea of music as sounded writing gives rise to what [...] I call the paradigm of reproduction: performance is seen as reproducing the work, or the structures embodied in the work, or the conditions of its early performances, or the intentions of the composer'.

⁴⁴⁸ See, e.g., Marty, *Vingt-quatre leçons*, p. 73, and *ibid.*, n95.

⁴⁴⁹ Hipkins, p. 7.

its afterlife may be today. To that effect, it aims to get ‘in the gloves’ of Chopin’s students by way of the fingering indications, challenging as they may often be to decode because we obviously lack the living master’s demonstrations. In other words, the focus lies squarely on conception rather than reception history, and is therefore inherently experimental.⁴⁵⁰ Jim Samson, for one, though dealing with musical works rather than performances, does consider the validity of such alternatives to presentism:

The alternative would be to try to read it [history] forwards from the perspective of the historical subject. Of course this perspective is never really fully recoverable. But through an exercise of historical imagination (as much as an archaeological quest) we can make some attempt to recapture the ‘present’ of the historical subject; indeed we must make the attempt if we are to avoid collapsing history into analysis.⁴⁵¹

But how *does* one go ‘beyond the score’ (it being perhaps illusorily more stable than performance despite the inevitably thorny textual problems) and reclaim Chopin’s long foregone viewpoint as a performer? More to the point, are Chopin’s performance practices as irrecoverable as they tend to be portrayed or could we still have access to at least some of their kernels? Chopin performance studies tend to err on the side of caution in that regard, as searching for concrete answers to those questions can be tantamount to anathema.⁴⁵² And indeed, some scholars take inexplicably bizarre extremes to avoid what is actually there to see and experience for themselves. Take for example David Kasunic, who chooses to

consider Chopin’s piano technique within the context of the history of dance, from Taglioni’s technique to Michel Fokine’s choreography, and

⁴⁵⁰ For a quick overview of the state of affairs of (and the problems besetting) performance studies as of late, see the first part of Rink, ‘Between practice and theory: performance studies and/as artistic research’, in *Remixing Music Studies: Essays in Honour of Nicholas Cook*, ed. by Ananay Aguilar et al. (London & New York: Routledge, 2021), pp. 76–90 (pp. 76–80).

⁴⁵¹ Samson, ‘Chopin and the Structures of History’, in *Chopin and His Work in the Context of Culture, Volume 1*, ed. by Irena Poniatowska (Warsaw & Others: Polska Akademia Chopinowska; NIFC; Musica Iagellonica, 2003), pp. 47–57 (p. 54).

⁴⁵² Despite the title, James Methuen-Campbell, *Chopin’s Playing from the Composer to the Present Day* (London: Victor Gollancz, 1981) does not stray much from the usual truisms and regurgitations: ‘Chopin’s piano playing was largely self-taught, and he displayed some unconventional methods of fingering. [...] Chopin’s playing probably lacked the finish that a methodical training in virtuoso technique might have provided. [...] Chopin’s playing was based on natural ability rather than methodical tuition. He approached the piano in a spontaneous and improvisatory manner entirely different from the style of the French pianists of his time’ (p. 30).

thereby to access the art of Chopin's bodily movement in the fingering [sic] indicated in and implied by the theoretical work and editorial practice of Heinrich Schenker, specifically his analyses of Chopin's compositions and his edition of Beethoven's piano sonatas.⁴⁵³

As there is almost too much indirection to unpack here, let us just take issue with the most pressing. Kasunic not only takes Mikuli's fingerings to be de facto Chopinian (which as we have seen is already problematic), but he also assumes there to be unbroken continuity from Chopin through Mikuli to Schenker.⁴⁵⁴ Yet, even if for the sake of argument we concede that in some reactionary way Schenker's editorial fingerings do resemble Chopin's practices to some extent,⁴⁵⁵ are there really any good reasons why one should give them precedence over Chopin's own plentiful indications in his own works? It is quite hard to see how one could access 'the art of Chopin's bodily movement' that way. Much as the approach does seem hopelessly misguided I could not agree more with Kasunic's proffered aim, however, which is 'to encourage [...] a mode of analysis that will link piano technique to compositional craft and body movement to sound'.⁴⁵⁶ In that sense the Etudes offer the richest and, importantly, most *sustained* potential for that mode of

⁴⁵³ David Kasunic, 'The Legacy of Chopin's Dance: Taglioni, Fokine, Mikuli and Schenker', in *Chopin 1810-2010. The Third International Chopin Congress, Volume 2*, ed. by Zofia Chechlińska and Irena Poniatowska (Warsaw: NIFC, 2017), pp. 371–87 (pp. 372–73).

⁴⁵⁴ This widespread view of pianistic pedigree Kenneth Hamilton aptly compares to 'apostolic succession'. See Hamilton, 'The Virtuoso Tradition', in *The Cambridge Companion to the Piano*, ed. by David Rowland (Cambridge: CUP, 1998), pp. 57–74 (p. 72).

⁴⁵⁵ There are reasons to believe that any affinity between Chopin's and Schenker's (editorial) fingerings owes more to the latter's own proclivities than to Mikuli's direct tuition. See Hedi Siegel, 'Schenker at the Piano', *Music Analysis*, 34/2 (2015), 265–79 (272): 'During his student years in Vienna, Schenker was a piano pupil of Carl Ludwig; earlier he is said to have studied with Chopin's pupil Karol Mikuli in Lemberg (now L'viv), though it is likely he may just have played for him rather than taken lessons'. Although serious study of Schenker's fingerings for the Beethoven Sonatas is fascinating in and of itself, it certainly would also not hurt the performer wishing to approach Chopin's music in historically involved performance ways. In that regard Kasunic is absolutely right, though Swinkin had made much the same point over two decades prior. There is, however, something Schenker very likely received directly from Mikuli, and highly relevant in this context: a liking for Clementi's *Ped*, as he included analyses of some of the preludes in *Free Composition, Vol. 1*, trans. by Ernst Oster (London & New York: Longman, 1979 [1935]), pp. 46–7, 72, 118–19. Schenker must have valued Clementi very highly, for his chauvinism is legendary (the only other non-Germanic composers allowed in his pantheon being Scarlatti and, of course, Chopin). See Ian Bent, 'Heinrich Schenker, Chopin and Domenico Scarlatti', *Music Analysis*, 5/2-3 (1986), 131–49, and *AoP*, p. 84: 'Muzio Clementi may be named as an example; with his "Gradus ad Parnassum" a rank of composer was assured him such as can hardly be granted later, be it to Thalberg, Tausig, or Bülow. In the world of etudes, Clementi is only surpassed by Chopin'.

⁴⁵⁶ Kasunic, p. 373.

analysis of all of Chopin's oeuvre through study of their fingerings. Ignoring the finer implications of Chopin's own fingerings, incidentally, seems to be the weakest point of some 'haptic' studies of his music, as they tend to proceed top-down from preconceived notions of fingering function and aesthetic outcome before quickly concluding how the rest of the body moves or should move.⁴⁵⁷ In other words, there is too little effort to discern the fingerings 'from the perspective of the historical subject', very likely due to pressures to conform to currently dominant ideologies of performance.

The real question is, as ever, how to fulfil Kasunic's lofty aims. In my view, it is the process itself that is interest, over and above any hopes of actual reconstruction of Chopin's own playing—an unattainable goal in any practical sense to begin with. Furthermore, while we can reverse-engineer some of its essential aspects from the indications themselves (supplemented by other kinds of evidence, of course), reconstruction of Chopin's *habitual* fingerings in pieces where original indications are nearly or completely missing in all the main primary sources will necessarily remain chimeric. The aim is rather to uncover whatever guiding principles 'link piano technique to compositional craft and body movement to sound', thereby assisting with not just the thorny question of extrapolation but also with understanding of the original indications that *have* come down to us. In short, what is perhaps most exciting are the sheer creativity and the exploration of individual expression involved in the process.

It is for all the above reasons that no 'performance guide' and no hard-and-fast prescriptions or tips for practice of the Etudes are offered here.⁴⁵⁸ What the case studies that follow do offer instead are personal 'performer's analyses' borne out of my long-running preoccupation with the topic. Hopefully it can provide a

⁴⁵⁷ See, e.g., Yuki Negishi, 'Haptic influences on Chopin pianism: case studies from the music of Szymanowska and Kessler' (MPhil thesis, Trinity Laban Conservatoire of Music and Dance, 2018), and Xiaoyun Lim, 'Haptic Analysis: An Alternative to Score-based Analyses of Chopin's Piano Sonatas Op. 35 and Op. 58' (PhD thesis, University of London, 2019).

⁴⁵⁸ In that regard, the present study differs fundamentally from Hugo Goldenzweig, 'Selected piano etudes of Frederic [sic] Chopin: A performance guide' (Ph.D. dissertation, New York University, 1987), a monograph I would be very hard-pressed to put a positive spin on.

reasonable ride through the material for future reference or rumination, perhaps even help some players develop their uniquely personal convictions in and for performance of the Etudes—and beyond.

CHAPTER 6

The Etudes (I): Case Studies in (Mostly) Conjunct Motion

We should be now in a much better position to appreciate how a top-down approach to finger choice yields limited understanding of practices as rich as Chopin's, or, indeed, how they might compare to those of his contemporaries. On the other hand, exhaustive bottom-up phenomenological description in the Etudes alone could fill entire volumes—reflecting a general problem often alluded to in pedagogical writings from the period. A way out of this impasse, counter-intuitive as it may seem, is to tackle what stands out as most unusual rather than attempting to build up progressively from (seemingly) established ideas. As perceptual habits are selective to astonishing degrees, the greater challenge is to avoid defaulting to some or another received idea while remaining receptive to the particulars of a given situation.⁴⁵⁹ Once we hit upon some concrete gestural procedure, there is a good chance we can extrapolate successfully from it—and perhaps even find underlying similarities in situations where we otherwise would not.

Thus, puzzling as Chopin's indications may seem on occasion (even with a good critical edition at hand),⁴⁶⁰ we should resist for as long as possible the impulse to dismiss them as misprints or slips of the pen. There is simply no substitute to facing the complexities of the original sources ourselves, much as critical editions may thankfully spare musicians some of the tedious legwork involved. And in this era's unprecedented availability almost anyone can have access to materials even the most specialised musicologists could not until quite recently. Thus, the

⁴⁵⁹ The classic experiment on perceptual expectations is Jerome S. Bruner and Leo Postman, 'On the perception of incongruity: A paradigm', *Journal of Personality*, 18/2 (1949), 206–23 (208): 'It would be our contention [...] that for as long as possible and by whatever means available, the organism will ward off the perception of the unexpected, those things which do not fit his prevailing set'.

⁴⁶⁰ Ideally, the reader should be able to follow the remainder of this study along with either or both the *Wiener Urtext Edition* (ed. by Badura-Skoda) and the *Polish National Edition* (ed. by Ekier). Note that, as of this writing, op. 10 and the *Trois nouvelles études* (ed. by Roy Howat) in Peters's ongoing *The Complete Chopin: A New Critical Edition* are already in print, while op. 25 is still forthcoming. (See Bibliography.)

remainder of this thesis aims to cover as many representative fingering issues as possible in the Etudes while eschewing any claim to (or desire for) systematic comprehensiveness. For similar reasons, the proposed reconstructions or extrapolations hereafter are indicative of expressive performance *options* rather than prescriptions.

The organisation of the case studies follows roughly Chopin's own synoptic, three-part division of 'mechanism', with a chapter devoted to each: 1) conjunct motion, 2) disjunct motion, 3) polyphony and double notes.⁴⁶¹ This simply acts as a kind of scaffolding which allows discussion of similar fingering ideas as they occur *across* etudes,⁴⁶² a strategy which obviously requires some conceptual flexibility. To name but a couple of resulting slippery issues (out of many), the first two categories differ only in terms of hand extension (that is, adjacent fingers a minor or major second apart vs adjacent fingers at least a minor third apart), which means that any expressive expansion or contraction of the hand (however small) would straddle back and forth between categories—as would basically any actual composition. In contrast, the third category requires some fingering technique or another in order simply to exist, for example by using the same couple of fingers to play a given interval in parallel motion (arguably the simplest double-note fingering technique). In short, the fluid nature of the phenomena involved resists hard-and-fast categorising, and demands much hands-on artistic engagement. Ultimately, what

⁴⁶¹ See *PaT*, pp. 25, 91n5. In this context, *mécanisme* simply refers to a fundamental interaction between hand and keyboard (see *id.*, *Esquisses*, p. 41), and is not to be confused with the 'daily regime consisting of long hours of digital gymnastics and stubborn repetition' already gaining traction in the early nineteenth century (*PaT*, p. 16). For a useful review and summary of Chopin's alleged 'radical simplification of technical categories', see Rink, 'Frédéric Chopin: *Esquisses pour une méthode de piano*'. Ed. by Jean-Jacques Eigeldinger', *Music & Letters*, 75/3 (1994), 471–75 (472).

⁴⁶² Most monographs on the Etudes tend to discuss the pieces in order and blow-by-blow. See, e.g., Monique Deschaussés, *Frédéric Chopin. 24 Études – Vers une interprétation* (Paris: Editions Vandeveld, 1995) and Marty, *Vingt-quatre leçons*, as well as countless theses and dissertations (see Bibliography). A monograph closer to this study in terms of its organisation is Jan Marisse Huizing, *De Chopin-etudes in historisch perspectief* (Haarlem: De Toorts, 1996), pp. 31–32, which groups the Etudes as follows: 2, 4, 8, 12, 14, 15 ('Rubriek 1'); 1, 5, 9, 10, 11, 13, 23, 24 ('Rubriek 2'); 3, 7, 10, 15, 16, 17, 18, 20, 21, 22 ('Rubriek 3'). Huizing believes the remaining etudes (6 and 19) to pose merely challenges of voice leading rather than of technique per se, a view I find difficult to agree with because, not only are those two etudes extremely difficult technically, but voice-leading challenges are inherent in any art music worthy of its name and thus present *throughout* the Etudes.

matters are the specifics of any given situation rather than the category they could be fitted in—hence the ‘mostly’ qualifier heading each category.

Special Features of Chopin’s Fingerings in (Mostly) Diatonic Motion

Let us begin by taking issue in more detail with today’s performers’ nearly unquestioned preference for rhythmic equality and unwavering time-keeping,⁴⁶³ especially as compared to the earliest performances preserved in historical recordings. As Andrew John Snedden puts it, today’s near-absolute rhythmic equality in passagework may be ‘inherently schizophrenic, a problem particularly acute in those composers whose art is, for better and worse, most deeply Romanticist’.⁴⁶⁴ In this modernist mindset, as Snedden observes further,

passagework of rhythmically even note values implies [...] a rhythmically even rhythm, while differing note values are usually assumed to have largely fixed relative values. Yet is the rhythm to be understood as literal, or as a simplified notation to make reading easier, relying on sympathetic modification in performance?⁴⁶⁵

Expectations of temporal inflexibility can indeed hamper appreciation of Chopin’s detailed attention to fingering, even compel players and editors to substitute comparatively cruder ones. And so, even though Chopin’s fingerings often suggest purposely unequal passagework, the Etudes have come to epitomise more or less relentlessly regular, metronome-driven performances whereby ‘the player is not obliged to make significant and perceptible but very delicate time-organizing decisions’, as Robert Hill similarly observes.⁴⁶⁶ Moreover,

[i]n banishing the artistic manipulation of time, modernists simplified the job of interpretation enormously — akin to doing a high-wire act with the

⁴⁶³ See, e.g., Bruce Haynes and Geoffrey Burgess, *The Pathetick Musician: Moving an Audience in the Age of Eloquence* (New York: OUP, 2016), pp. 202–04. Completing today’s normative trifecta, current piano performance styles also do away with hand asynchrony and unmarked arpeggiation almost completely. As Chapters 7 and 8 will go on to show in some detail, this avoidance also severely limits use and understanding of historical fingering techniques.

⁴⁶⁴ Snedden, p. 96.

⁴⁶⁵ *Ibid.*, p. 107.

⁴⁶⁶ Hill, ‘Overcoming Romanticism’, p. 43.

wire on the floor — and simultaneously concealed themselves from judgement for any potential lack of artistic control in this matter.⁴⁶⁷

Chopin's published fingerings for etude 4 provide a good starting point for discussion, as they suggest alternatives to the modernist mindset and how these may translate into concrete actions at the keyboard. They reveal that, however 'malleable' a pianist's hands may be,⁴⁶⁸ there are limits to how much and how fast they can morph within such temporal straitjacketing without also losing kinaesthetic (and therefore expressive) control—perhaps even injury in the long run. As a matter of fact, Chopin exploits those very limits for strikingly expressive effects:

Ex. 6. 1 Etude 4, 25–27 (F1)

As already mentioned, many players and editors prefer to buffer these quick regroupings on both fourth beats by using for example $\frac{5}{1} 2 1 2$ instead of $\frac{5}{1} 4 2 3$, a choice which practically forces hand redistribution, perhaps deeming the original fingering too problematic at or near the indicated tempo.⁴⁶⁹ The situation begins to make more musical sense, however, when we allow ourselves to 'sympathetically modify' the beat by noticeably broadening it at those points.⁴⁷⁰ That is, though

⁴⁶⁷ Ibid.

⁴⁶⁸ Marty, *Vingt-quatre leçons*, p. 70, argues this etude to be an exercise for 'the malleability of the hand' (la malléabilité de la main). To be fair, that is a great ideal—just not as a sacrificial lamb to the metronome.

⁴⁶⁹ See *ibid.*, pp. 21–22, and Ekier and Kamiński, pp. 2–3, to name but a few proponents of this widespread notion. They generally argue for tempos considerably slower than Chopin's markings, adducing somewhat defective metronomes (as Marty does) or, more reasonably, that performance on modern pianos simply sits more comfortably on the slower side because of their sturdier construction (as Ekier and Kamiński do). The core assumption is nevertheless a fairly inflexible external beat—part and parcel of the modernist mindset.

⁴⁷⁰ See Hill, 'Carl Reinecke's Performance of Mozart's *Larghetto* and the Nineteenth-Century Practice of Quantitative Accentuation', in *About Bach*, ed. by Gregory G. Butler, George B. Stauffer and Mary

getting from $\frac{5}{1}$ to 4 may indeed take more time and effort than the surrounding semiquavers, doing so with the indicated fingering also ensures clearer kinaestheses and thus self-control. The gesture rides on its own natural timescale, so to speak, allowing players to swivel comfortably on the thumb much as they normally would in a crossing-over, thereby reaching the 4 2 3 portions jolt-free.

If pressed to find a metaphor for the physicality of the original fingering around bars 25–30, something like surmounting a series of obstacles would fit the bill nicely. Heeding the fingering also ensures things *stay* metaphorical, that no real physical discomfort (or even pain) results in the name of self-control. Yet avoiding the impression of dodging difficulties or slowing down because we simply cannot play a tempo, or of simply wishing to make this spot easier for ourselves can also present quite a challenge.⁴⁷¹ On the other hand, resorting to the usual redistribution to facilitate near-absolute rhythmic equality hardly communicates anything—other than equality itself, that is.⁴⁷²

Dalton Greer (Urbana & Chicago: University of Illinois Press, 2008), pp. 171–80. An outstanding recent study which attests to the importance of prosody in Chopin performance is Michael Pecak, “Dire un morceau de musique”: The Language Behind Chopin’s Music’ (D.Mus. thesis, McGill University, 2016). See also id., ‘Imagining speech: Elsner, Polish prosody and poetic pianism’, in *The Lyric and the Vocal Element in Instrumental Music of the Nineteenth Century*, ed. by Kamila Stępień-Kutera (Warsaw: NIFC, 2017), pp. 253–65 for a condensed version. Goebel-Streicher, *passim*, amply confirms Pecak’s insights, as Chopin constantly asks Müller to ‘say’ pieces of music to him.
⁴⁷¹ See Snedden, p. 19: ‘Deep rhythmic flexibilities may seem ill-disciplined at best and technically inadequate at worst. This last reason certainly seems in my experience to be the greatest impediment to a more general C19th HIP adoption’. And Hill, p. 42: ‘Time is central because when the player organizes time subjectively rather than adhering to an external, regular beat, timing decisions must be genuinely intuitive. They must be improvised, even if according to some kind of schematic plan; they cannot be “reproduced”. This type of improvisation is not without risk, for even the novice listener can often tell whether or not the resulting proportions are in a convincing balance’. For a remarkable exploration of the problem of difficulty in musical performance, see Alexis L. Witt, ‘The Aesthetic of Difficulty’ (M.M. thesis, Rice University, 2007), especially pp. 38–41, on the unrealistic performance expectations brought about by heavily-edited commercial recordings which can all but obliterate the communication (and perception) of difficulty as an expressive factor in performance.

⁴⁷² Kruger, pp. 63–64, interestingly surmises that this etude contains some mockery—a joke possibly lost on us because what it alludes to may be just too close to the now normative mechanistic ideals of performance. For Chopin’s often hilarious talent for mimicry, see, e.g., Goebel-Streicher, pp. 151, 156 (and p. 206 for his more serious imitation of Liszt).

Most early editions feature a seemingly redundant lone 3 on the first semiquaver of bar 26 (see **Example 6.1** above).⁴⁷³ If not a misprint, its most plausible function should be preventing any silent substitution through the tied note—but that would be very odd, as there seems to be no other instances of such notation in Chopin's works. If it is indeed a misprint, an intriguing possibility would be to reinterpret the 3 as a 5 on the *second* semiquaver instead, which somewhat forces a more poignant resumption of the figure after the tie because of the same kind of 5 2 squeeze as in the rest of the sequence. The same approach would seem to make sense for the next bar as well.

Although at some level the traditional hand redistribution (where the LH also takes the alto part) does seem to facilitate bars 25–28,⁴⁷⁴ it is worth investing in practice of the original fingering, if anything else because it is one of the most intriguing compound uses of fingering techniques in all of the Etudes. Deferring for now discussion of a special chromatic technique at work here, note that following the notated hand distribution directs our awareness to the 'thumb alto' sequence in bars 25–26 ($c^1-d\flat^1-d\flat^1-a\flat^1$, $e\flat^1-e\flat^1-e\flat^1-b\flat^1$).⁴⁷⁵ This fingering's highly distinct qualitative dynamics are very much worth the trouble if just for that reason. But they also contribute to a greater feeling of security than the alternative redistribution, hard as that may be at first to believe.

As intimated in the previous chapter, the spot causing the most head-scratching is the 2 4 indication over $f^1-g\flat^1$ on the downbeat of bar 25, which causes a similar squeeze to the one involving 5 2 already mentioned. In my view, the function of 2 4 on $f^1-g\flat^1$ may be to effect a fresh-sounding start from the *second* semiquaver on, which suggests quietly shifting the whole hand from the first semiquaver along with very subtle timing rather than having 4 already in place for

⁴⁷³ This 3 appears in all first editions, though a bit camouflaged in FEE because of Fontana's surrounding additional fingerings. As critical editions routinely omit it, one can safely assume it is generally regarded as a misprint.

⁴⁷⁴ See e.g., Badura-Skoda (p. 20), and Ekier and Kamiński (p. 4).

⁴⁷⁵ To borrow and adapt Brahms's wonderful phrase 'thumb tenor'. See, e.g., George S. Bozarth, 'Fanny Davies and Brahms's late chamber music', in *Performing Brahms: Early Evidence of Performance Style*, ed. by Michael Musgrave and Bernard D. Sherman (Cambridge: CUP, 2003), pp. 170–219 (p. 177).

the $g\flat^1$ (see **Example 6.2** below). As already mentioned, Chopin often uses the ‘omission of fingers’ technique to force a subtle lingering or hesitation, though in this case it may hold phrasing and even motivic functions as well. In other words, the fingering could be indicative of phrasing *into* bar 25, contrary to today’s conventional slowing down at the end of the phrase to then ‘place’ the next downbeat (at heart still a modernistic, exacting approach), all of which would excessively highlight the spot. Even though the articulation and texture do vary slightly in bar 25, we are still in the midst of a hellishly long modulation and probably should not make too much of it. To put this again a bit metaphorically, resting while being chased does not seem to be the wisest option.

[Presto ♩ = 88]

Ex. 6. 2 Etude 4, 24–26 (F1)

It is tempting here to adapt Chopin’s idea of wrist movement—despite the misnomer—being to piano playing what breathing is to singing,⁴⁷⁶ as such quicker and finer movements do resemble brisk top-up breathing in singing (or wind playing). For one, Jérôme-Joseph de Momigny states, ‘[...] fingering is to piano [playing] what breathing is to singing, or normal discourse’, which seems to hint at that very kind of effect.⁴⁷⁷

⁴⁷⁶ See *PaT*, p. 45: ‘The wrist: respiration in the voice’, and id., *Esquisses*, p. 26: ‘Le poignet [:] la respiration dans la voix’. The best-known formulation comes from Emile Gretsch: ‘At every point where a singer would take a breath, the accomplished pianist [. . .] should take care to raise the wrist so as to let it fall again on the singing note with the greatest suppleness imaginable’, as quoted in *PaT*, p. 45. See also id., *Esquisses*, p. 77n58.

⁴⁷⁷ Jérôme-Joseph de Momigny, *La première année de leçons de piano forte* (Paris: Hanry, 1802), p. 9: ‘LE DOIGTÉ est pour le piano ce que la RESPIRATION est pour le chant, ou le discours ordinaire’. Although the similarity to Chopin’s formulation is striking, there is no need to assuage fears of plagiarism: Momigny’s influence on Chopin in this (or any other) regard is extremely unlikely, as Momigny based his pedagogy on the commonplace fare of scales, arpeggios and double notes, and moreover heavily relied on the five-finger position. See *ibid.*, pp. 9–12.

The $\frac{5}{1} 4 2 3$ series already discussed also pose an interesting question regarding inflection at the very opening: would the downbeat of bar 1 also lend itself to such regrouping (and resulting quantitative accentuation) between the first and second semiquavers, for example through $\frac{5}{1} 3 1 2$?⁴⁷⁸ Indeed, this is the fingering which seems to be implied in most primary sources by the rule-of-regularity type of situation that follows. In this regard, however, Marty believes there should be no perceivable break, arguing that the pencilled vertical line between the first two notes in bar 1 in Dubois was just meant to remind Camille O’Meara of the *fp* and thus not indicative of any articulation at all—again betraying today’s anxiety about mechanical time-keeping and fairly continuous legato.⁴⁷⁹ My preference here is to keep the thumb on $c\sharp^2$ until 3 reaches $d\sharp^2$ (much as in bars 25 and 26, fourth beats), as this regrouping of the hand coupled with the *fp* still manage to convey the effect of a (psychological) break—even if we choose to actually connect $c\sharp^2$ and $d\sharp^2$.

A last vexing textual problem to consider here is, are we to take the RH $e\flat^1$ on beat 4 of bar 24 as the *only* possible reading? It is certainly the most popular (see **Figure 6.1** below),⁴⁸⁰ though one for which editors do not usually offer any rationales.⁴⁸¹ While one can safely assume it is the LH $e\flat$ on the third beat which compels them, there is actually no binding harmonic reason for the natural to carry over to the next beat, for it belongs to the double-neighbour figure embellishing the *f* within a voice exchange (LH $e\flat$ - f - $g\flat$, RH $g\flat^1$ - f^1 - $e\flat$ (\flat ?).¹). In other words, the LH $e\flat$

⁴⁷⁸ Instead of $1 2 1 2$, as suggested by Marty, *Vingt-quatre leçons*, p. 71, presumably for reasons of continuous legato and rhythmic equality.

⁴⁷⁹ *Ibid.*, pp. 69–70. Note also that Marty also believes in slurring through the first barline rather than maintain the same (octave) hand position. I prefer the latter alternative as it fosters gestural legato and greater freedom overall.

⁴⁸⁰ While precise statistics on this are probably best left to big data enthusiasts, editors and pianists do seem to prefer the $e\flat^1$.

⁴⁸¹ There is no mention of this in Ekier and Kamiński, p. 4 (or on the score proper). And Badura-Skoda’s parenthetical remark over this note (‘U Aut e-flat’, p. 19) is insufficient and even misleading: the main musical text does not show the natural sign in brackets despite its absence not just in the working autograph but in all but one of the original sources—the GFE. Howat, p. 15, offers the clearest reading on this spot. For Breitkopf & Härtel’s notorious editorial interventions even during Chopin’s lifetime, see Kallberg, ‘The Chopin Sources’, p. 109–10, and *id.*, ‘Chopin in the Marketplace (Part II)’, 816, 818.

does not have jurisdiction over the RH e^1 —unless explicitly notated, hence the conundrum.

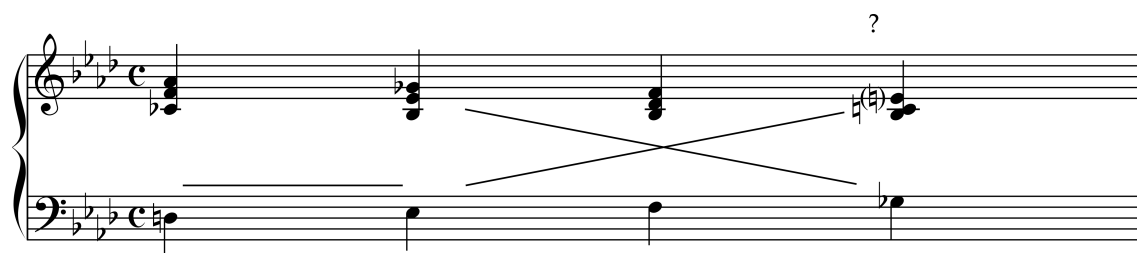


Fig. 6. 1 Etude 4, 24–25, voice exchange

Surely, the fact that chromaticised voice exchanges are not infrequent in music from the common-practice period does not automatically rule this particular one to be.⁴⁸² And, moreover, none of the many other voice exchanges sharing this figuration involve cross-relations, which strongly suggests a consistent motivic consideration on Chopin's part—in turn weakening the absentmindedness argument for the absence of a natural. Now what is relevant fingering-wise here is that playing e^b1 or $e^{\natural}1$ makes for very different kinaestheses when shifting the hand towards 2 on the downbeat of bar 25. Spelling is clearly not a trivial a matter from that standpoint, and however difficult it may be to go against well-established tradition we should at least consider playing e^b1 instead. And if we are willing to give the e^b1 a go, 3 probably effects the smoothest shift over to 2 on f and the subtle shift to accommodate (and clearly articulate) 4 on g^b1 .

Moving on now to more tangible issues, most editors indicate $\overset{5}{2} 3 1 3$ for the RH throughout the embellished *fauxbourdon*-like sequence in bars 31–32 (see **Example 6.3** below), probably because it appears to match Chopin's printed LH $2 1 3 1$. I submit that it is at least worth considering to use $\overset{5}{1} 3 1 2$ for the RH here in rule-of-regularity fashion.⁴⁸³ Although the choice might seem one of ergonomics

⁴⁸² For an analysis of a striking chromaticised voice exchange in etude 12, see Schachter, *The Art of Tonal Analysis*, pp. 40–41.

⁴⁸³ Of all the editions later in the century, only Carl Reinecke (ed.), *Pianoforte-Werke von F. Chopin. Etüden* (Leipzig: Breitkopf & Härtel, n.d. [1879]), p. 14, seems to recommend a similar enough fingering: the alto part begins $1 3 2 3 1 3 2 3$ but then varies it slightly through the sequence.

pure and simple, there are also subtle kinaesthetic considerations at work: $\begin{smallmatrix} 5 \\ 1 \end{smallmatrix} 3 1 2$ results in a more grounded ‘thumb alto’ and therefore more satisfying solution overall, whereas the usual $\begin{smallmatrix} 5 \\ 2 \end{smallmatrix} 3 1 3$ tends to move the hand to each next position a bit prematurely, thus needing a compensating vertical gesture that could feel slightly out of sync with the linear quality of the parallel six-three chords.⁴⁸⁴

Ex. 6. 3 Etude 4, 31–33 (F1)

Finally, other uses of omitting fingers in this etude involve fluency of the pervasive neighbour-note figure and Chopin’s characteristic fingering for it (see **Example 6.4** below). Even though in this context the omission of fingers has more to do with ergonomics than inequality (therefore less relevant to this discussion), it still needs our attention for it to function. In more concrete terms, we may need to consider momentarily stepping out of the rule of regularity, that is, from $1 3 2 5$ to $1 2 1 5$ in the final four semiquavers for many a sequence of the etude. For example, going from bar 40 to 41 completely regularly poses the problem of quickly ‘finding’ the $d\sharp^2$ on the downbeat, that is, of forcing too quick a movement, or taking too much time or making too much of a break:⁴⁸⁵

⁴⁸⁴ Finger choice in double-neighbour figurations often has serious analytic implications, as we will see later in this chapter.

⁴⁸⁵ Again, this is mostly a matter of personal preference: I dislike keeping the $1 3 2$ pattern right up to the last instant, but it is perfectly possible (see, e.g., **Example 5.28**, p. 136). Indeed, momentarily forcing movement away from where we need to be the very next instant is an extremely effective way to convey a sense of effort or emphasis. There is a great example of this alternative in etude 8, bars 47–51 in the *Stichvorlage* and all first editions, where $1 3$ take the repeated notes at the end of each bar instead of the more expedient $1 2$. The resulting ampler motion thus puts the downbeats—and the chromatic line they outline—into even bolder relief.

[Presto ♩ = 88]

Ex. 6. 4 Etude 4, 40-44 (F1)

Except, perhaps, in the very last sequence, as the RH hand falls nicely on the downbeat of bar 79 after an unbroken rule-of-regularity sequence of *1 3 2 5* through four whole bars:

[Presto ♩ = 88]

Ex. 6. 5 Etude 4, 77-79 (F1)

‘Character’: A Most Elusive Function of Fingering

There seem to be two basic, antagonistic approaches to grouping the RH in etude 14 right from the downbeat of bar 1, based on having either *1* or *2* on c^2 . The *1*-based handing remains the most popular among players and editors and appears in none other than Mikuli’s edition,⁴⁸⁶ a pedigree which perhaps endows it with more authority than it should because, arguably, *1* on every beat makes too much of the hemiolas even in *p*.⁴⁸⁷ Almost regardless of the player’s efforts to counteract it, this choice seems to make polyrhythm this etude’s ultimate technical aim and focus, which may be far too reductive. What may be at work is yet again a Clementi-esque

⁴⁸⁶ Carl Mikuli (ed.), *Chopin: Complete Works for the Piano, Vol. 7* (New York: G. Schirmer, 1895 [1879]), pp. 63–66.

⁴⁸⁷ To be fair, Mikuli does land on *2* for a couple of quavers out of necessity in bars 20 and 51, but then reverts to *1* as the basic handing.

study in *sprezzatura* instead.⁴⁸⁸ That is, present as the hemiola may be in our mind, the real challenge seems to be the artistic use of temporal manipulation and asynchrony rather than a metronomically exact, busy hammering out of the polyrhythm. A further argument against such bluster involves simple textural balance, as the highly embroidered c^2 in the first two bars eventually reveals itself to be an inner voice and thus (at least to my ear) in need of a more tactful approach:

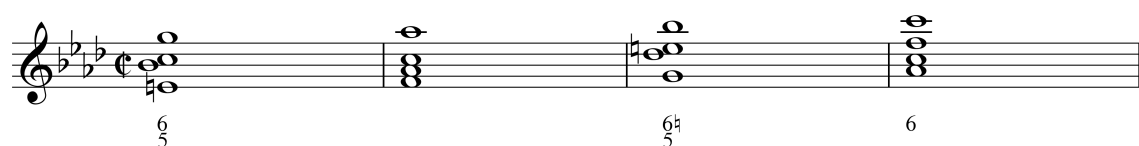


Fig. 6. 2 Etude 14, 1–4, voice-leading reduction

That is, subtly oblique and requiring some retrospective hearing the top thread in bars 1–4 is not c^2 but rather an initial ascent $g^2-ab^2-bb^2-c^3$ (reinforced by the LH thumb's $g^1-ab^1-bb^1$). This etude constitutes a more veiled example of such textural balance because of its constant *coloratura*, but etude 11 also presents many situations—not least the opening itself—where we may also want to subtly differentiate the inner part from the top, and choose our handings accordingly:

Allegretto ♩ = 76

Ex. 6. 6 Etude 11,⁴⁸⁹ 0–3 (*Stichvorlage*)

⁴⁸⁸ Careful practice of Clementi's fingerings in the *exercices* in $A\flat$ and F minor from Book II proves invaluable as preparation for the RH of this etude. See, e.g., *PaT*, pp. 28, 60.

⁴⁸⁹ Stockholm, Stiftelsen Musikkulturens framjande (S-Smf, MMS 398, unpaginated).

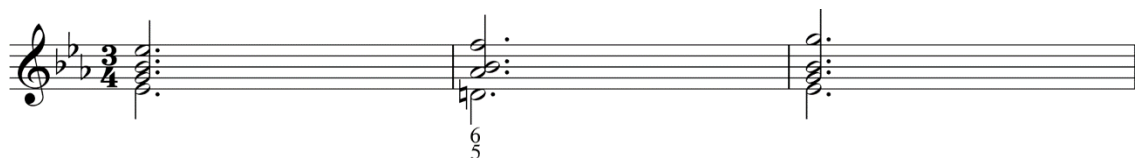


Fig. 6. 3 Etude 11, 1–3, voice-leading reduction

Whatever Chopin's ultimate fingering rationale may have been for etude 14, the original sources show a clear preference for a 2-based handing over Mikuli's, though indications are a bit scattered thus making the bigger picture harder to piece together. The lone 2 on the upbeat in the Stirling exemplar, for example, may not be convincing enough to those adamant to keep Mikuli's choice.⁴⁹⁰ And the only surviving autograph features another lone 2 just on the downbeat of the reprise (bar 51)—hardly a smoking-gun either.⁴⁹¹ Even more indirectly, the anonymous extra fingerings in Wessel's corrected reprint (E2) include 2 3 1 2 4 3 in bar 1 (shown in **Example 6.7** below).⁴⁹² Piecing together all this information might get us closer to Chopin's preferred choice for bar 1, as the 2-based handing indeed promotes a much calmer, undulating movement which does seem better suited for the character of the entire piece.⁴⁹³

⁴⁹⁰ The only (known) source possibly connected with Chopin which bears 2 on the downbeat as well as the upbeat seems to be an annotated copy of op. 25 pending writing identification, Valldemossa, Celda de Frédéric Chopin y George Sand (E-VALm, uncatalogued), which belonged to a Mathilde Arnavon, almost certainly Chopin's occasional student from Marseille. See Frick, p. 409 (letter to his family in Warsaw, Paris, 28 March-19 April 1847): 'I have to give a lesson to the young lady Rothschild, then a certain woman from Marseille'. Her (maiden) name appears matter-of-factly in a list of Chopin students in Ferdynand Hoesick, *Chopin. Życie i Twórczość Tom IV „Kopernik fortepianu”* (Krakow: PWN, 1968), p. 351: 'Matylde Daniel (z Marsylii)'. Although Jaeger, pp. 86, 103n117, expresses some doubts as to the reliability of Hoesick's arguments for the inclusion of other names on the list of students, the facts that she married in 1843 and that Chopin's letter dates from 1847 make a compelling case for long-term study with Chopin, sporadic as it may have also been.

⁴⁹¹ Autograph copy for Maria Wodzińska, dated 1836 (hereafter: 'Wodzińska'), now extant only in photographs in Leopold Binental, *Chopin w 120 – tę rocznicę urodzin. Dokumenty i pamiątki* (Warsaw: Łazarski, 1930), Plates 56–58 (unpaginated).

⁴⁹² These could turn out to be Moscheles's, as Howat relays from Eigeldinger's investigations into the matter (pers. comm., 17 September 2021).

⁴⁹³ The proposed reconstruction is also found in Marty, *Vingt-quatre leçons*, p. 157, and, rather surprisingly, in Hans von Bülow (ed.), *Auserlesene Klavier-Etüden von Fr. Chopin*, trans. by G.F. Hatton (Munich: Jos. Aibl, n.d. [1880]), p. 40 (see also *ibid.*, p. vi: 'Our fingering differs from that generally used, chiefly in order that the hand may be held as quietly as possible'), and Theodor Kullak (ed.), *Frederick Chopin's Works. Instructive Edition with explanatory remarks and fingerings by Dr Theodore Kullak*, trans. by Albert R. Parsons (Berlin: Schlesinger, 1880) p. 48.

Presto ♩ = 112

Ex. 6.7 Etude 14,⁴⁹⁴ 0–3 (Stirling)

Textual inconsistencies aside, the strongest argument for the 2-based handing is the presence of the long slur (and *molto legato* or *sempre legatissimo* indication to boot) in most sources—implying a *spianato* realisation which would generally require ‘long’ fingerings and the quietest possible hand.⁴⁹⁵ In that regard, Schumann’s famous recollection may indirectly confirm Chopin’s own preference:

Then he played the second *etude* in the book, in F minor. Again one in which his individuality impresses itself unforgettably: so charming, dreamy, and soft that it could be the song of a sleeping child.⁴⁹⁶

In addition to its much quieter overall demeanour, the 2-based handing is conducive to finer control of niceties such as the cross-relation LH $e\flat$ -RH $e\flat^2$ in bar 1. Potential for subtle hand-pedalling through fingering is especially relevant here, as unpedalled playing is something Chopin and many of his contemporaries are on record as exploiting to a much higher degree than eventually became the norm—not to mention if compared to today’s nearly constant use.⁴⁹⁷

A common objection to the 2-based handing seems to be that 2 4 5 for c^2 - $f\sharp^2$ - g^2 on the last crotchet of bar 1 may be too much of a stretch for some. Yet once we accept the idea of a naturally outward-tilting hand (but also sensitive to the particulars of any given situation), ample reaching without much actual stretching

⁴⁹⁴ F-Pn: Rés Vma 241 (III, 25), p. 6. Incidentally, there are at least two sources which tie the first two RH notes: a manuscript copy by Chopin’s student Delfina Potocka and some other unidentified hand, Krakow, Muzeum Narodowe w Krakowie, Biblioteka (PL-Kn: MN 73152, which Howat kindly informed me of), and an anonymously annotated F₃ (PL-Wn, Mus.III.162.045 Cim.).

⁴⁹⁵ See Meniker, pp. 23, 37.

⁴⁹⁶ As quoted in *PaT*, pp. 69–70.

⁴⁹⁷ See, e.g., Meniker, *passim*, and Martin Sehested Hansen, ‘Brilliant Pedalling: The Pedalling of the style *brilliant* and its influence upon the early works of Chopin’ (Osnabrück: Electronic Publishing Osnabrück, 2016), *passim*.

is possible for most normal-sized hands, though naturally that should be somewhat easier on historical instruments.⁴⁹⁸ The main point is, as ever, that players should not go against their bodies during such expansions because of the perceived need to conform to an external (regular) beat and/or continuous legato.

By far the most difficult fingering indications to interpret in this etude are those in bars 37–38 (see **Examples 6.8** and **6.9** below), as ‘Wodzińska’ and the Dubois exemplar seem to offer mutually exclusive readings.⁴⁹⁹ But in the latter case we may be (for once) looking at a slip of the pencil:

[Presto ♩ = 112]

poco a poco *cresc*

Red. * > Red. * Red.

Ex. 6. 8 Etude 14,⁵⁰⁰ 36–39 (Dubois)

⁴⁹⁸ However contentious that may be today, a slight outward tilting of the hands is a natural consequence of letting the arms hang naturally close to the torso in playing—as described in many sources from the period (e.g., Hummel, *Anweisung*, p. 1, I/p. 3). See also *PaT*, p. 105n50 [on scale playing]: ‘When there is a rapid and continuous movement a slight inclination of the wrist in the direction of the run gives assurance and facilitates coherent, even playing of scales and arpeggios’. And *ibid.*, p. 106n59: ‘Victor Gille in turn recalls: “He so loved *legato* playing that at times in a scale he would tilt the hand towards the little finger when ascending and towards the thumb when descending”. [...] This participation of the hand by an imperceptible lateral movement in the direction of the run was one of the conditions of the evenness of Chopin’s playing, so much admired by his contemporaries’.

⁴⁹⁹ Critical editions so far do not offer a clear enough text as to fingering here: Ekier (p. 76) conflates the two sources despite supposedly clarifying them in separate rows, while Badura-Skoda’s (p. 9) has a purportedly original *1* on the tenth quaver of 37 which cannot be found in any source. In their defence, deciphering these few bars may be near impossible due to internal contradiction and the smudgy fingering on the downbeat of bar 38.

⁵⁰⁰ F–Pn: Rés F. 980 (I, 2), p. 7.

[Agitato]
[sempre legatissimo]

Ex. 6. 9 Etude 14,⁵⁰¹ 36–39 ('Wodzińska')

In 'Wodzińska', bar 37 clearly shows $1 [3 2] 1 [2 3]$ characteristically twisting and turning around c^2 with 1 and 2 used in alternation,⁵⁰² which strongly implies arrival with 4 on eb^2 in bar 38. In contrast, the pencilled-in fingerings in Dubois feature some puzzling writing-over and what looks like a 'ghost' 2 (possibly a spur-of-the-moment change of mind or, even more likely, writing cut short). I suspect the $2 1$ on the last crotchet of bar 37 was meant to be placed one quaver earlier.⁵⁰³ As this bit of handwriting in the Dubois exemplar is too sketchy to attribute to Chopin with any certainty,⁵⁰⁴ we cannot rule out the possibility of hasty dictation and mistakes resulting from it: that is, either Chopin or O'Meara could have meant to jot the last 1 in bar 37 over b^2 , not c^2 , which would make this spot identical to 'Wodzińska' (and also justify the 'ghost' 2 right before it). Alternatively, if we take that same 1 to be correctly in place, it would imply 3 on the next downbeat despite all the smudginess, and that the 'ghost' 2 actually belongs on the b^1 . But this option really makes for too busy a crossing-over and quite unlike all such turns in the rest of the etude—which strongly speaks against it. The case for a remedial, 'studently' specimen dodging the slight difficulty posed by arriving with $4 5$ on the downbeat of 38 seems weak: following $4 5$ with $3 5 3 2$ is a negligible hurdle for any advanced

⁵⁰¹ Binental, Plate 56. (The fingering shown in bar 36 is taken over from the previous bar.)

⁵⁰² This chromatic neighbouring motion develops into a trilling pattern going into the reprise (bars 50–51 with $1 3 2 3 1 3 | 2$), which incidentally is yet another argument for the 2 -based handing overall. Furthermore, the same fingering for the chromatic neighbouring figure appears in a faint annotation in Dubois as well (bar 18, $1 3 2 1$ for $c^2-db^2-c^2-bb^2$).

⁵⁰³ Perhaps this is what Badura-Skoda (p. 9) may have been trying to suggest (see p. 159n499 above).

⁵⁰⁴ See *PaT*, p. 217: 'Even if a very large majority of the fingerings in the Dubois scores seem positively attributable to Chopin's hand, this cannot be automatically assumed for them all'.

pianist, not to mention the many other fingerings showing Chopin's great trust in O'Meara's general technical command and musical judgment.⁵⁰⁵

Much as in the situation involving rhetorical accents through quick hand regrouping shown in etude 4, the annotated fingerings in Dubois, bar 43 (see **Example 6.10** below), show how Chopin exploits the time needed for (and felt by) the hand to expand and reach over to the g^2 .⁵⁰⁶ The difference being that here the effect is much more vocal—a particularly beautiful case of expression ushered in by finger choice:

Ex. 6. 10 Etude 14,⁵⁰⁷ 43-45 (Dubois)

At least one alternative fingering appears to have some merit, however: after the turn on c^2 with the original $3\ 4\ [3]\ 2\ 1$, the hand could (minimally) expand and reach the g^2 with 5 instead of 2, then cross it over with either 3 or 4. But this results in ever so slight jolting and accenting (especially with 3)—unless, that is, we are able to make a similar ‘time-stopping’ use of the crossing-over to which the expansion with $1\ 2$ clearly lends itself. But, all things considered, this possibility seems to make less musical sense and to be less satisfying kinaesthetically than the solution found in the Dubois exemplar.

⁵⁰⁵ Though probably was not as accomplished an artist as Müller was. For the latter's critical views of O'Meara, see Goebel-Streicher, p. 473.

⁵⁰⁶ Marty, *Vingt-quatre leçons*, p. 159, believes the marking a bit to the right of the sixth note to be not a fingering but an ‘oblique mark’ implying a separation of some sort. And both Badura-Skoda (p. 9) and Ekier (p. 76) avoid any trouble by omitting any (original) fingering for the g^2 . In my view, the internal evidence strongly suggests that ‘oblique mark’ to be a 2—as weirdly placed and shaped as it may be. The Lemoine copy of the Zaleska-Rosengardt exemplar is fairly clear on this spot: the upper row reads $1\ 3\ 1\ 2\ 1\ 2\ 3\ 4\ 3$, whereas the lower $3\ 4\ 3\ 2\ 1\ [2]$ (maybe in Chopin's hand but it is very hard to tell) seems to be there to indicate a better alternative.

⁵⁰⁷ F-Pn: Rés F. 980 (I, 2), p. 7.

Let us close this discussion with just a small detail in that regard (see **Example 6.11** below). The simple up-and-down run begs for Clementi's favourite 'hiding thumb' technique, in this case by pivoting with 3 on the g^2 instead of 2 for the crossing-over towards the e^b^2 (thus also providing a fingering template for the rest of the descent). The option with 2 on g^2 may be a bit abrupt for the subdued general mood, as it needs perhaps too much of a $\langle \rangle$ and/or sheer force to mask an incongruent, slightly hectic crossing-over to the e^b^2 :

[Presto $\text{♩} = 112$]

The image shows a musical score for Chopin's Etude 14, measures 14-16. The score is in G minor, 3/4 time, and marked Presto. It features a right-hand melodic line with a descending chromatic run and a left-hand accompaniment of quarter notes. Fingerings are indicated with numbers 1-5 above the notes.

Ex. 6. 11 Etude 14,⁵⁰⁸ 14–16 (Stirling)

This etude is deceptively simple as it presents quite a few difficulties in terms of fingering techniques. Even in seemingly obvious cases of stepwise or scalar playing, Chopin's scattered indications ensure the hand's path is not just free of jolts, but that movement is congruent with the expressive ebb and flow. In short, every tiny detail may be significant even when handling a simple-looking situation such as this.⁵⁰⁹

Special Features of Chopin's Fingerings in (Mostly) Chromatic Motion

As early as the opus 2 Variations on Mozart's *Là ci darem la mano* (1827),⁵¹⁰ Chopin shows his predilection for a technique which squeezes the hand into sequential

⁵⁰⁸ F-Pn: Rés Vma 241 (III, 25), p. 6.

⁵⁰⁹ Again, one could not recommend enough Clementi's *exercices* in A^b major and F minor for this purpose. The affinity between them and Chopin's etude 14 is possibly more than coincidental—the first of those at least seems to have been quite the warhorse in Chopin's teaching. See Zaleska-Rosengardt's comment on the A^b *exercice* being every pupil's requirement (as quoted in *Pat*, p. 60).

⁵¹⁰ See, e.g., Variation II, bar 7. Despite there being quite a few discrepancies across the original sources as to fingerings, the indication under discussion appears in both the working autograph (US-NYpm: C549.L139) and the autograph *Stichvorlage* (A-Wn: Mus.Hs. 16789) as well as the AFE.

chromatic segments, most commonly a minor third with 1 2 3 4 (see **Examples 6.12** and **6.13** below).⁵¹¹ We had a preview of this kind of handing in etude 4, there taken with 2 3 4 5 because it combined with the ‘thumb alto’. (Incidentally, those keen to attribute super originality to Chopin here as elsewhere should first look at the many examples of this figure and fingering in Hummel.⁵¹²)

[Allegro con fuoco ♩ = 160]



Ex. 6. 12 Etude 12, 28–29 (F1)

[Presto ♩ = 88]

Ex. 6. 13 Etude 4,⁵¹³ 47–51 (Stirling)

A striking use of this technique appears in the ‘scale-exercise’ of sorts which crowns Chopin’s Impromptu opus 36, as annotated in the Stirling exemplar:

⁵¹¹ Yet, to the best of my knowledge, nowhere does Chopin show *all* fingers to fit into such a pattern, as Liszt suggests (though only for quintuplets). See Franz Liszt, *Technical Studies, I*, ed. by Imre Mező (Budapest: Editio Musica Budapest, 2006), p. 107. Note that, because the Henle *Etüden* volume reverses the usual typography (i.e., it shows original fingerings in Roman type, editorial ones in italics), it is all too easy to mistake the left-hand fingering for the descending chromatic scale in etude 23, bar 67 (1 passing under 5 twice) as being Chopin’s when it is in fact Hermann Keller’s (e.g., Chen, pp. 80–81). For a thoughtful critique of Keller’s fingerings (though in the context of op. 28), see Bellman, ‘Chopin Piano Editions’, *Notes*, 65/4 (2009), 857–60 (860).

⁵¹² See, e.g., Hummel, *Anweisung*, p. 108, II/p. 5 (‘Ex. 4’).

⁵¹³ F–Pn: Rés Vma 241 (I, 10), pp. 17–18. Note that the main function of the proposed 5 on a¹, and especially later on c², is signalling.

[Andantino]



Ex. 6. 14 Impromptu Op. 36,⁵¹⁴ 87–88 (Stirling)

Here we find not just otherwise irreproducible hand-pedalling potential, but equally irreproducible expression based on off-beat regrouping (or ‘chase and escape’, in Kurpiński’s terms), all wrapped in comfortable rule-of-regularity fashion.

But probably the most ingenious variation of this type of hand-squeezing chromatic fingering takes place in etude 12 (e.g. bars 17–18). The pattern first appears in Reicha’s *Etudes ou exercices* opus 30 around the turn of the century, though, as already mentioned, devoid of fingering indications.⁵¹⁵ See **Example 6.15** below for a transcription of these eleven bars, an oddly independent composition placed before any of the actual etudes of the collection. Note also how Reicha makes sequences out of the normal chromatic four-note segments well before Hummel—and which are possibly more than coincidentally similar to those in Chopin’s etudes 4 and 12.

⁵¹⁴ F–Pn: Rés Vma 241 (IV, 36), p. 6.

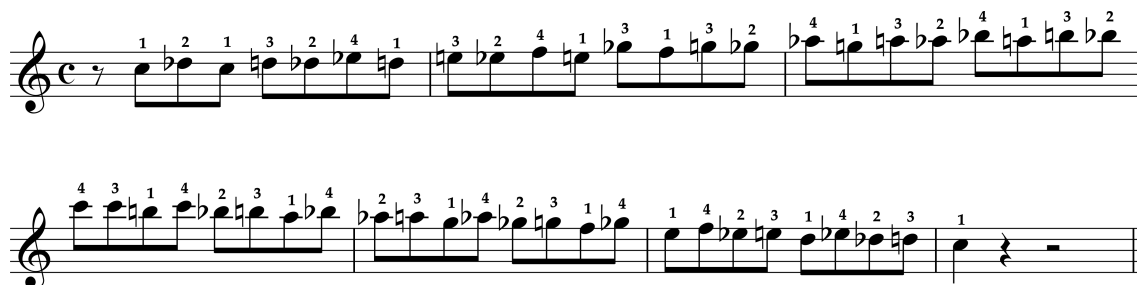
⁵¹⁵ Reicha, p. 2, proudly lays claim to the novelty right away: ‘The chromatic scale offers moreover a very singular passage; as it is new and important, I thought it appropriate to give it here separately’ (La gamme Chromatique offre en outre un passage très Singulier ; Come il est neuf et important, j’ai jugé à propos de le donner ici Séparément). For the etude proper, which is nothing to write home about, see *ibid.*, pp. 12–14.

The musical score is presented in five systems, each containing a grand staff with a treble clef and a bass clef. The key signature is B-flat major (two flats) and the time signature is common time (C). The first system shows a complex rhythmic pattern in the bass clef with a long slur. The second system features a similar pattern in the treble clef. The third system has a more active treble clef line. The fourth system shows a complex rhythmic pattern in the bass clef. The fifth system concludes with a final chord in the bass clef.

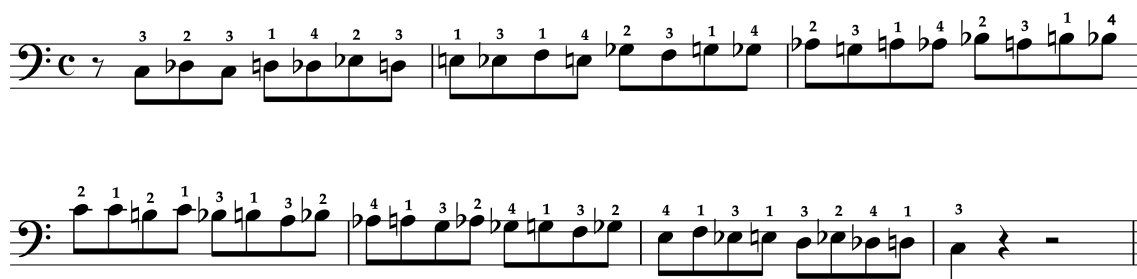
Ex. 6.15 Reicha,⁵¹⁶ remarks on 3^{eme} *Exercice*

⁵¹⁶ Ibid., p. 2.

As Reicha did not indicate any fingering for this figure, however, credit for furnishing it with one about a decade later should go (at least provisionally) to Francesco Pollini:⁵¹⁷



Ex. 6. 16 Pollini,⁵¹⁸ from *Metodo pel clavicembalo*



Ex. 6. 17 Pollini,⁵¹⁹ from *Metodo pel clavicembalo*

Uncovering this fingering's genesis is not quite that clear-cut, for even earlier than Pollini Beethoven had also made use of an almost identical figure in the first movement of the 'Emperor' Concerto opus 73—with sparse fingerings to boot (see

⁵¹⁷ Francesco Pollini, *Metodo pel clavicembalo* (Milan: Giovanni Ricordi, n.d. [1812]), p. 20: 'There is another chromatic scale which can be called ascending and descending by second, sometimes major and sometimes minor. Useful only for fleeting embellishments, it must have a small compass and should preferably be used in the treble register rather than in the bass'. Translation from Pollini, *Metodo per pianoforte / Piano Method*, ed. by Leonardo Miucci (Roma: Società Editrice di Musicologia, 2016), p. 23. Note that direct influence is extremely likely in this case, as none other than Carlo Soliva appears on Pollini's list of subscribers ('Elenco', unpaginated). Moreover, Soliva, *Szkola praktyczna Forte Pianu. Wyjęta z naleyjszych Autorów* (Warsaw: The Author, n.d. [1826]) reproduces exactly the fingerings for scales in all keys from Pollini's *Metodo*—even an elaborate composition based on scales in flat keys—without giving any credit other than the vague subtitle 'Taken from the best authors'. Being one of Chopin's closest mentors, it is almost unthinkable Soliva did not at least steer Chopin towards the *Metodo*. For Soliva's involvement in Chopin's career, see Goldberg, *Music in Chopin's Warsaw*, pp. 6, 61, 111–12, 289.

⁵¹⁸ Pollini, *Metodo*, p. 20.

⁵¹⁹ *Ibid.*

Example 6.18 below).⁵²⁰ This illustrious case may have led some to draw hasty conclusions as to its originality.⁵²¹

[Allegro]

sforzato

sforzato

Ex. 6. 18 Beethoven, *Grand Concerto* Op. 73 (I), 195–99

Chopin’s fingering—already a slight variation from Pollini’s—does seem to mimic Beethoven’s choice of 4 on the lowest note of each ascending pair, though Chopin prefers to reserve 3 for the black-keyed ‘bad’ notes of each pair.⁵²²

[Allegro con fuoco ♩ = 160]

dim

Ex. 6. 19 Etude 12,⁵²³ 17–19 (Dubois)

To keep free of any jolts and contortionism, Chopin’s fingering for this pattern will likely result in movement akin to a string player’s right hand as it approaches the frog in an upbow: tilted inwards, thumb hiding under, and a gradually flexed wrist. All of this ensures a relaxed-enough preparation for every detail of the figure,

⁵²⁰ Beethoven, *Grand Concerto Pour le Pianoforte* Op. 73 (Leipzig: Breitkopf & Härtel, 1809), p. 9.

⁵²¹ See, e.g., Bülow, p. vi: ‘The chromatic “meandering” passage in bars 16 and 17 (amplified in bar 73 and following) was first introduced into pianoforte music by Beethoven—first movement of the 5th Concerto Op. 73, there, certainly, with a mixture of diatonic intervals — and since then has been abundantly used by modern composers’. Given the Reicha precedent and the near certainty of Chopin’s direct knowledge of Pollini’s *Metodo*, Beethoven’s example clearly cannot be taken as the sole source of inspiration for Chopin’s similar passage in etude 12.

⁵²² See, however, **Example 6.28**, p. 175.

⁵²³ F–Pn: Rés F. 980 (I, 1), p. 50.

regardless how we may wish to inflect or outline it. Due to the well-paced crawling, however, the most likely highlighting will involve the top thread c-d \flat -d \natural -e \flat etc.⁵²⁴

A further elaboration of the pattern—featuring both chromatic and diatonic elements—can be found in the Coda of the Impromptu opus 36, just before the written-out trill of bar 100.⁵²⁵ Note how the proposed fingering is again a very slight variation of Pollini’s (see **Example 6.17** above), and that it derives its expression once again from off-beat shifting, and Kurpiński’s ‘chase and escape’:

Ex. 6. 20 Impromptu Op. 36, 98–101 (F1)

All of the above suggests a key expressive gesture, regardless how dependable and otherwise expressive other fingering choices may also be.

Even the archetypal chromatic scale may include fingerings promoting inherently different expressive gestures. In that regard, it is unfortunate Chopin left behind only a single indication for the chromatic scale (the so-called called ‘French’ variant where 3 always takes the black notes), as his approach in this respect is also likely to have been extremely flexible—if Clementi and Hummel are again any indication, that is.⁵²⁶ Indeed, we need look no further than Hummel’s opening

⁵²⁴ See *AoP*, p. 24.

⁵²⁵ Trills and fingering for them in Chopin have already received sufficient attention to warrant another discussion in the present study. See, e.g., *PaT*, p. 131–33n126.

⁵²⁶ See *ibid.*, pp. 35–37.

number from his *Études* to find a striking deviation from any abstract fingering pattern in early nineteenth-century piano methods:

[Allegro]

Ex. 6. 21 Hummel, etude 1, 27–29

Clearly, even when dealing with literal chromatic scales savvy composer-pianists will likely include varied fingerings for grouping and signalling purposes. The few examples in Chopin's *Études* of not just chromatic segments but full chromatic scales appear in etudes 14, 19 and 23, and upon close inspection none would seem to easily conform to the so-called French fingering.⁵²⁷

The longest chromatic scale appears in etude 19 as a 33-note LH tuplet:

⁵²⁷ Etude 2 is excluded from this discussion as it gets its own case study at the end of this chapter (see pp. 176–91).

[Lento ♩ = 66]

Ex. 6. 22 Etude 19,⁵²⁸ 51–53 (Dubois)

A simple way to maintain a solid recurring pattern throughout the run is to have 1 and 4 on every B# and F# respectively, which also helps keep an ear on the dominant seventh harmony.⁵²⁹ In addition, 3 and 1 anchor the run quite well ergonomically—crucial here because of its extension, and the force and speed it demands. Note also how, instead of sticking blindly to the overall pattern, the run starts with the thumb tucked under.⁵³⁰ An even more personal choice, perhaps, is reserving the shortest possible fingering to end the run with, thus possibly

⁵²⁸ F–Pn: Rés F. 980 (1, 2), p. 29.

⁵²⁹ See, e.g., Clementi, *Introduction*, p. 17, and Pollini, p. 18 for almost identical fingerings.

⁵³⁰ After pushing back considerably against the argument for individual anatomies as regards fingering, it feels a bit embarrassing to disclose my own peculiarities in that regard: an elongated trunk and short upper arms, which results in my body being usually much too close to the keyboard for comfort—not to mention always needing to use a short enough, custom-made bench. I often need to lean backwards while extending my arms and thus forego a straight back, which most agree is a must for healthy keyboard playing. All of this is just to say that, if anything, I have to be *extra* mindful of finger choice in situations involving extreme registers because they are more uncomfortable than if more normal bodily proportions were involved. For a useful discussion of the upper arm to trunk ratio, see József Gát, *The Technique of Piano Playing*, trans. by István Kleszky (London: Collet's, 1980 [1954]), pp. 49–58. Since it deals with the body itself, it should prove useful for performance on historical instruments as well.

emphasising it by forcing a slight slowing down (or, more strikingly, to do the exact opposite, which would tend to highlight note-pairing).⁵³¹

A much shorter chromatic scale appears towards the end of etude 14:

[Presto ♩ = 112]

Ex. 6. 23 Etude 14,⁵³² 62–64 ('Wodzińska')

In sync with the rate of movement given by long fingerings right from the beginning of the etude, the proposed solution here finds a balance between the expressive off-beat crossing-overs and using long fingerings as much possible. Thus, the longest is reserved for *4 3 2 1* for the first segment (which allows for hand-peddalling the c^3 and some expressive expansion), followed by a couple of *3 2 1* segments and ending with either switching to *3 1 2 1* (which remains close to the previous pattern) or the shortest possible fingering *1 2 1 2* (which perhaps functions as stronger signalling for the end of the run). Note, however, that the alternative *4 3 2 1* is found in Zaleska-Rosengardt's exemplar, and that while we cannot be certain it was sanctioned by Chopin it is certainly a solid option—especially if we wish to accelerate through the last portion of the chromatic line.⁵³³

⁵³¹ The choice of 'short' and 'long' fingerings may well induce subtle inflections in situations such as this run, where we might want to finish it off by taking time or accelerating. Incidentally, the level of sophistication of some historical fingerings as regards signalling for beginnings and ends for all sorts of patterns is astounding, and much deserving of further study.

⁵³² Binental, Plate 58.

⁵³³ The proposed fingering as a whole matches that in the Lemoine copy of the Zaleska-Rosengardt exemplar, except for the *4 3 2 1* just commented upon (shown in italics in the example because it cannot be confirmed to stem from Chopin).

The final example of a literal chromatic scale appears just before the reprise in etude 23. On the face of it seems quite straightforward, but still contains a few noteworthy details fingering-wise.

[Allegro con brio $\text{♩} = 69$]

cre ----- scen

8va-----

do -----

ff

segue segue

Red.

Ex. 6. 24 Etude 23, 66–69 (E1)

Because of how much faster this two-octave run could go as compared to the one in etude 19, it may be tempting to choose whatever feels most ergonomic and expedient. There are important motivic and rhythmic issues which speak against that approach, however, and it would probably pay off to proceed a bit more analytically. Most prominent is the lament-like neighbouring figure $\hat{5}\text{--}\hat{6}\text{--}\hat{5}$ which opens and pervades the etude, here refurbished and embedded as an obsessive minor 9th appoggiatura over the prolonged dominant in the dramatic *ff* contrary motion passage of bars 59–64. The appoggiatura grows ever more persistent from bar 65 on, which begs for some inflection even through the chromatic scale leading up to the reprise (perhaps suggested also by the hairpin on the downbeat of bar 67).

Such emphasis is why keeping 1 on F throughout the chromatic scale may be the most natural option, together with 4 on F# not just for speed but for signalling as well—in that way it mirrors exactly the proposed fingering for etude 19, bars 52–

53 (see **Example 6.22** above). Comparing this solution with Badura-Skoda's and Ekier's editorial fingerings is informative of current approaches:



Ex. 6. 25 Etude 23,⁵³⁴ 67–68 (Ekier)

[Allegro con brio $\text{♩} = 66$]

Ex. 6. 26 Etude 23,⁵³⁵ 67–68 (Badura-Skoda)

Ekier resorts to 1 at almost every three semiquavers, which, however dependable and easy to learn it may be perhaps hammers things out a bit excessively.⁵³⁶ Badura-Skoda's upper choice matches Ekier up to the third beat, where the pattern changes to 3 on F to include another 1 2 3 4 segment, presumably also for reasons of expedient learning. But while that may very well be the case, it is also overly taxing in terms of kinaesthetic memory and cognitive load.

One last consideration within the proposed fingering framework concerns bar 68, where the obsessive oscillation F-E-D# in the bass embellishes E (see **Examples 6.24** and **6.27**). The main question is whether we wish to bring out an appoggiatura effect at all (and if so, *how*), which here hinges on finger choice to a very high degree because of the figure's runaway speed. Note, however, that both the speed itself and the long slurs do seem to preclude hammering away at the hemiolas in bar 68, as one may be tempted to simply because they happen to be there. In other words, however present the rhythmic element may be or we may

⁵³⁴ Ekier, p. 119.

⁵³⁵ Badura-Skoda, p. 56.

⁵³⁶ Incidentally, some eminent late nineteenth-century editors also suggest this very fingering, e.g., Bülow, p. 60.

wish to bring into play in our performance, there is also the issue of harmonic clarity, which hammering away every beat with F and D# in the bass throughout the bar would obscure if the E is not also revealed somehow—certainly a challenging balance.

[Allegro con brio ♩ = 66]

1 2 3 1 2 1 3 1 2 1 3 1 2 *segue* 1

1 2 3 1 2 1 3 1 2 1 3 2 1 2 3 1 2 1 3 1 2 1 3 1

1 2 3 2 1 2 3 *segue* 1

fz
Ped.

Ex. 6. 27 Etude 23, 68–69 (E1)

The top row would appear to be the most viable, while the second is perhaps too taxing in its effort to make the pattern repeat at the minim; the third, though seemingly a most natural solution as 1 2 3 take F-E-D# throughout, may lack enough force and control. But whatever option we ultimately choose, prominent use of the thumb on E—and also on the appoggiatura F *at some level*— appears to have the most grounded effect.

The above use of the LH 1 prominently on $\hat{5}$ to assist with prolongation of the dominant harmony does in fact closely resemble something Chopin *did* write in etude 12, bar 76:

[Allegro con fuoco ♩ = 160]

1 1 (4) 2 (3) 1 (3) 2 (4) 1 2 (4) 1 1 (4) 2 1 2 (4) 1 1 (4) 2

smorz

sotto voce

[Not 3 2 1]

Ex. 6. 28 Etude 12,⁵³⁷ 73–77 (Dubois)

This fingering's main function appears to be analytical (by disambiguation), as it prioritises the dominant G by latching onto it with *1* rather than taking the seemingly more ergonomic route that would bypass it in favour of *1* on Ab. Though awkward-looking, when properly handled Chopin's choice results in the clearest gesture (and therefore awareness) to inflect the underlying harmony.⁵³⁸ Here Chopin uses the potentially overpowering thumb to the greatest advantage, by preventing the LH to move too casually over the dominant, thus ensuring the projection of the cadential six-four through its resolution. Finally, note the potentially more forceful fingering in bar 73 with respect to bar 17, perhaps more appropriate to the climactic scenario.

⁵³⁷ F-Pn: Rés F. 980 (I, 1), p. 54.

⁵³⁸ The Dubois exemplar features a faint line below the LH staff going from the second beat of bar 73 to the downbeat of bar 77 (shown in **Example 6.28** by a dotted slur), whose ultimate meaning one cannot just assume to be slurring—it is more likely to have been Chopin's way of underscoring the importance of keeping an ear on harmonic function through those four bars. Such an analytic sort of marking would be in accordance with the Anonymous Scottish Lady's account of Chopin's teaching: 'He would sit patiently while I tried to thread my way through mazes of intricate and unaccustomed modulations, which I could never have understood had he not invariably played to me each composition [...] letting me hear the framework (if I may so express it) around which these beautiful and strange harmonies were grouped, and in addition showing me the special fingering, on which so much depended, and about which he was very strict', as quoted in James Cuthbert Hadden, *Chopin* (London: Dent & Co., 1903), p. 187.

Chopin's *Applicatio*? Etude 2 as Blueprint⁵³⁹

The literature often notes how etude 2 features the most protracted set of fingering indications Chopin ever wrote, thereby marking its special significance:

The enormous importance Chopin attached to this Étude is shown by the fingering, which he has given for every note except in repeated passages; no other composition in the whole of his music is so completely fingered; none demonstrates more clearly the importance of following the composer's own fingering and not that of his ingenious editors.⁵⁴⁰

And it may well be that 'without facility in the fingering it employs it is impossible to render appropriately some of Chopin's most important compositions',⁵⁴¹ that the apparent fingering overkill may represent our best chance at understanding many *other*, general aspects of Chopin's approach to performance.

Much commentary on this etude, however, has long taken strengthening or 'training the weak fingers' to be a prerequisite to then focus above all on delivering a perfectly even chromatic line.⁵⁴² Thus, in a classic case of putting the cart before the horse, many pianists search for alternatives to the original fingerings before any consideration of their expressive functions, an attitude resulting from a few widespread misconceptions. First, there is the assumption of dual articulation throughout, that it unequivocally dictates legato for the upper line and staccato for the inner part written in isolated semiquavers. Yet Chopin notates such duality very

⁵³⁹ This section is a thoroughly revised version of that in 'Expressive gesture and structural disambiguation in Frédéric Chopin's fingering indications: A preliminary study through selected etudes' (MA dissertation, Cardiff University, 2018), pp. 28–46.

⁵⁴⁰ Gerald Abraham, *Chopin's Musical Style* (London & Others: OUP, 1939), p. 39.

⁵⁴¹ G.C. Ashton Jonson, *A Handbook to Chopin's Works*, revised 2nd edn (London: William Reeves, n.d. [1908; 1st publ. 1905]), p. 98. Jonson's short commentary was to be one of the last to paint this etude in a positive *artistic* light: '[W]hen properly rendered, [it is] as delicate as a silver-point drawing, as rounded and finished as a lyric of Heine' (*ibid.*).

⁵⁴² See, e.g., Min Joung Kim, 'The Chopin Etudes: A Study Guide for Teaching and Learning Opus 10 and Opus 25' (D.M.A. dissertation, University of North Texas, 2011) p. 71: 'Before tackling the chromatic scale as the etude's main target, it is necessary to train the weak third, fourth, and fifth fingers'. This is not to single out and denigrate Kim's valuable study, but just to show how ingrained and long-standing this idea has become—there really are too many like-minded comments in the literature to keep count.

explicitly whenever that is actually what he wants, as revealed for example by etude 16 and the last of the 3 *Études pour la Méthode des méthodes*:⁵⁴³

Ex. 6. 29 Etude 16,⁵⁴⁴ 9–11 (*Stichvorlage*)

Ex. 6. 30 *Nouvelle étude* in D \flat ,⁵⁴⁵ 0–4 (Autograph)

In that regard, I submit that the notation in etude 2 represents a kind of shorthand which promotes great flexibility as to the sounding duration of the inner parts and voicing of the texture throughout.⁵⁴⁶ A second, largely unchallenged assumption is

⁵⁴³ *Mdm*, pp. 10–14 (hereafter: *Trois nouvelles études*, as they became known after being printed independently).

⁵⁴⁴ P–Wn: Mus. 217 Cim., p. 11, a copy by Fontana (as are nos. 5, 6 and 12). Note that the autograph *Stichvorlage* (F–Pn, Rés 50(2)), bears the surprisingly slow metronome marking of ♩ = 120, probably an absent-minded repetition of the previous etude’s metronome marking, as Howat surmises (pers. comm., 20 January 2023).

⁵⁴⁵ Chopin, *Manuscrits autographe*.

⁵⁴⁶ S–Smf, MMS 398, unpaginated, first published in Badura-Skoda, pp. 11–14. This autograph shows crotchets and only occasionally semiquavers for the inner texture. And Moscheles’s op. 70/3 etude, usually cited as forerunner, shows no such legato-staccato duality either. Incidentally, that Chopin wrote etude 2 in direct response to Moscheles’s op. 70/3 (as is often surmised in the literature) is now confirmed by Goebel-Streicher, p. 199: ‘[Y]ou know Moscheles etude in G, I wanted to prove the opposite and wrote this one: and then the method has been employed often [...] You’ve grasped it well, but [it needs] to be quicker and lighter, tempo-wise’ ([V]ous connaissez l’étude en sol /in G dur/ de Mosheles, je voulu prouver le contraire et j’ai écrit celle-la: et alors on a employé cette methode souvent [...] Vous l’avez bien saisi, mais plus vite et plus leger, avec le tems c’est à dire). Note also that, as already discussed, hand pedal was a time-tested technique and positively encouraged—as Moscheles for one makes clear in the preface to op. 70 (p. 6).

that the primarily chromatic top line must be conveyed with absolute evenness of timing and dynamics at the expense of all else—hence its ‘gliding and vaporous character’ as Alfred Cortot would have it.⁵⁴⁷ Prolonged experimentation with the original fingering reveals a more ‘solid’ conception, perhaps, one where the upper line is not the main feature or agent but steadfastly subordinates itself to the harmonic motion. Indeed, playing the top line with minimal inflection yet emphasised above all else seems to elicit feelings of dread for both player and listener. In short, this etude seems to have very different *raison d’être* from those usually given.

Some pianists and editors feel inclined to change the original fingering right from the very first note, in fact, substituting 5 3 for the original 4 3. And this approach usually extends to the rest of the etude, as 5 3-based chromatic fingerings are nowadays generally thought to be superior to those based on 4 3.⁵⁴⁸ Yet however dependable a 5 3-based chromatic fingering may be in some cases, here it may actually run against Chopin’s meticulously worked out gestures (both musical and physical) and lead to a fundamentally different bodily attitude at the keyboard.

Allegro ♩ = 144
sempre legato

The musical score shows the first few measures of Chopin's Etude 2, Op. 10, No. 3. The tempo is marked 'Allegro' with a quarter note equal to 144 beats per minute. The instruction 'sempre legato' is written above the staff. The piece begins with a piano (*p*) dynamic. The right hand features a complex chromatic line with numerous fingerings (4 3 4 5, 3 4 3 4, 5 3 4 3, 4 3 4 5, 3 4 3 4, 5 4 3 4, 3 5 4 3, 4 3 5 4, 3) written above the notes. The left hand provides a simple harmonic accompaniment with chords and single notes. A crescendo (*cres*) is indicated in the middle of the piece.

Ex. 6. 31 Etude 2,⁵⁴⁹ 1–3 (Fo)

⁵⁴⁷ Alfred Cortot (ed.), *Chopin 12 Études Op. 10. Student's Edition*, trans. by M. Parkinson (New York & Paris: Salabert, n.d. [1915]), p. 15.

⁵⁴⁸ See, e.g., Mei-Ting Sun, ‘The Etudes Op. 10 of Frédéric Chopin: A Technical and Scientific Study’, (D.M.A. dissertation, The Juilliard School, 2006), pp. 39–48.

⁵⁴⁹ Paris, Bibliothèque-musée de l’Opéra, F-Po, Rés. 50 (4), unpaginated.

Even if we take the *sempre legato* indication to be all but psychological at the indicated tempo,⁵⁵⁰ Chopin's 4 3-based fingering binds the upper line more closely together—if possibly also less clearly in terms of individual notes—than 5 3 does. The continuous use of 4 guarantees maximum and constant contact with the keys despite the fairly brisk tempo, thus exploiting its apparent weakness to the utmost.⁵⁵¹ Indeed, it is baffling that some still take Chopin's famous remark about his 'inept 4th finger' at face value,⁵⁵² as he seems to need very good reasons for even sporadic use of 5 3, for instance in bar 3 to better prepare 4 for e² on the second beat:

[Allegro ♩ = 144]

The image shows a musical score for Chopin's Etude 2, Op. 10, No. 3, measures 17-20. The tempo is marked [Allegro] with a quarter note equal to 144 beats per minute. The score is in C major and 4/4 time. The upper staff (treble clef) contains a complex rhythmic pattern of eighth and sixteenth notes, with various fingerings indicated above the notes. The lower staff (bass clef) contains a simpler accompaniment of chords and single notes. The key signature has one sharp (F#), and the time signature is 4/4.

Ex. 6. 32 Etude 2, 3–5 (Fo)

The downbeat of measure 18 is another rare example of 5 3 (on the very same notes as those of the opening), the reason being that as 4 takes b¹ on the last semiquaver of bar 17, 5 on a¹ is somewhat forced:

⁵⁵⁰ The indication *sempre legato* appears seven times in all first editions, which for once matches the only extant set of proofs.

⁵⁵¹ Etude 8 also makes prominent use of 4 even where much force is needed, attesting to its holistic technical conception—the fingerings given certainly do not hint at any 'fingers only' approach, regardless of our choice of instrument.

⁵⁵² See Frick, p. 446 (letter to Julian Fontana, Edinburgh, 18 August 1848): 'No one plays to my taste today, and I've become so indulgent that I could listen to Sowiński's Oratorio and not die. I'm reminded of Norblin, the painter, who said that a certain artist in Rome saw the work of a certain other one, and it was so unpleasant an experience for him, that... he died. What has remained for me is a large nose and an inept 4th finger'. But all too often Chopin's tongue-in-cheek comment is taken seriously, e.g., Davies, p. 59, and Verbalis, pp. vii, 28. Note, however, that Higgins (p. 123) had pointed out several decades prior that Chopin's comment was in jest.

[Allegro ♩ = 144]

The musical score shows a trill figure in the right hand with several alternative fingerings indicated above the notes: 5 4 3 4, 3 4 5 4, 3 4 5 4, 3 4 5 4, 5 3 4 5, 3 4 3 4, 5 4 5 4, 5 4 5 3, and 4. The left hand has a bass line with chords and a 'dim' marking in the first measure.

Ex. 6.33 Etude 2, 17–19 (Fo)

Yet another unusual feature of this etude is Chopin's use of alternative fingering indications—something he did not care to do too often (see **Example 6.32** above). In bar 4, Chopin gives 3 4 3 4 and 3 5 4 5 as possibilities for the trill figure on b^1 (presumably assuming use of the chosen fingering through the next beat as well). Both alternatives are quite viable as long as one guides from the upper-arm to avoid any 'pigeon hunting'—Chopin's picturesque phrase for any brusque movement or unintentional lurching in legato playing.⁵⁵³ When choosing between the alternatives, however, especially in a piece with as much repetition of chromatic scales or segments such as this trill figure, we may want to consider using them for variety rather than unthinkingly sticking to one or the other throughout.

The second case of alternative fingering (see **Example 6.34** below) is quite interesting in that it hints at unmarked arpeggiation: that is, unless we take an inordinate amount of time and/or an awkward *silence d'articulation* when skipping from e^2 to e^b3 with 4, we will need to arpeggiate g^2-e^b3 to maintain the *sempre legato* texture.⁵⁵⁴

⁵⁵³ See, e.g., *PaT*, pp., 32, 104n42.

⁵⁵⁴ Chapters 7 and 8 will deal more fully with the important issue of unmarked arpeggiation.

[Allegro ♩ = 144]

Ex. 6. 34 Etude 2, 25–27 (Fo)

For some reason, this fingering failed to be included in any of the first editions and can only be found in the only extant set of proofs.⁵⁵⁵ Yet even if it was ultimately discarded by Chopin himself (rather than the omission being the product of an editorial mistake), as arpeggiating dyads may actually represent a very common practice of the period we would probably do better not to dismiss it outright.

Chopin was obviously not averse to the use of 5 3 *per se* but chose not to make it the basis for this etude, resorting instead to the more natural legato effect granted by 4 3. By harnessing the natural configuration of the hand, 4 3 not only helps the pianist attain a perfectly calm legato overall but also a more kinaesthetically attuned connection to the keyboard. Note also that the original fingering may require a somewhat higher wrist position than normal, thus making for the most comfortable and, importantly, swift crossing-overs and passing-unders of the archaic kind.⁵⁵⁶ Yet a higher wrist position need not result in superficial playing—it may just require a slightly different approach to weight transfer as compared to a more neutral one. The use of a high wrist in a closely related context is quite illustrative:

⁵⁵⁵ Badura-Skoda (pp. 7, 9) chose to ignore *both* alternative fingerings, but they can be found in Ekier (pp. 19, 21) and Howat (pp. 6, 8).

⁵⁵⁶ The reader can also test the validity of this general point by trying out the original fingering at the keyboard with varying wrist heights. A relatively high wrist is a perfectly healthy, musically consistent and technically sound option here, however much it may depart from current technical approaches thought to be ergonomically ideal.

[Andantino ♩ = 116]

Ex. 6. 35 Field, *Fantaisie on Russian Themes*,⁵⁵⁷ 100–03

Aleksander Nicolayev's commentary is worth quoting in full:

Such a sequence in fingering is often met in his concertos and exercises. It makes us realize that Field used a high position of the wrists and forearm in playing to avoid the uncomfortable result caused on the first finger by a low wrist position.

His fingering convinces us that although his hands appeared almost immovable in playing, his wrists, relaxed and pliant participated in directing the work of the fingers. Their position dictated not only the technical employment but also depended on the character of voicing and phrasing.

In all this Field was close to Chopin. The fingering of both marvellous pianists was subservient to the artistic idea and the peculiarity of each finger in attaining the subtle shades of sound.⁵⁵⁸

Although whether a high wrist position is actually what avoids 'the uncomfortable result caused on the first finger' is debatable (mysterious, even), that it results in freer overall movement of the hand as well as how swiftly the hand can shift should not be.

A more natural and efficient sideways hand-to-forearm angle also results from 4 3-based fingerings when using a slightly higher wrist than usual. For all its pearly clarity and lesser need for arm involvement, 5 3-based fingerings in this etude often force that angle to quite uncomfortable degrees, somewhat denting our

⁵⁵⁷ Transcribed exactly as it appears in Aleksander Aleksandrovich Nikolayev, *John Field*, trans. by Harold M. Cardello (Musical Scope Publishers, 1973 [1960]), p. 114.

⁵⁵⁸ *Ibid.* Despite the peculiar English translation and the inexplicable barrage of typos and misspellings, this source does provide the English-speaking reader with much invaluable information on Chopin as well as on Field.

ability to lean on the thumb and index when needed for expressive or technical reasons, and possibly lead instead to undue discomfort and fatigue.

Taking all of the above into account, perhaps the most salient technical demand of the original fingering is that of guiding from the upper arm. Again, *Pdm* in this respect is illuminating and worth repeating in this context:

Just as we need to use the conformation of the fingers, we need no less to use the rest of the hand, the wrist, the forearm and the upper arm. One cannot try to play everything from the wrist, as Kalkbrenner claims.⁵⁵⁹

And, furthermore, ‘A supple hand; the wrist, the forearm, everything will follow the hand *in the right order*’.⁵⁶⁰ How one prepares the move from the last beat of bar 6 to the next downbeat is a case in point (see **Example 6.36** below). As it requires considerable arm involvement and flexibility if played with Chopin’s fingering, this gesture guarantees a hefty enough arrival at the cadential six-four chord—and involves judicious weight transfer even on a Viennese-action instrument.⁵⁶¹

[Allegro ♩ = 144]

The musical score shows two staves. The right staff (treble clef) contains a series of sixteenth-note chords and single notes, with fingerings indicated above the notes. The left staff (bass clef) contains a simple bass line with chords and single notes. The tempo is marked Allegro with a quarter note equal to 144 beats per minute.

Ex. 6. 36 Etude 2, 6–8 (Fo)

Substituting 3 for the indicated 5 on the downbeat of bar 7 would all but ruin this effect—both sonically and kinaesthetically. Likewise, substituting 3 for 5 on the fourth beat would be equally ineffective, as 5 there makes for a more compact hand which gently connects the passing tone a¹ to its resolution g^{#1} by gesturing towards it (and thus our hearing), by hand-peddalling somewhat but without any need to

⁵⁵⁹ As quoted in *PaT*, p. 18.

⁵⁶⁰ *Ibid.*, p. 29.

⁵⁶¹ Judging from experience on my Conrad Graf copy (Paul McNulty, 2008, after a c. 1819 instrument), most of op. 10 works extremely well on such instruments. This should not be surprising, as Chopin’s preference for Graf’s instruments while in Vienna is well known.

hold either note for a full crotchet.⁵⁶² A similar kind of sizable arm weight transfer happens for example going from the fourth beat of bar 14 to the following downbeat, which helps emphasise the Neapolitan sixth:

[Allegro ♩ = 144]

Ex. 6. 37 Etude 2, 14–16 (Fo)

This etude thus aligns itself perfectly with its implicit companion, etude 1, as enduring the arpeggio figure there for very long without this kind of larger-muscle guidance would be all but impossible. By pairing these two etudes,⁵⁶³ Chopin's tacit dictum seems to be something along the lines of 'Always guide from the upper arm, regardless of how expanded or contracted the hand may happen to be'. Small as these larger-muscle motions may be in the case of etude 2, they prove decisive in mastering it, even if the arm remains for the most part rather close to the body.⁵⁶⁴ In addition, some in-and-out guiding results in 'finger walking' while also responsively varying the curvature of the fingers.⁵⁶⁵ Summing up, the original fingering promotes a rather relaxed and agile hand position (which may tend to be higher than usual), a subtly punctuated upper line and, at least potentially, a variedly balanced inner-voice texture—all of which opens up vast possibilities for nuance and thus individual expression. Modern, 5 3-based fingering alternatives, on the other hand, while granting much relief to the upper line may also end up also sacrificing some

⁵⁶² For opposing views, see p. 228n654.

⁵⁶³ The case for Chopin intentionally pairing etudes on technical grounds remains to be investigated in any depth.

⁵⁶⁴ See, e.g., *PaT*, pp. 30, 106n58.

⁵⁶⁵ Needless to say, there will be many other complex movements across all planes simultaneously and too rich for verbal description, but such guiding does seem fundamental to this etude's conception.

of the texture to it, possibly causing unnecessary muscular tension in the process as well.⁵⁶⁶

The middle section further illustrates how the original fingerings may assist in controlling the temporal ebb and flow, and in rationing sound and texture. Note also how the Stockholm autograph shows the most variety in note values at this point, bringing the inner-voice syncopated sequence into relief in bars 19–24:

Ex. 6. 38 Etude 2,⁵⁶⁷ 19–21 (Autograph)

Another related case of inner-voice protagonism takes place in bars 20 and 22, where both melodic design and fingering also allow for arpeggiating the right hand slightly but expressively ahead of the third beats, thus infusing the whole sequence with forward motion.

⁵⁶⁶ See Sun, p. 39.

⁵⁶⁷ S–Smf: MMS 398 (unpaginated). Note also that the time signature in this autograph is C and the tempo indication is slightly slower ($\text{♩} = 69$). Here I should correct a gaffe in ‘Expressive gesture’, p. 36, as the image of this autograph included therein was not taken by my friend Mei-Ting Sun, but was rather the Nydahl Collection’s own reproduction.

[Allegro ♩ = 144]
sempre legato

sempre legato

Ex. 6.39 Etude 2, 19–23 (Fo)

In fact, we may be looking at a case of not just unnotated- but even *implied* arpeggiation, as untold hours of practice with the original fingering ultimately revealed the near impossibility of having it both ways: one either keeps the gestural and sonic flow by arpeggiating, or a perceptible lurch results when attempting total synchrony.⁵⁶⁸ A similar case takes place in bar 18, were if one strikes the octave simultaneously 4 has an awkward time moving from e^2 to $\text{g}^{\sharp 2}$ on the third beat (see **Example 6.40** below); arpeggiation again solves the difficulty smoothly and rather expressively—a possibility perhaps also hinted at by the only notated slur in the whole etude as it appears in the extant proofs and all first editions.

⁵⁶⁸ See p. 234n666.

[Allegro ♩ = 144]

5 4 3 4 3 4 5 4 3 4 5 4 3 4 5 4 5 3 4 5 3 4 3 4 5 4 5 4 5 3 4

dim

Ex. 6.40 Etude 2, 17–19 (Fo)

The arrival to the dominant pedal point in bar 32 provides a modicum of rest for the pianist at last.

[Allegro ♩ = 144]

4 5 4 5 4 5 4 5 4 5 4 5 3 1 4 5 4 5 4 5 4 5 4 5 4 5

sempre legato

Ex. 6.41 Etude 2, 32–36 (Fo)

Indeed, the reason why many pianists substitute 4 5 3 5 for Chopin's 4 5 4 5 and apply it to the whole passage up until the reprise may be mostly a wish for relaxation—but which unwittingly makes for less differentiation as to voice leading. That is, absent fingering indications (see **Example 6.41** below) we would be hard-pressed to decide which of the two readings shown in **Figure 6.4** below Chopin meant, and fingering becomes possibly the best and most synthetic way to specify it:

[Allegro ♩ = 144]

Ex. 6.42 Etude 2, bars 32–34, without markings of any kind

Fig. 6.4 Conflicting contrapuntal interpretations

Note once again that such disambiguation hinges first and foremost on the player's perception and own sense-making rather than a clear-cut recipe for performance or to convey 'structure' while at it.

Thus, the original fingering is there not just for technical guidance or facilitation, but also to dispel any Necker cube-like ambiguity (aurally, but also kinaesthetically): 4 5 4 5 naturally projects the underlying linear progression composed of quavers where each (taken by 4) is embellished by escape tones (taken by 5), and 4 5 3 1 on the ensuing downbeats stands for a crotchet embellished by a double-neighbour which also signals the skip upwards to continue the sequence. As seen from the conflicting readings in **Figure 6.4** above, the two fingerings for the seemingly identical melodic design make perfectly clear that they do *not* carry the same contrapuntal meaning, as fingering the whole passage uniformly with 4 5 3 5 would tend to project crotchets descending by thirds, each embellished by a double neighbour (**Figure 6.4a**)—certainly less piquant than Chopin's driving idea of filled-in thirds (**Figure 6.4b**). This passage is a particularly striking example of analytical fingering, as without it discerning the intended contrapuntal

interpretation would be mostly a matter of speculation—and indeed, one must wonder what other sort of indication could better convey said interpretation. Incidentally, note that Chopin does prescribe a uniform use of 4 5 3 5 earlier in bar 8 (though the initial 3 5 3 5 is rather forced) for a similar sequence, but which works beautifully there because the underlying progression is in fact based on crotchets embellished by double neighbours:

[Allegro ♩ = 144]

The musical score shows two staves. The right-hand staff contains a sequence of eighth-note patterns with fingerings: 3 5 3 5, 4 5 3 5, 4 5 3 5, 4 5 3 5, and 4. The left-hand staff has a simple bass line with notes corresponding to the right hand. A hairpin crescendo is indicated over the first two bars, and a 'dim' marking is present in the second bar.

Ex. 6.43 Etude 2, 8–9 (Fo)

Returning now to the dominant pedal point (see **Example 6.41** above), note how challenging it can be to inflect the dissonances on the downbeats of bars 33–34 in performance despite the relatively easier 4 5 3 1 fingering. Thus, counterintuitive as it may be to play the preceding scales (with 4 5 4 5) overall faster than (maybe also slowing down towards) the double-neighbour figure which follows it (with 4 5 3 1), that could be an important implication of the original fingering. In fact, it could even suggest a slight *crescendo* towards the downbeats of bars 33–34 for extra emphasis, thus somewhat contradicting (or allowing for a double meaning of) the hairpins.⁵⁶⁹ Note also that the 5 4 5 4 scales may need (even) more outward tilting of the hand as compared to the rest of the etude.⁵⁷⁰

The fairly continuous presence of 4—with its natural tendency to linger—also helps ever so slightly lengthen each of the semiquavers in the 4 5 4 5 pattern, thus also helping project the underlying quaver progression. Even if in the process some individual notes do not speak with the same clarity (especially the escape

⁵⁶⁹ This last point reflects my personal interpretation for this passage at this time, and I do not mean to proselytise.

⁵⁷⁰ I owe this valuable suggestion to Sun, who (rather annoyingly) gets more problem-solving done in a few minutes of practice than the rest of us do in weeks.

tones, which simply will not sound as distinct as the notes they embellish), Chopin's fingering furnishes the most congruent gesture for the underlying counterpoint. Note also how the melodic peaks and valleys in this passage outline a series of 7 6 suspensions over the dominant pedal point (see **Figure 6.5** below). Incidentally, we have already seen a similar use of the same pair of fingers for scales with escape tones,⁵⁷¹ something every bit as old-fashioned by the late 1820s as Chopin's choice of 4 3 for this etude was.

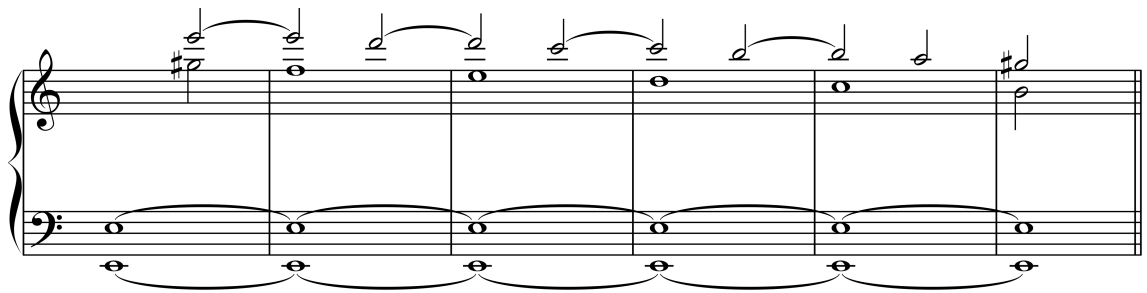


Fig. 6. 5 Suspension series over dominant pedal point

The A' section and Coda offer further expressive indications, especially the second half of bar 42 which features a different fingering from its homologue passage in bar 15. That this results in using 4 5 four times in succession through the crescendo instead of 4 3 perhaps hints at effecting more of a *ritenuto* than in bars 15–16. In any event, that a relatively more expansive or lingering expression is called for here should be beyond doubt. Note also the arrival to a³ with 4 instead of 5 and the omission of f³ on the downbeat of bar 43, which further differentiates this spot from its homologue (bar 16), allowing perhaps for a more emphatic deceptive cadence and possibly inviting a bit more dwelling as well.

The arrival at the Coda on the downbeat of bar 45 with 2 (as opposed to 5 as was the case with its homologue in bar 18) entails a significant extension between 1 and 2—which also requires noticeable extra time to play healthily—and very much ensures a final-sounding (and feeling of) arrival to the structural tonic:⁵⁷²

⁵⁷¹ For even more examples of this from as far back as the 16th century, see Oortmerssen, pp. 30–41.

⁵⁷² In my experience at least, playing this and similar extensions with the hand quite far into the keys helps immensely, not least psychologically.

[Allegro ♩ = 144]

The musical score consists of two staves. The right hand (treble clef) plays a complex chromatic pattern with various fingering indications: 5 4 3 4, 3 4 5 4, 3 4 5 4, 3 4 5 4, 2 3 4 5, 3 4 3 4, 5 3 4 3, 4 3 4 5, and 4. The left hand (bass clef) provides a harmonic accompaniment with chords and a 'cres' marking. The key signature has one flat (B-flat), and the time signature is 3/4.

Ex. 6. 44 Etude 2, 45-47 (Fo)

In addition, it reinforces the effect of an implied unison: as 2 also takes the leading tone in the previous beat, its lateral movement towards a¹ converges in turn with the top voice's as the result of its descent from b¹. This exceptional fingering thus separates an important structural point from the ascending flourish that follows. Finally, from bar 47 onwards Chopin again indicates a 5 4-based fingering, suggesting not just some form of *ritardando* but possibly also an unhurried feeling overall—5 4 for this chromatic descent demands more careful attention (and possibly slightly more broadening) than would 4 3- or even 5 3-based fingerings, regardless of how proficient or how much practice any pianist gets.

This etude is altogether unforgiving, demanding complete mastery of complex patterns of movement throughout. It simply makes no room for lazy minds and ears, as everything must be willed in the interest of an expressive, communicative performance. A 5 3-based fingering may be an unnecessary, even counterproductive tour de force which can even diminish this piece's charm and expressive power. Careful study of the original fingering indications, on the other hand, significantly deepen our musical understanding of this etude—often reviled as technically useful but musically negligible—and contribute towards more involved performances, thus help reclaim its musical value. Despite its notorious fame to the contrary, it can be rendered quite expressively and without undue muscular fatigue, if probably only after much experimentation to find where the music, choice of instrument and individual expression come together. Fortunately, Chopin did point out in great detail how to work in that direction.

CHAPTER 7

The Etudes (II): Case Studies in (Mostly) Disjunct Motion

Chopin's fingering indications in the Etudes lean towards the most compact possible hand configurations, occasionally even more so than the so-called 5-finger position, as we saw in the previous chapter. Thus, expansions and contractions of the hand (as minute as they may be) tend to arise from expressive concerns rather than from just a desire to prepare the fingers over the next keys to be played—the siren calls of dependability.⁵⁷³ Much as Clementi and Hummel did masterfully before him, Chopin uses movements *in between* relatively more stable hand configurations for expressive purposes. As we will see below, this principle of compactness applies just as well in disjunct motion contexts, even in situations which would seem to demand keeping expanded positions longer such as in, obviously, arpeggio-based figurations.⁵⁷⁴

'Forks' and Other Unconventional Arpeggio Fingerings

Hummel's definition of a 'fork' fingering is straightforward enough:

When the interval of a third or fourth is taken with the 3rd and 4th or 4th and 5th fingers extended, the angular position of these fingers somewhat

⁵⁷³ Kruger, p. 72, puts this quite perceptively: 'When playing this étude [étude 11], anxiousness to cover the keys of each subsequent chord earlier than necessary can compromise the flow of the music. If the hand jerks into position in anticipation of the following chord, the formation of a full wrist circle is prevented. A halting sensation results physically and musically as each chord is played in a static manner, with no apparent relationship to the chords around it'. On this same étude, see also Goebel-Streicher, p. 96: 'I practised this horrible, I mean beautiful but *impertinently* difficult Etude Saturday for 2 hours, on Sunday for 3, on Monday and Tuesday for 4 hours of the day, and yet today it is still not secure enough' ([...] daß ich diese abscheuliche, ach nein sie ist schön aber *impertinent* schwer, kurz diese Etude Samstag 2 Stunden, Sonntag 3, Montag und Dienstag aber 4 Stunden des Tages geübt habe, und heute doch ihrer nicht ganz sicher war).

⁵⁷⁴ For more on the potential expressive import of hand compactness, see, e.g., Nikolayev, p. 114, and *AoP*, p. 34.

resembles a fork, this in many cases, as here for example, saves passing the fingers over the thumb, and facilitates the performance.⁵⁷⁵

Unsurprisingly, we need look no further than the first few bars of Hummel's etude 1 to find a perfect example of a fork in bar 8.⁵⁷⁶

Ex. 7. 1 Hummel, etude 1, 7-9

It is crucial to note that fork fingerings generally require a substantial amount of outward tilting, thus allowing stretches which would be unfeasible with the wrist perfectly parallel with the keyboard.

The clearest (albeit implied) fork in Chopin's Etudes appears at the very end of etude 8. The final arpeggiated chord and fingering are in fact identical to Hummel's just shown above, only a semitone higher:

Ex. 7. 2 Etude 8, 93-95 (F1)

Although shifting within the final arpeggio (e.g., with 5 3 on c^3 - f^3) would likely have a more forceful effect, the fork ensures a continuous gesture more in sync with the rate of movement of the RH arpeggios in bar 93. Also speaking for the

⁵⁷⁵ Hummel, *Anweisung*, p. 238, II/p. 24 (footnote to 'Ex. 68'). See also *ibid.*, p. 152, II/p. 50 ('Ex. 175').

⁵⁷⁶ Hummel, *Études*, p. 2.

appropriateness of the proposed RH forks (3 4 instead of 3 5) in bar 93 is that, while it is certainly more natural there for the LH to cross over 1 with 5 rather than with 4, having *both* hands shift so extremely on every beat would probably tend to result in some thumping.

An important takeaway here seems to be that forked fingerings are best used fleetingly, that they should preferably not involve extended positions for very long.⁵⁷⁷ In this connection, there is a fork in etude 12 (notated in full this time) that deserves much consideration:

[Allegro con fuoco ♩ = 160]

Ex. 7. 3 Etude 12, 37–41 (F1)

Although the LH fork 3 4 on c^1 - a^b and c - A^b in bar 40 is notoriously awkward and needing considerable tilting, it does prevent unwanted accents around the second and third beats—exactly what the more comfortable passing of 1 under 5 instead of

⁵⁷⁷ For comparison, see Aloys Schmitt, *Etudes pour le Piano Forte* Op. 16 (Bonn & Cologne: Simrock, n.d. [c. 1830]), p. 21, where etude no. 8 prolongs use of forks in the LH perhaps too unergonomically. Chopin knew Schmitt and apparently thought him ‘a sensible man’, but the comment ‘[...] a pianist from Frankfurt, known for very good *etudes*’ does ring a bit ironic (Frick, p. 215, letter to Jan Matuszyński [26 and 29? December 1830]). *Ibid.*, p. 221, is more forthcoming: ‘Alois Schmitt, a pianist from Frankfurt, [...] he is over 40 years old and composes 80-year-old music’ (letter to Józef Elsner, Vienna, 26 January 1831).

4 would unwittingly result in perhaps even if we had made a mental note to avoid it. The fork does the job for us free of undue cognitive effort if also through some (mild) discomfort.

As already mentioned, Chopin's fingering usage in arpeggio figurations tends to be as ergonomically compact as it is also rich in expressive potential. And etude 1 is usually the standard bearer for the idea that some reaches between 1 and 5 are often more illusory than real. That is, it bears few extensions as such because the hand can regroup comfortably *within* beats—one more instance of inherently expressive off-beat expansion and contraction of the hand. As Aline Tasset relays Joseph Schiffmacher's approach (partially transcribed in **Figure 7.1** below), one 'holds everything' that does not participate in such regrouping, which differs in ascending and descending.⁵⁷⁸ (Note that the beaming and the brackets do not denote articulation at all, only hand pedal.)

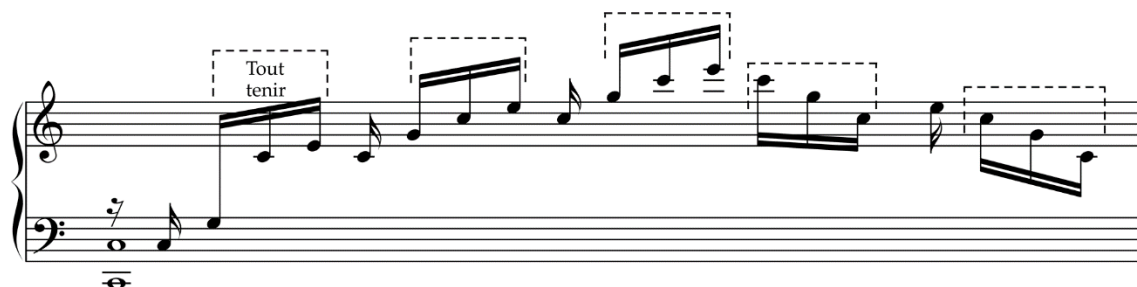


Fig. 7. 1 Etude 1 in Aline Tasset's *La main et l'âme au piano*

The pattern remains fairly regular throughout, though actual extensions of up to a minor seventh between 1 and 2 take place occasionally. And the difficulty in those cases is compounded by how far across the body the RH gets at times, which may also affect where to sit in relation to the keyboard. Here is the most sustained of such extensions (bars 22–23):

⁵⁷⁸ Tasset, p. 77.

[Allegro ♩ = 176]

8^{va} ----- loco

8^{va} ----- loco

Ex. 7. 4 Etude 1, 21–25 (F2)

The key point may be, as ever, that gestural unity should take precedence over holding onto any stretch for the sake of strict legato—even if the pedal is involved.⁵⁷⁹ Many other cases attest to the uselessness of stretching for that purpose, and to the fact that a large hand is not a prerequisite—only a supple one is. However, even allowing for such regroupings, having a comfortably large *enough* overall span (a major ninth, perhaps) does seem to be of help in the case of etude 1, especially on a (normal-sized) modern piano keyboard. Similarly to etude 13,⁵⁸⁰ holding on to the keys as much as possible may also prove necessary in this case to avoid any ‘pigeon hunting’. Moreover, even when the pedal is used (as is obviously the case in this etude), such hand-pedalling coupled with much ‘gliding delicately over the keys’ may also help not only with managing the many challenging spans, but also with inducing the necessary subjective feelings of connectedness even through those challenges.⁵⁸¹

⁵⁷⁹ See Czerny, *A Supplement*, p. 16: ‘As the pedal constantly sustains the sound, in this example [from op. 49, bars 29–36], the *staccato* in the bass appears superfluous. But such is not the case: for it is worthy of remark that, when the pedal is used, detached notes produce quite a different kind of tone from the same when held down, which arises from the difference in the touch’. Putting the different context aside, Czerny tellingly maintains that use of the pedal does not exempt the player from issues of touch and articulation.

⁵⁸⁰ See, e.g., *PaT*, p. 31.

⁵⁸¹ See p. 97n335.

The change of 3 to 4 in bar 27 may seem puzzling—perhaps even a misprint (see **Example 7.5** below), though the fact that the indication covers the first two beats instead of just one may speak for its correctness.⁵⁸² For one thing, carrying over the 3 from bar 26 to the first beat of bar 27 ensures a smooth gestural connection through the common tone, especially if one avoids lifting the hand through the rest—yet another idea behind the indication, perhaps. In addition, the finger substitution may be the most surreptitious switch to a more comfortable hand position, as keeping 3 through the whole bar would put a strain (however mild and subjective) even on ample hands. (As already mentioned, any *unjustified* extension between 2 and 3 does seem to be a pet peeve for Chopin.)

[Allegro ♩ = 176]

Ex. 7. 5 Etude 1, 25–29 (F2)

Let us now go over a couple of vexing textual discrepancies between printed and annotated sources in etude 5, both bearing on finger choice to some degree. The first concerns the RH slur over bars 16–18 (see **Example 7.6** below), the beginning of which has long irked editors even though the only extant autograph

⁵⁸² To be sure, such repetition is not conclusive enough as it also happens in spots where there is no change in the finger sequence (e.g., bars 22–23). While Ekier (p. 15) and Badura-Skoda (p. 3) keep the 3, Howat (p. 56) feels compelled to change it: '[P]ianistically implausible fingering “3”, not “4”, to RH note 3; here by analogy with RH note 7’, going on to point out how the English first edition (edited by Fontana) does have 4 on both beats.

Stichvorlage and all first editions clearly shows it to start at the last quaver of bar 16.⁵⁸³

Ex. 7. 6 Etude 5, 16–19 (F2)

The source of discomfort is probably that, if played exactly as written, the slur results in a very unruly gesture. Yet the situation may be as simple as that the 8^{va} sign interfered with the slur's placement, thus inviting a contextual rather than graphical interpretation: because of how musically clear the resolution of the 9 8 suspension in bar 16 (1 1 for $e^b^2-d^b^2$, 5 4 for $e^b^3-d^b^3$) and the ensuing broken octaves are, Chopin may not have been all that pressed for millimetric precision of the pen. But the engravers did nevertheless reproduce the handwriting literally, with patently confusing results. The proposed placing of the slur (shown by the dashed slur in **Example 7.6** above) is consistent with the rest of broken octaves in the etude. This seemingly insignificant textual detail has important implications, however: the wrist may now 'breathe' (however swiftly) after the eighth semiquaver and start afresh with the upbeat triplet hemiola $a^b^2-a^b^3 d^b^2-d^b^3$, also well grounded by the thumb. Thus, well-intentioned as some editors' impulse to move the slur to the next downbeat may be, that could rob the player of a key compositional and performative feature which, absent fingering indications, we would certainly have a harder time discerning.

⁵⁸³ See, e.g., Kullak, p. 16: '[...] better [to do] without the bow'. Only too happy to oblige, a few editors in the late nineteenth century did get rid of the offence. More recently, Ekier (p. 34) and Badura-Skoda (p. 24), simply move it to the next downbeat without due explanation. Thankfully, Howat (p. 20) puts it back where it belongs, and also shows it to be analogous to bars 31–32 (*ibid.*, p. 60).

The other textual issue concerns the correction of a single note in bar 4 in the Dubois exemplar (see **Example 7.7** below), which in turn seems to have motivated the annotated fingering. Both changes depart from the autograph *Stichvorlage* and all early editions (and most modern ones at that):⁵⁸⁴

Ex. 7.7 Etude 5,⁵⁸⁵ 3–5 (Dubois)

Intriguingly, even though there is little chance Schenker could have known of this emendation,⁵⁸⁶ he also prefers the eb^3 over the db^3 for the ninth semiquaver of bar 4:

[S]o long as the arpeggiation $ab^2-eb^3-ab^3$ in bars 3–4 holds sway [...] it is inadmissible, on account of the eb^3 , to sound the db^3 prematurely, in spite of the db^1 which is already sounding in the left hand at the third beat.⁵⁸⁷

This was a bold claim to make indeed as it went against all known sources at the time, yet one ultimately in sync with Chopin's latest choice. And though we should be as wary of *Fassung letzter Hand* notions here as anywhere else, their unanimous hearing in this case is nevertheless extremely compelling.

Now what, if anything, does this have to do with fingering? First, it hints at a signalling function: if we take the above emendation in Dubois to be Chopin's

⁵⁸⁴ The Dubois exemplar appears to be the only known source bearing this variant, which presumably would also hold for bars 12 and 52. While Ekier includes (p. 34) and comments on the amendment (Ekier and Kamiński, p. 11)—as does Howat (pp. 20, 59), Badura-Skoda (p. 24) avoids the issue completely.

⁵⁸⁵ F–Pn: Rés F. 980 (I, 1), p. 20.

⁵⁸⁶ Although Schenker may have been aware of the Dubois exemplar's existence, he seems to have been familiar only with the Stirling exemplar indirectly through Édouard Ganche's 'Oxford' edition. See Ian Bent, David Bretherton, and William Drabkin (eds.), *Heinrich Schenker: Selected Correspondence* (Woodbridge: The Boydell Press, 2014), p. 439.

⁵⁸⁷ Schenker, *The Masterwork in Music, Volume I · 1925*, ed. by William Drabkin and trans. by Ian Bent et al. (Mineola, NY: Dover, 2014), p. 94.

preferred reading, the printed fingering proves less effective because using only 5s for the top notes tends to force the player to mentally superimpose the slightly irregular new idea over the regular fingering pattern. In other words, by alternating 5 and 4, Chopin's amended fingering lets one arrive at the $e\flat^3$ in a natural manner and without extra cognitive effort.

Marty for one does discuss some of the departures from printed fingerings in the Dubois exemplar, although he usually writes them off as remedial or studently facilitations, which may be just too hasty: despite Marty's preconceptions, this fingering is not any easier because of the 5 4 alternation, just better attuned to the consequences of a (seemingly) tiny note change. Since we can only dimly fathom the context in which this fingering arose, for all we know it may even have been O'Meara herself who inspired (or asked) Chopin to come up with one to match the emended text.

There is in fact yet another (seemingly) tiny fingering discrepancy among sources for this etude worth mentioning: whereas the autograph *Stichvorlage* has 5 for both $d\flat^2$ and $a\flat^2$ through bars 41–42 (shown under the notes for clarity in **Example 7.8** below), all first editions feature 4 instead for $d\flat^2$, then switch to 5 in bar 43, arguably for signalling reasons as well:

[Vivace ♩ = 116]

p

cres

** Red.*

Ex. 7. 8 Etude 5,⁵⁸⁸ 41–45 (F2 & *Stichvorlage*)

That is, the change to 5 signals the point where the range expands to two octaves, which is indeed a helpful mnemonic.

The lead-up to the Coda contains a set of indications of utmost interest (see **Example 7.9** below) for performance practice. We first need to note that, as Chopin's fingerings are often in shorthand form, he may have often expected not just 'redistributions' in the usual sense but rather a more context-dependent, commonsense interpretation of the voice leading. That is, Chopin distributes material freely across the staves for clarity of the musical ideas rather than having them signify one or the other hand.⁵⁸⁹ As Schenker observes of this particular case, the writing implies that the LH is to retake the g^b in bar 66, despite the rather ambiguous annotation *l l* in the Dubois exemplar which could lead one to conclude otherwise.⁵⁹⁰

⁵⁸⁸ PL-Wmfc: M/193/1, p. 1.

⁵⁸⁹ As we will see in more detail in Chapter 8, Chopin on the whole still subscribed to this eighteenth-century approach to keyboard notation.

⁵⁹⁰ Schenker, *Masterwork*, p. 95: '[T]he notation [for bar 66] in the manuscript [...] is preferable to all others: the g^b as a crotchet and the three slurs in the left hand (reflecting the lie of the voices) show that Chopin played the g^b in this bar with the left hand, just as he did the g^b in bars 65 and 67'.

[Vivace ♩ = 116]

8va ----- loco

pp *delicat* *smorz* *p*

(1) (4) (1) (1) * Ped. * Ped.

Ex. 7. 9 Etude 5,⁵⁹¹ 65–67 (Dubois)

The most likely interpretation for bar 66 is that the thumbs interlock: the LH takes $g\flat^1$ - f^1 , the RH $e\flat^1$ - $d\flat^1$,⁵⁹² all of which indirectly justifies the seemingly odd 4 on $b\flat^1$. That is, the 4 allows arriving on $g\flat^1$ with 2 instead of forcing 1 to get to $g\flat^1$ from $d\flat^1$ too quickly by using a more ‘normal’ 3 on $b\flat^1$. To be perfectly clear, this reading also depends on unmarked arpeggiation in the LH to a high degree—possibly more than once in bar 66.⁵⁹³ Moreover, it may also imply an interesting kind of gestural legato: since the RH takes $e\flat^1$ it is impossible to bind $d\flat^2$ - $a\flat^1$, though one could easily compensate for this through expressive timing and asynchrony—and use the pedal accordingly. The *delicat* and *smorz* indications also hint at *portato* articulation (perhaps through some *carezzando* as well), despite there being no dots subsumed under the slur.

Note also the (possibly implied) analytical use of two fingers on the same key, as the LH would naturally want to resolve the leading tone into the downbeat $g\flat^1$ of bar 67. A last saving grace of the interlocked-thumb reading is that it makes for no exception to the ‘all-black-keys’ gimmick: much as one may appreciate

⁵⁹¹ F–Pn: Rés F. 980 (I, 1), p. 24.

⁵⁹² Ekier and Kamiński (p. 4) even seem to suggest that the LH thumb is to take *both* notes, but none of their three solutions involves interlocking of the thumbs. Interlocking does seem to be the most grounded option, however dependent it may be on a variety of expression techniques we are no longer accustomed to (e.g., hand asynchrony and arpeggiation of the $e\flat^1$ - $a\flat^1$ dyad).

⁵⁹³ Incidentally, the pedal marking on the *second* beat could be an in-house editor’s addition: holding onto the $d\flat$ seems to imply being able to keep the stretch through the 4 3 suspension, which may result in too stiff a gesture even for large hands, and almost regardless of instrument type. A little blurriness through a single pedal for the whole bar seems preferable as a more fluent alternative, at least gesturally speaking.

Chopin's humorousness, this situation clearly does not point to playing the single white key $f\sharp^1$ with the RH as a joke, which in any event would be quite hard to tell (no pun intended) either sonically or visually.

'Limp Finger' Techniques: Etude 9 as Blueprint⁵⁹⁴

If we extend the idea of fork fingerings further by contemplating playing fifths, occasionally even sixths between 4 and 5 (without skipping, that is), we will hit upon another favourite device of Chopin's which I like to call 'limp finger' technique. It appears to be notated most precisely in etude 9, but it also looms large implicitly in its companion, etude 10, and the 15–16 etude pair. Once again, we find ourselves in a familiar predicament: was Chopin's use of this technique revolutionary in some way or is it rather that because most of his contemporaries had already converted to utilitarian systems they failed to recognise its archaic origins?

In *Mdm*, for instance, Fétis and Moscheles believe the main difficulty of Chopin's etude 9 to consist in some form of stretching:

The most difficult gap is that of the fifth between the fourth and fifth fingers. It requires a hand of ample proportions or extended exercise to accomplish the speed easily, and to perform well the arpeggios in this ninth etude of Chopin's.⁵⁹⁵

⁵⁹⁴ This is a thoroughly revised and rewritten version of 'Expressive gesture', pp. 11–27.

⁵⁹⁵ *Mdm*, p. 64: 'L'écartement le plus difficile est celui de la quinte, entre le quatrième et le cinquième doigt. Il faut une main de grande conformation ou un long exercice pour y atteindre facilement dans la vitesse, et pour bien exécuter des arpèges tels que celui-ci de la neuvième étude de Chopin'. See also Eigeldinger, 'The Hand of Chopin: Documents and Commentary', in Bellman and Goldberg, pp. 297–313 (p. 309): 'It is precisely this ability for extraordinary extension, allowed by his flexibility, that most struck his contemporaries'. Chopin's possibly unique flexibility notwithstanding, the argument I wish to advance here is that *most* pianists can benefit from use of this technique—in this etude and elsewhere.

This comment is somewhat surprising, especially as Moscheles himself makes occasional (if also less extreme) use of the technique.⁵⁹⁶ Equally surprising are Czerny's opinions on the matter about half a decade later:

The particular difficulties presented to the player in CHOPIN'S Pianoforte works, chiefly consist in the great extension of the fingers, and in the very peculiar fingering which is often necessary in many passages. Here also are required, a very delicate touch, an exceedingly refined style, and the most accurate use of the pedal, in order to impart the due euphony to his frequently singular harmonies and embellishments.⁵⁹⁷

Any hopes we may have had of Czerny illuminating how such 'great extension of the fingers' may be facilitated or even made to work effortlessly through Chopin's 'peculiar fingering' come to naught, however: in the mere three pages he devotes to Chopin, the cherry-picked examples include just one bar with any original indications,⁵⁹⁸ while substituting his own fingerings everywhere else without any comment.⁵⁹⁹ Furthermore, Czerny does not care to expand on what (to him) makes Chopin's fingerings in any way 'peculiar'—he just flags them as such, thus implying his own system to be applicable even to Chopin's (perceived) extension oddities. However indirect, that is an emboldened claim indeed, yet so close to today's prevalent attitude to fingering that it is all too easy to miss.

Much like Czerny, later in the century Bülow also took for granted the need to change Chopin's excessively stretchy fingerings for etude 9:

It is not improbable that the fingering given by the composer [...] may have frightened players who do not possess extraordinary hand-stretching powers from attempting this piece; technically one of the most useful, and by its poetic originality most prominent of Chopin's studies. To obviate this for the future, we have permitted ourselves to modify his fingering to suit the

⁵⁹⁶ See Rosenblum, 'Chopin among the Pianists in Paris', p. 286: 'Fétis wrote the text, Moscheles etudes and examples'. This division of labour is striking, as Fétis was certainly much less of a (working) pianist than Moscheles. It is an open question, then, how much agreement may have been between them in matters of piano technique, and to what extent Moscheles may have agreed with Fétis's ideas. In any event, Moscheles eventually came into general alignment with Czerny. See Charlotte Moscheles, pp. 22–23: 'No one understood better [than Czerny] how to strengthen the weakest fingers, or to lighten study by practical exercises, without neglecting to form the taste'.

⁵⁹⁷ Czerny, *A Supplement*, p. 15.

⁵⁹⁸ Etude 20, bar 3, which reproduces the fingering as it stands in the only extant *Stichvorlage* for G1 and obviously G1 itself. See pp. 257–58 for more on the two original variants.

⁵⁹⁹ Czerny, *A Supplement*, pp. 15–17 (excerpts from opp. 21, 28, 35 and 49).

normal hand; and our easier method will at any rate serve to bridge over the way to the original, the unprepared use of which would lead, either to a break between the two first notes, or to a doubtful attacking of the second.⁶⁰⁰

One last reference to consider in this regard can be found in the very first biographical sketch published after Chopin's death, Józef Sikorski's 'Recollection of Chopin' (1849). Although Sikorski did have some contact with Chopin during their student days, the account still rings a little too fantastic:

[P]revented by the slenderness of his hand from reaching and striking it [a tenth], he sought a way of achieving the desired span for his hand, and to that end would place objects between his fingers that pushed them out, like wedges; and he would spend nights with that apparatus in place. He did this not for vainglory at the span of his hands; he subjected his fingers to voluntary torture not in order to surpass others in the execution of new difficulties for pianists; he was led to it by the difference in beauty he had observed between the sound of chords in closed and open positions, which he made common in his compositions.⁶⁰¹

One cannot altogether rule out such youthful eccentricities, of course, but this one runs completely opposite to Chopin's own statements in *Pdm* and the many apropos comments to students on the matter of body alteration and use of contraptions. He condoned none of those approaches, insisting instead on study of the masterworks and very attentive use of the pedagogical repertoire, that is, on being mindful of and attuned to one's body in the process.⁶⁰² In any event, Sikorski's account suggests that beliefs in Chopin's uniquely flexible hands and torturous command of extensions were established well before his death.

Many pianists (of both mainstream or historical performance persuasions) seem to be under that spell even today and avoid the original LH fingerings for etude 9 in the belief that only those who 'possess extraordinary hand-stretching powers' should attempt it. Putting any such mythic past aside, a more plausible reason may be simply that use of said fingerings leads to a far more subdued outcome than that sought after these days—especially when playing on modern

⁶⁰⁰ Bülow, p. v.

⁶⁰¹ Bellman and Goldberg, pp. 45–84 (p. 53).

⁶⁰² As we have seen, the closest Chopin gets to endorsing any such contraptions is when he concedes that Kalkbrenner's *guide-mains* may have some utility—but for experienced pianists, not beginners.

pianos in large concert halls. That similar configurations abound in Chopin's music should prevent us from automatically substituting or discarding such fingerings entirely, however: while there certainly is no moral obligation to use them, they may nevertheless bring us closer to this piece's (and similar others) essential *bodily* conception.

To the best of my knowledge, etude 9 represents the first explicit appearance of this type of fingering technique in all of Chopin's oeuvre. Yet, despite the usual assertions as to Chopin's radical originality in this and other techniques, Hummel's *Anweisung* (for one) already contains quite a few examples which demonstrate the idea in embryo.⁶⁰³ And figurations begging for this special fingering are not unheard of in music predating (possibly also inspiring) etude 9.⁶⁰⁴ Thus, Finlow's assertion that 'one cannot adequately explain [Chopin's] success by invoking antecedents' for the Etudes,⁶⁰⁵ while true to some extent, may be in need of revision as regards this technique as we still know very little about Chopin's adoption of this technique.⁶⁰⁶ But while much research is still needed to ascertain genetic matters to any precise degree, that Chopin attached great importance to this type of fingering should be beyond doubt.

Let us now look at the opening of etude 9:

⁶⁰³ See, e.g., Hummel, *Anweisung*, p. 303, II/p. 216–17 ('Ex. 23') and p. 304, II/p. 218 ('Ex. 30').

⁶⁰⁴ See, e.g., Schubert's *Ungarische Melodie* D. 817, and Beethoven's sonatas opp. 31/2 (III) and 90 (I). Even closer to our topic, Moscheles's op.70/9 also contains a few examples, and explicitly fingered.

⁶⁰⁵ Finlow, 'The twenty-seven etudes', p. 51.

⁶⁰⁶ Würfel's involvement may have been decisive in this regard, yet without an extant copy of his *Zbiór exercycyi* we will probably never know the extent of his influence in that respect. In any event, it is worth mentioning that e.g., Würfel, *Rondo brillant pour le Piano-Forte* (Leipzig: Peters, n.d. [1827]), pp. 5–6, hints at his great familiarity with the technique.

Allegro molto agitato ♩ = 96

Ex. 7.10 Etude 9,⁶⁰⁷ 1–3 (Dubois)

At first glance, the fingering does appear to stretch the hand unnaturally (probably even more so today, given the somewhat wider keys compared to most instruments available to Chopin). It also does seem to contradict the *legatissimo* indication by seemingly working ‘against the directive of the slur’,⁶⁰⁸ though as already discussed at some length, *gestural* legato may have been as important as any literal overlapping—even, as we have seen, when the pedal is used. Modern-day pianists usually resort to some finger alternation scheme instead of the indicated pivoting of 4 on c, perceiving that substituting the stronger 3 for 4 overall leads to a more comfortable and secure hand position. Yet that is only a partial solution because such ‘constant switching might cause confusion’,⁶⁰⁹ a problem which reaches its peak in bars 25–28 if we keep alternating fingers—hardly a model for the simplicity Chopin considered the ultimate and most challenging artistic goal.⁶¹⁰ But should we simply throw up our arms in despair and concede that ‘[t]here is no way to play the left hand without strain’ because of all those difficulties?⁶¹¹

Despite appearances, this fingering requires little or no actual stretching for average-sized hands. Enough experimentation eventually reveals a sophisticated technique whereby 5 and 4 do indeed span an unusually large interval, but well within the possibilities of average-sized hands on period instruments, and for some

⁶⁰⁷ F–Pn: Rés F. 980 (I, 1), p. 38.

⁶⁰⁸ Sun, p. 148.

⁶⁰⁹ *Ibid.*, p. 151.

⁶¹⁰ See, e.g., *PaT*, pp. 54–55, and Goebel-Streicher, p. 183.

⁶¹¹ Sun, p. 148. Sun more recently agrees that using the original fingering indeed helps minimise strain even on the modern piano (pers. comm., 11 September 2018), but only if we also let go of the usual expectations of dynamic power.

even on a modern piano. The span between 5 and 4 throughout the etude (see **Examples 7.11** and **7.12** below) ranges from a diminished fifth to a major sixth, the latter coupled with a jaw-dropping minor tenth between 4 and 1, where Chopin still insists on keeping 4 for the alternation:

[Allegro molto agitato ♩. = 96]

Ex. 7. 11 Etude 9, 7–9 (F1)

[Allegro molto agitato ♩. = 96]

cres ----- *cen*----- *do e stretto*

Ex. 7. 12 Etude 9, 51–53 (F1)

That Chopin does not wish to substitute 5 even after reaching the tenth is quite significant, as keeping the 4 there is clearly uncomfortable and stretchy for virtually *any* hand—probably including Chopin’s. We thus cannot rule out implications of playing somewhat off-the-keys here as a special effect. Incidentally, one must also wonder at this point why *Mdm* did not single out these bars instead of the opening, containing as they do the most (seemingly) extreme stretches of the whole etude.

The original fingering results in kinetic orchestrations that not only enable a comfortably compact hand after the bass note has been struck, but also make for very distinct sonic imprinting—even taking into consideration the fairly continuous use of the pedal.⁶¹² That is, 5 depresses every bass note from its side in a sharply tilted hand position thus enabling a strain-free stretch between 5 and 4, while 4 depresses its corresponding notes from its side as well but immediately pivots and allows 1 to reach the tenor line more or less simultaneously with 4 as it touches its

⁶¹² See p. 196n579.

ball part, then back to the bass and so on.⁶¹³ This can seem quite an unorthodox approach to the keyboard indeed—it certainly must have shocked the dogmatic Kalkbrenner, who insisted on an ideal finger-to-key angle at all times:

The key should be touched with the fleshy part of the finger; let the hand have the most natural position: keep the arm quite steady, whilst the fingers are in motion; let the motion of the hand proceed entirely from the wrist, and that of the fingers from the articulations which connect them with the hand.⁶¹⁴

Unsurprisingly, Chopin and Kalkbrenner did not see eye to eye on fundamental technical issues, despite Chopin's early admiration. In this particular case, Chopin's fingering promotes a sizable tilt of the left hand towards the bass (which much amplifies the span between the fingers)—and we have seen that the documentary evidence for Chopin's condoning a tilted position of the hand in certain situations is quite conclusive. Its effectiveness lies in promoting on-the-keys playing, which may lead to more nuanced expressive gestures than if mostly vertical motions are used.

The recurring, weighty motion to and from the bass supports (but also gives respite from) the tenor and soprano lines, whereas alternative modern fingerings allow for rather less differentiated motion. In other words, modern fingerings too easily lead to a mostly extended hand position so as to facilitate the finger alternation pattern, all of which tends to promote less polyphonic differentiation between bass and tenor. In this sense the original fingering proves that 'a hand-position that is physically awkward may actually be better than a more immediately convenient one in the sense that it reinforces a point regarding the music's structure'.⁶¹⁵ Yet Chopin's fingering for this etude mostly just *looks* awkward: deliberate practice would make it second nature quickly enough.

⁶¹³ Note that fingers not involved in the pattern may be of significant (psychological) assistance if we let them 'rest' on non-sounding keys (e.g., 2 and 3 on d_b and e_b respectively in bar 1)—every bit helps, as they say.

⁶¹⁴ Kalkbrenner, *A Complete Course of Instruction for the Piano-Forte, with the Assistance of Hand Guides* (Edinburgh: Robertson, n.d. [184-]), p. 11, of course a translation of *Méthode pour apprendre le Piano-Forte à l'aide du guide-mains* (Paris: Pleyel, n.d. [c. 1830]).

⁶¹⁵ Cook, *Music*, p. 78.

To repeat, Chopin's fingering often forces 4 to stay curved sideways to varying degrees—'limp', so to speak. And, crucially, it involves moving from a grouped to a more extended hand position and back, which ensures the player keeps an ear on the bass in addition to the all-important, expressive kinaestheses. But reaching a comfortably grouped hand position almost immediately after striking each bass note also greatly facilitates *legatissimo* playing for the 'tenor thumb', something which counters the argument claiming the original fingering only befits ample enough hands. In much the same way, even a seemingly extreme example such as Liszt's *Au lac de Wallenstadt* is upon closer inspection quite playable with limp finger technique, if also much less comfortably so than etude 9 because of the filled-in thirds which force an additional stretch between 4 and 3. But tilting takes care of this difficulty even here for the most part as well:

Andante placido

pp $\frac{3}{8}$ *dolcissimo egualmente* *cantabile*

Ex. 7. 13 Liszt, *Au lac de Wallenstadt*,⁶¹⁶ 1–7

As already mentioned, notes played by the limp finger tend to be softer as it simply cannot compete in dynamic power with the bass, the upside being that it helps maintain a balanced inner-voice texture. As Andreas Klein observes, '[m]ost likely the reason [for Chopin's use of 4] is that the stronger middle finger would unnecessarily stress this key, thereby disturbing the flow of the accompaniment',⁶¹⁷ though that is clearly only part of the rationale.

⁶¹⁶ Liszt, *Années de pèlerinage, 1^{ère} année* (Mainz: Schott & Söhne, n.d. [1855]), p. 20.

⁶¹⁷ Andreas Klein, 'The Chopin "Etudes": An indispensable pedagogical tool for developing piano technique' (D.M.A. dissertation, Rice University, 1989), p. 36. See also Robert Collet, 'Studies, Preludes and Impromptus', in *The Chopin Companion: Profiles of the Man and the Musician*, ed. by Alan Walker (New York: Norton, 1973), pp. 114–43 (p. 133): '[T]he constant employment of the very strong third finger on C is apt to give that note undue prominence'.

Chopin also indicates *limp* 4 for the fifth of the triad in etude 10 (the *legatissimo* indication is again a clear giveaway) and quite possibly implies it for much of etude 13 as well. The note configuration which opens both etudes is practically identical, in fact, though etude 10 is arguably the more challenging of the two:

Vivace assai $\text{♩} = 80$

f
legatissimo
Red.
Red.
Red.

Ex. 7. 14 Etude 10,⁶¹⁸ 0–3 (*Stichvorlage*)

Allegro sostenuto $\text{♩} = 104$

p
Red.
Red.
Red.

Ex. 7. 15 Etude 13,⁶¹⁹ 0–4 (Dubois)

⁶¹⁸ PL–Wmf: M/197, p. 4 (pagination continues from M/196).

⁶¹⁹ F–Pn: Rés F. 980 (I, 2), p. 4. The unassuming 3 in bar 1 has far-reaching consequences—it is not a ‘remedial’ fingering tailored for Camille O’Meara’s ‘rather small hand’, as I (being as prone to ‘premature knowing’ as anybody else) mistakenly surmised in ‘Expressive gesture’, p. 54. This kind of substitution pattern on repeated notes can be used often in the etude—for example to expand the hand expressively towards the f^2 on the downbeat of bar 2 (as indicated by Chopin himself), but

As already mentioned, searching for other instances of limp technique in the Etudes quickly suggests there to be a group of them (9, 10, 15 and 16) which feature it as their main difficulty—their *raison d'être* as etudes despite other, perhaps more immediately apparent technical issues. In particular, without use of this technique etude 16 becomes so unwieldy that it prompted James Huneker to suggest it ‘might well be named “inquietude”’.⁶²⁰ Despite the obvious *agitato* character, however, there should be no disquieting physical tension at all when using limp technique,⁶²¹ as it promotes such left-hand clarity and ease that it might well be nicknamed ‘cimbalom’ or ‘dulcimer’ instead.⁶²² This etude could thus even be postulated to stand, on the basis of such performance, within the orientalisising *Style hongrois*.⁶²³ Note how in in **Example 7.16** below e begs to use 4 as the most compact possible option—as in **Examples 7.14** and **7.15**, but in minor—and thus promote the utmost relaxation while skipping, but without simultaneously having to *reach* for the notes:

probably not on every beat as Cortot suggests (mostly for practice). See Cortot (ed.), *Chopin 12 Études Op. 25. Student's Edition*, trans. by M. Parkinson (New York & Paris: Salabert, n.d. [1915]), p. 8.

⁶²⁰ James Huneker, *Chopin: The Man and His Music* (London: Scribner, 1918 [1900]), p. 183.

⁶²¹ For contrasting views, see Jooyoung Kim, ‘A Study of the Chopin Etudes, Op. 25, with Performance Suggestions for Technical and Musical Issues’ (D.M.A. dissertation, Ball State University, 2011), p. 40: ‘Since continuous large leaps between the bass note and two upper notes require a large expansion of the hand throughout the piece, it is difficult to play this “jump bass” as well as the staccato chords accurately’ (emphasis added), and Jason Jinki Kwak, ‘Mastering Chopin’s Opus 25: A Pianist’s Guide to Practice’ (D.M.A. dissertation, University of Texas at Austin, 2003), p. 32.

⁶²² Meaning, among many other things, that the LH in etude 16 mimics the ease with which a cimbalom player would play such material with alternating hands.

⁶²³ See Bellman, ‘Toward a Lexicon for the Style Hongrois’, *Journal of Musicology*, 9/2 (1991), 214–37, *passim*.

[Agitato ♩ = 160]

Ex. 7. 16 Etude 16,⁶²⁴ 4–8 (*Stichvorlage*)

In that regard Abby Whiteside—never one to fuss much over fingering—rightly observes that

fingers have the habit of reaching for key position. They have been trained to do just that. One of the results of this reaching with the fingers will be a shutting off of the power of the levers at the wrist. The wrist is much less free when fingers are reaching for position.⁶²⁵

But then (in the context of etude 23) goes on to make the following, rather contradictory claim:

Fingering in most cases is not a vital problem, certainly it is never a primary cause of frustration in achieving success with a passage. It is always the reaching for position with the fingers, and not the specific choice of fingers, which is the great destroyer of ease.⁶²⁶

One should contend that the LH of etude 16 in fact presents a *most vital* fingering problem, that while there are plenty of choices inevitably resulting in either ‘reaching for position’ or unnecessarily uncomfortable stretches, those which do not are few and far between—those Chopin explicitly shows in etudes 9 and 10.

⁶²⁴ PL–Wn: Mus. 217 Cim., p. 11. As already mentioned, the autograph *Stichvorlage* for FFE bears ♩ = 120 instead of 160 as the rest of early editions and the *Stichvorlage* for FGE. The faster tempo does seem more in keeping with the (hypothetical) *Style hongrois* character. Incidentally, see Eigeldinger (ed.), *Vingt-quatre préludes et fugues*, pp. xvii50, xxxviii49 (and the plates, pp. xix–xx) for confirmation that all the metronome markings in the *Stichvorlage* for FGE are indeed in Chopin’s hand.

⁶²⁵ Whiteside, pp. 42–43.

⁶²⁶ *Ibid.*, p. 99.

We can find another variation of the basic limp technique in etude 8, bars 53–57, where the LH 2 takes the seventh instead of the octave of the chord:

[Allegro $\text{♩} = 88$]

Ex. 7. 17 Etude 8, 53–55 (F1)

This is a particularly informative case, for *any* other fingering would demand too frequent and/or awkward passing-under or crossing-over.⁶²⁷ And there is also the bimanual coordination aspect to it, as the mirroring figure would require us to consider whether to change the original fingering in the RH to match any changes in the LH and vice versa. No matter how adept we might be at hiding them, however, such extraneous motions are likely to result in disruptive, non-negligible ‘executive mismatches’. By contrast, the original limp fingering allows one to comfortably reach the notes at the outer extremes in both hands—partly by tilting—and calmly focus on the resulting gesture.

Yet another variation of the technique occurs throughout bars 29–36 of etude 9, where the lines *ab–g* and *f–g* are taken by *3 4* and *4 4* respectively:

⁶²⁷ Hummel, *Anweisung*, p. 138, II/p. 36 (‘Ex. 105’) seems especially relevant in this context, as tilting the hand to approach each octave while playing each filled-in third seems almost as necessary there as it is in this example. It is identical to the figuration in etude 8, bars 46–52, minus the octave skips.

[Allegro molto agitato ♩ = 96]

Ex. 7.18 Etude 9, 29–33 (F1)

Chopin here makes the most of the ‘Siamese’ finger configuration, achieving the greatest preparation and quietest hand for the *legatissimo* connection of the tenor lines.⁶²⁸ Another fleeting ‘Siamese’ configuration appears in etude 11, bar 4, fifth to sixth quavers, where taking *ab-g* with $\begin{smallmatrix} 3 \\ 4 \end{smallmatrix}$ would also be advantageous:

[Allegretto ♩ = 76]

Ex. 7.19 Etude 11,⁶²⁹ 4–5 (*Stichvorlage*)

Note how naturally one could also sing out the tenor *bb-ab-g-(f)* with the fingering shown, and that the last two chords take on practically the same notes as in etude

⁶²⁸ As quoted in *PaT*, p. 195: ‘[T]he fourth, the weakest one, the Siamese twin of the third, bound to it by a common ligament, and which people insist on trying to separate – which is impossible and, fortunately, unnecessary’.

⁶²⁹ S-Smf: MMS 398 (unpaginated).

9, bars 29–30 (see **Example 7.18** above). Yet another instance of this kind of configuration may be implied in an unpublished version of etude 13, bar 21.⁶³⁰

[Allegro sostenuto ♩ = 104]

Ex. 7. 20 Etude 13,⁶³¹ 20–22 (Stichvorlage)

A fully written-out variant of the technique appears in the Stirling exemplar, etude 21 (though ascending rather than descending):

[Allegro vivace ♩ = 116]

Ex. 7. 21 Etude 21,⁶³² 17–19 (Stirling)

The neat pencil markings there are clearly not Chopin's (the 3s immediately give that away), which simply means Jane Stirling forgot to retrace them in ink. (As she

⁶³⁰ This is of course the *Stichvorlage* autograph for FGE and *not* the *Stichvorlage* for FFE (which is not even extant) as I mistakenly wrote in 'Expressive gesture', p. 23. This version appears also in 'Wodzińska' (Binental, Plate 61), and in another manuscript copy by Chopin's student Delfina Potocka and some other unidentified hand (PL-Kn: MN 73152). The wholesale rejection of it in print could be due to Chopin's caving in to editorial intervention: editors may have thought the apparent parallel octaves between soprano and bass either downright faulty or too sophisticated for public consumption. The whole RH texture actually moves *upwards* towards the downbeat of bar 21 (see **Example 7.20**), which makes the top part $e^b^2-f^2-g^2-ab^2-g^2$ out to be an elaboration of $e^b^2-g^2$ and thus the g^2 in bar 20 an embellished anticipation. In any event, this version demands as vocal a performance as can be mustered, for any mechanical time-keeping would indeed reinforce the impression of inadequacy due to the (apparent) parallel octaves.

⁶³¹ PL-Wn: Mus. 217 Cim., p. 2.

⁶³² F-Pn: Rés Vma 241 (III, 25), p. 32.

herself attests, annotations in pencil represent those made by Chopin while ink was reserved for those copied from other, reliably direct sources.⁶³³) Note how, similarly to etude 16, limp technique can also be made to work in staccato and big leaps. As can be inferred from the above examples, an advantageous diminuendo is intrinsic to the ‘Siamese’ variation of the technique: its movement being delimited within a larger gesture, 4 cannot by itself attack the following note without undue strain. In short, unwitting accents in such a gesture become virtually impossible.

Another frequent variation of the technique in Chopin is the stacking of two fifths where otherwise a crossing over the thumb (most often with 2) would be needed to take the top note thereby (potentially) disturbing the gestural flow. Although one could in some cases argue for such crossing-over as the best solution, limp technique usually results in a more assured and fluent performance as it avoids any resetting of the gesture and taking undue extra time. This exact note configuration occurs most prominently in Field’s nocturne 14, though devoid of fingering indications:

[Molto moderato]

Ex. 7. 22 Field, Nocturne 14,⁶³⁴ 65–67

We have already seen a fleeting case of this configuration in etude 11, last quaver of bar 4 (see **Example 7.19** above). And indeed, from the very first bar, the LH in etude 10 also shows even in its basic motivic design the thumb repeatedly reaching it (see **Example 7.14** above). But much more extended uses of it can be found in etude 13, bars 15–16 and 42–43:

⁶³³ See *PaT*, pp. 201, 209–10.

⁶³⁴ John Field, *14^{eme} Nocturne pour le Piano-Forte* (Vienna: Diabelli, n.d. [1836]), p. 6.

[Allegro sostenuto ♩ = 104]

Red. * Red. * Red. * Red. * Red. * Red. * Red. *

smorzando

Red. *

Ex. 7. 23 Etude 13,⁶³⁵ 15–17; 42–44 (*Stichvorlage*)

This last case shows how this technique not only promotes relaxation, but also the quietest possible hand to taper off through the *smorzando* as sensitively as one possibly can.⁶³⁶ Incidentally, it is important to note that, when using limp technique in etude 13, going from bars 15 to 16 does require the LH to (silently) glide down the keyboard: in my experience, lifting the hand there makes landing on a limp 4 position *again* extremely challenging if not downright impossible. The almost exact same situation takes place in etude 9, bars 36–37, possibly implying the same kind of preparatory gliding.

⁶³⁵ PL-Wn: Mus. 217 Cim., pp. 1, 3.

⁶³⁶ Although I still stand by the idea of not making too much of the alto $e\sharp^2-d\sharp^2-f^2-e\sharp^2$ in bars 15–16 (see ‘Expressive gesture’, pp. 59–60), the fact that in ‘Wodzińska’ (Binental, Plate 60) the last three of those appear as larger note heads does merit reflection. See Daniel Barolsky, ‘Romantic Piano Performance as Creation’ (Ph.D. dissertation, Chicago University, 2005), p. 144n25: ‘Although [...] this tradition has become a part of some editions, it has also become a “text” of a different kind, one fixed in recorded sound rather than on the page’. *Pace* my 2018 self, attentive shaping of the inner voice *does* seem necessary here, and thus grounds for a performance tradition or ‘text’ of some kind—and so, apologies to Barolsky for being too quick to dismiss the idea. I would add, however, that this tradition of shaping the alto may have also arisen simply from the need to make the voice leading work—that is, to mask the parallel octaves, which is a challenge even with the help of the 9 8 suspension. Thanks to Barolsky, I now view the task of preventing too much foreshadowing in bars 15–16 of the beautiful plateau of bars 22–24 (which features $e\sharp^2-d\sharp^2-f^2-e\sharp^2$ in the soprano instead) as *doubly* challenging.

A last variation of this technique to consider here is an embellished form of the basic configuration where the thumb adds a 4 3 appoggiatura or suspension, as already seen in an isolated case (see **Example 7.20** above, last beat of bar 21). Etude 15 displays a series thereof in bars 18, 20, 22, 24 and 26 (see **Example 7.24** below), and each of them allows sensitive voicing because of the more comfortably grouped hand position which results from having 4 on the fifth of each triad. In other words, limp technique assists not only with the 4 3 accented passing tones or suspensions, it also minimises movement thus securing the smoothest possible (gestural) connection toward their resolutions.

[Allegro ♩ = 120]

Ped. * Ped. * Ped. * Ped. * Ped. * Ped. * Ped. * Ped. * Ped. * Ped. * Ped. * Ped.

Ex. 7. 24 Etude 15, 17-21 (F1)

Incidentally, note the similarities between the above examples and Chopin's written-out hand redistribution in etude 6, bar 26, which shows the lengths to which he will go to resolve such dissonances smoothly (in this case the RH 4 3 suspension), in both gesture and sound:

[Andante ♩ = 69]

Ex. 7. 25 Etude 6, 25-27 (F1)

Chopin's limp fingerings in etude 9 help clarify musical structure and assist with expression, but it takes some getting used to before one can feel technically at ease with them. As etudes 10, 15 and 16 also show, this kind of fingering reveals a larger gestural pattern which makes the most of the fourth finger's apparent weakness, that is, its higher dependence on movement by the whole hand than any

other finger. Different configurations of limp technique abound in Chopin's oeuvre and are especially prominent in the Nocturnes,⁶³⁷ where sensitive LH voicing is of primary importance.

Skips vs Extensions

It is useful at this point to bring up Hummel's basic distinction between skips and extensions, though in practice there is quite a bit more to it than first meets the eye (and hand):

In extensions, the hand stretches itself out towards some distant note, in skips this also takes place; with this difference only, that in the first case the notes are drawn, or, as it were, connected together, while in the latter, on the contrary, they are detached from each other. The arm must not move too much, nor must the hands be lifted up too far from the keyboard; as otherwise the certainty of the performance will be greatly diminished, and the player stop short of, or pass beyond the proper note.⁶³⁸

There is indeed much grey area here, however, as the degree to which the player perceives skips to be 'detached' or not depends of course on the qualitative dynamics involved. Hummel's fingering for Bach's C# minor fugue from *WTC I* immediately before the leap to a bass entrance is a case in point:

[Fuga I]

[And not: 1 3 2 1]

Ex. 7. 26 Bach, Fugue in C# minor,⁶³⁹ 72–76, with Hummel's fingerings

⁶³⁷ A piece which features limp technique as built-in to a very high degree is the etude-like prelude op. 28/8. It seems to contain all the variant configurations discussed here and then some.

⁶³⁸ Hummel, *Anweisung*, p. 299, II/p. 212.

⁶³⁹ *Ibid.*, p. 380–81, II/p. 300.

The skip down from *b* with 2 causes noticeable psychological discomfort, no doubt magnified in our ‘era of paranoia about wrong notes’,⁶⁴⁰ so (I surmise) many players would quickly write it off as a misprint and substitute *1* for that reason. But this fingering is in fact a superb example of how much the qualitative can bear on performance: leaping down from *1*, though surely lending a more dependable and secure feel for the skip, robs the bass entrance (and the player) of some of its thunderboltd effect.⁶⁴¹ Put another way, skipping from *1* would in a way reduce it to an extension (in Hummel’s sense quoted above), as the hand would then smoothly *seem* to the player to ‘stretch itself out towards some distant note’ despite the obvious impossibility of holding onto the one it originates from.

The LH in etude 19 seems to beg for a similar kind of disconnection through fingering going from bar 10 to 11 (see **Example 7.27** below), though the resulting arm shift in this case is probably much quieter and controlled because of the *pp* dynamic:

[Lento ♩ = 66]

Ex. 7. 27 Etude 19,⁶⁴² 9–12 (Stirling)

The opening of Chopin’s etude 7 could also benefit from the same differentiation to some extent, as the LH chromatic line should probably be made distinct from the bass pedal point:

⁶⁴⁰ Hamilton, ‘Do They Still Hate Horowitz? The “Last Romantic” Revisited’, *Journal of Musicological Research*, 39/2–3 (2020), 246–71 (255).

⁶⁴¹ Slightly freezing a movement’s degrees of freedom is useful to signal such disconnections. In this case, even keeping an open mind as to wildly variable performance outcomes, most players would agree that the bass entrance should be distinct from the quaver run *somehow*.

⁶⁴² F–Pn: Rés Vma 241 (III, 25), p. 26.

[Vivace ♩ = 84]

The musical score consists of two staves. The top staff is in treble clef with a 6/8 time signature. It begins with a piano (p) dynamic marking. The first measure contains a triplet of eighth notes with fingerings 3, 5, 3, 5. The second measure has a triplet of eighth notes with fingerings 2, 1, 2, 1. The third measure has a triplet of eighth notes with fingerings 4, 5, 2, 1. The fourth measure has a triplet of eighth notes with fingerings 2, 1. The bottom staff is in bass clef with a 6/8 time signature. It begins with a fermata over a whole note. The first measure has a quarter note with a slur and a fermata, with a fingering of 2. The second measure has a quarter note with a slur and a fermata, with a fingering of 1. The third measure has a quarter note with a slur and a fermata, with a fingering of 2. The fourth measure has a quarter note with a slur and a fermata, with a fingering of 3.

Ex. 7. 28 Etude 7, 0-3 (F1)

It is probably a good idea not to invite even the feeling of a *faux* extension by leaping from 1 here, 3 being perhaps more appropriate for the job of purposely effecting some disconnection. Even if the distinction seems to be purely psychological, such gestural awareness does enhance the player's hearing and should therefore have an effect (however subtle) on the performance at large.

Etude 4 in the Dubois exemplar includes a virtuosic fingering starting in bar 27 which players today would very unlikely to arrive at on their own (see **Example 7.29** below). Chopin's use of the same finger makes a striking effect here especially as it continues through the skipping six-three chords down the circle of fifths:

[Presto $\text{♩} = 88$]

The musical score consists of two systems of piano music. The first system is marked [Presto] with a tempo of quarter note = 88. It features a treble clef with a key signature of one sharp (F#) and common time. The right hand has a complex arpeggiated pattern with triplets and accents. The left hand has a simpler accompaniment. A crescendo is marked with 'cres' and 'do' at the end of the first system. The second system continues the piece with similar arpeggiated patterns in both hands.

Ex. 7. 29 Etude 4,⁶⁴³ 27–31 (Dubois)

Skipping repeatedly with $\frac{3}{1}$ here is anything but studently, and quite challenging to pull off convincingly even allowing for considerable slackening and fluctuation of tempo, yet it is absolutely effective once mastered.

The Effects of Unmarked Arpeggiation on Finger Choice, and Vice Versa

As the issue of unmarked arpeggiation impacts quite directly on the next batch of case studies, it is useful to give a quick overview at this point. Despite there being already a sizeable body of secondary literature on the subject,⁶⁴⁴ it is still virtually absent in present-day performance—including much that is purportedly ‘historically informed’. Because finger choice could vary (sometimes wildly) depending on whether we make use of the device or not, identifying fingered passages which hint at arpeggiation could perhaps help us extrapolate onto

⁶⁴³ F–Pn: Rés F. 980 (I, 1), p. 16.

⁶⁴⁴ See especially Anselm Gerhard, ‘Willkürliches Arpeggieren – Ein selbstverständliches Ausdrucksmittel in der klassisch-romantischen Klaviermusik und seine Tabuisierung im 20. Jahrhundert’, *Basler Jahrbuch für historische Musikpraxis*, 27 (2003), pp. 123–34, Hamilton, *After the Golden Age*, 139–178, and Peres Da Costa, pp. 101–87.

contexts devoid of them—that is, to find congruent matches between our own finger choices and potential uses of unmarked arpeggiation.

Challenging Mikuli's assertion that, unless explicitly marked, '[f]or playing double notes and chords, Chopin demanded that the notes be struck strictly simultaneously' may feel like intolerable hubris for some.⁶⁴⁵ And yet, acknowledging arpeggiation to be a legitimate expressive technique is a most necessary step in our path towards even *general* sorts of understandings of early nineteenth-century fingerings, never mind those of individual composers. Several decades of research into the 'significant gulf between written advice and practice' through analysis of historical recordings (including piano rolls) clearly support the notion that unmarked arpeggiation was in use well before, and throughout, the nineteenth century—Chopin being of course no exception.⁶⁴⁶ The question, as ever, is *how*, as verbal descriptions do not help much beyond the most basic aspects of the technique. Attempting to establish one-to-one correspondences with notational practices is also bound to be an inconsistent and sterile route to follow, though there may be still some kernels of truth still hiding between the cracks. For example, the argument that some terms (e.g., 'con espressione', 'con anima', 'dolce') call for slower arpeggiation than in normal (relatively quick and constant) practice.⁶⁴⁷ And fingering indications can function as a similar shorthand, though one far more precise than any verbal admonitions.

Many chordal passages in Chopin's music become unnecessary tours de force if played without recourse to this technique, in fact, as forcing simultaneity onto them often demands excessive use of finger substitution and/or awkward pedalling. The most likely pedagogical function of etude 11 is therefore practice of unmarked arpeggiation, as startling as that may be: it would be quite odd if the main difficulty presented by an etude was never found in the repertoire or never afforded a chance to be put into practice (including improvisation in some capacity). In that regard, it

⁶⁴⁵ As quoted in *PaT*, p. 41. For solid arguments against taking Mikuli's (or for that matter anyone else's) disavowal of this practice too literally, see Snedden, p. 103, and Peres Da Costa, p. 140–45.

⁶⁴⁶ *Ibid.*, p. 141: 'In the end, it is dangerous to assume from Mikuli's comment alone that unnotated arpeggiation was not part of Chopin's expressive practice'.

⁶⁴⁷ See Gerhard, pp. 126–28.

is unfortunate that in this etude Chopin indicated fingering for just a single quaver chord (see **Example 7.30** below), as even its obvious precursor (Moscheles's opus 70 number 2) contains plenty of indications despite being much less technically demanding. To generate plausibly Chopinian fingerings we would do well to allow for much hand asynchrony (contrary to what Ekier and Kamiński ordain) and gestural legato—all of which should be *built-in* to a very high degree in etude 11.⁶⁴⁸

[Allegretto ♩ = 76]

Ex. 7. 30 Etude 11, 8–9 (F1)

Taking once again Hummel's fingerings as precedent for many of Chopin's own practices (see **Examples 7.31** and **7.32** below), some degree of arpeggiation in etude opus 125 number 7 does seem to be implied due to the frequent use of the same finger, occasionally in several parts simultaneously:

Andante cantabile

Ex. 7. 31 Hummel, etude 7, 1–5

⁶⁴⁸ Kurpiński (p. 44) clearly advises *not* to synchronise in such cases: 'If there are arpeggiated chords in both hands, the left starts sooner than the right' (Jeżeli w obudwóch razem rękach są Akordy Arfikowane, Lewa, iako maięca dolne nóty, poczyna cokolwiek wprzody od Prawey).

[Andante cantabile]

Ex. 7. 32 Hummel, etude 7, 18–22

Note how it is very often *not* the upper voice that the player is able to bind through the indicated fingering, but rather some inner part(s), which hints at prioritising gestural flow over pedantic connection—and to all appearances without resorting to pedalling.⁶⁴⁹

An even more striking case of arpeggiation as suggested by fingering is the following (note especially the dragging LH little finger):

[Allegro comodo]

Ex. 7. 33 Hummel, etude 10, 53–54

⁶⁴⁹ Ibid, p. 53, recommends slightly arpeggiating such successions of chords, aided by a ‘crawling’ sort of guiding motion. See Appendix B, pp. 328–29.

This etude is occasionally mentioned in the literature in connection to Chopin's etude 17, though mostly just the opening's similarities in figuration and harmony.⁶⁵⁰ Yet Hummel's etude may have directly inspired the following—which begs for lush arpeggiation of the LH if we use a similar fingering approach to Hummel's:

[Vivace ♩ = 184]

Ex. 7.34 Etude 17, 111–14 (*Stichvorlage*)

Consider also the RH throughout the middle section of Chopin's etude 6.⁶⁵¹ Because of already quite ingrained performance traditions, this piece would not normally be associated with unrepentant arpeggiation, and yet it may turn out to be a perfectly idiomatic and potentially much more expressive approach. Indeed, fairly constant arpeggiation may once again be a built-in feature, which of course does not come at all naturally to players today. Ignoring such possibilities (alongside hand asynchrony and *rubato*) may partly explain the long-standing tradition of playing etude 6 at about half tempo.⁶⁵² Physical gestures in some situations can become more fluent through arpeggiation, thus allowing for example more sensitive voicing and highlighting of dissonances than when the default aesthetic is absolute or near-absolute synchrony. In short, written-out fingerings can act as a

⁶⁵⁰ Given how close the publication of Chopin's op. 25 was to Hummel's death, however, I cannot unthink the idea that in this case we may be looking at an homage or even a *tombeau* rather than mere borrowing or allusion.

⁶⁵¹ We will explore this aspect of etude 6 in greater detail in Chapter 8.

⁶⁵² See, e.g., Rosen, *The Romantic Generation*, p. 379: 'Chopin's metronome mark (♩ = 69) is more than twice as fast as the usual performance—as fast as the Etude "in thirds," as a matter of fact'. While Rosen's estimation for the usual tempo taken for etude 6 in modern performances is roughly right, there is also an understandable lapse here: it is rather Chopin's etude 20 'in sixths' that features sextuplet quavers at ♩ = 69.

kind of a basic location guide for expressive use of arpeggiation and, importantly, extrapolation therefrom. Take the following:

[Allegro, ma non troppo $\text{♩} = 92$]

Ex. 7. 35 Clementi, *Gradus ad Parnassum* No. 29, 4-7

[Allegro, ma non troppo $\text{♩} = 92$]

Ex. 7. 36 Clementi, *Gradus ad Parnassum* No. 29, 12-15

Although on both occasions getting to the RH $d^{\sharp 2}$ - b^2 dyad on the downbeat of the second bar is quite possible without any arpeggiation, the required expansions (especially in the second case) become much more agreeable when not having to shoot upwards to the next position, and when the hand is able to remain on the keys as much as possible.⁶⁵³ Indeed, in addition to subtler timbral connection such arpeggiations can also invite more sophisticated uses of time manipulation.

The great irony here is that our modernist insistence on synchrony and mechanical time-keeping (which may require plenty of hand redistribution) often *prevents* a subjectively satisfying performance.⁶⁵⁴ Allowing ourselves a more

⁶⁵³ The reader may wish to experiment with the particularly expressive potential for arpeggiation in dyads found in Hummel's fingerings for the Handel fugue (Appendix A, pp. 303-10). Hummel's etude 9 (see **Example 4.3**, p. 95) offers a similar rationale for arpeggiation in a fuller context, e.g., getting to the chord on the downbeat of bar 3 without it would require swift skipping with 5 5, which does not seem in keeping with Hummel's generally suave writing (and sensitivity to tone quality).

⁶⁵⁴ See, e.g., Banowetz, pp. 67-72, especially the Chopin op. 47 example (p. 68), as redistribution there all but precludes 'thumb tenor' singing, and also much *diminishes* potential for legato in the

sympathetically human expressive approach would (especially from the player's viewpoint) not only prevent discomfort at many levels but also encourage more rhetorical kinds of performance. That is perhaps why the challenge implicit in the *Trois nouvelles études* is so elusive today—most notably the last in D \flat , for without much use of arpeggiation and asynchrony keeping a quiet hand and masking the agitation (for both player and listener) may be close to impossible at a brisk tempo—especially if we assume that it necessarily implies the use of many silent substitutions.⁶⁵⁵ One could go as far as to say that all three of them may represent the *ne plus ultra* of difficulty in that regard—that is, of keeping a quiet hand and finding fingerings to support it over and above realising polyrhythms or contrasting articulations, the latter being rather obvious difficulties and surely no real challenge for advanced pianists.⁶⁵⁶

One last example, from etude 23, is revealing even from a purely ergonomic perspective, as without use of arpeggiation—and thus at least *some* delay of the LH f' in bar 81—the hands will almost certainly bump into each other:

RH—other than through awkward pedalling, that is. See also Eric Tran, 'How to Cheat at Piano: The History and Ethics of Redistribution, Along with a Practical Guide' (D.M.A. dissertation, University of Madison-Wisconsin, 2020), particularly the suggestions given for etude 2, which Tran warns are 'apt to offend competition jurors with keen eyesight' (p. 62). See *ibid.*, pp. 18–26 for Tran's rationales for *carte blanche*. Hopefully, my own views on redistribution here will not come across as so categorically for or against. I wish, simply, that the reader senses the need to consider its *phenomenological* ramifications, and on a case-by-case basis. In other words, we may be fooling our *own* hearing and expressive potential in the process, not just competition jurors and other unsuspecting listeners.

⁶⁵⁵ See, e.g., Xian, pp. 34, 63. While some of the substitutions Xian proposes are sensible and certainly doable, many others may not be as unquestionably 'implied' as they appear to be if we take *subjective* calmness into account as well.

⁶⁵⁶ The scant published commentary on the *Trois nouvelles études* tends to elevate their musical value while downplaying their technical utility—exactly the opposite to the consensus view on etude 2, as we saw in the previous chapter. See, e.g., Marty, p. 24. Incidentally, the amount of self-quotation from opp. 10 and 25 in these pieces does seem to merit further investigation, especially as regards extrapolation of fingerings.

[Allegro con brio ♩ = 69] 8^{va}-----loco

8^{va}-----loco

cres-----

Ex. 7. 37 Etude 23, 81–83 (E1)

Indeed, it may well have been this very clash that negatively tainted the rest of the passage for Charles Rosen:

[T]he climax twists both hands unmercifully: [...] The very positions into which the hands are forced here are like gestures of exasperated despair. It would seem as if the physical awkwardness is itself an expression of emotional tension.⁶⁵⁷

Rosen's misgivings are surprising, to say the least, as other than the slight extension to accommodate 4 on e^b4 (establishing a pattern which then only *facilitates* the gesture down across three octaves), Chopin's fingering ensures that this is, in Rosen's own words, 'passage work that lies comfortably and does not stretch the hand'.⁶⁵⁸ In fact, it may be the most ideal fingering by any standard, for it prevents large stretches other than the unavoidable ones between 1 and 5 or 1 and 4—quick expansions of a minor ninth are generally doable for average hands, and those with smaller hands can easily get around the problem by having 'the gesture stand for

⁶⁵⁷ Rosen, *The Romantic Generation*, p. 382.

⁶⁵⁸ *Ibid.*

the effect', as Schenker advises when 'strictly speaking legato is impossible'.⁶⁵⁹ In other words, challenging as it may be, the figuration and fingering are effective *even* when we cannot hold onto some intervals.

There is much to contend with Rosen's views on the Etudes, which go against the very precepts Chopin is on record as espousing: suppleness, calmness, and (implicitly at least) bodily awareness—none of which would seem to suggest pianistic sadism.⁶⁶⁰ To further confuse matters, Rosen then wholly contradicts himself by insisting that pianists 'must not, as I have remarked, blame [this on] the heavy action of modern pianos: Chopin himself had to warn students to cease playing when they felt genuine pain'.⁶⁶¹ We should note, however, that Rosen's views—extreme as they seem—are actually not far from the consensus, which seems to argue for Chopin's rather abnormal flexibility and powers of extension and hence *sui generis* fingerings.

While Chopin's hand may have been inordinately flexible and superlatively gifted for many other pianistic reasons, taking a more circumspect stance on anatomic uniqueness and metapianistic ideals would prove more fruitful. That is, to focus on what is (close to) universally possible with his fingering indications, and to consider them together with concurrent aesthetics and techniques. An important issue to consider in the context of unmarked arpeggiation is that there is a whole grey area of legato playing which involves either the illusion of two or more parts being connected when only one is. As Schenker observes:

In such cases, it is entirely sufficient to use a legato fingering in the upper or, where appropriate, lower voice of the interval in question. At any rate, this

⁶⁵⁹ *AoP*, p. 25. Schenker is speaking in the context of etude 20, where protracted extension certainly is challenging for *most* hands.

⁶⁶⁰ Views more sympathetic to phenomenological issues than those in Rosen, *The Romantic Generation* can be found in id., *Piano Notes: The World of the Pianist* (New York & Others: The Free Press, 2002). Seemingly more impressionistic in style, its contents are, if not a complete change of heart, certainly less extreme. In *Piano Notes* Rosen *almost* convinces himself of the phenomenological import of gesture, in fact: 'The graceful or dramatic movements of the arms and wrists of the performer are simply a form of choreography that has no practical effect on the mechanism of the instrument, although if it looks more graceful, it may sound more exquisite, not only to the public but to the pianist convinced by his own gestures' (p. 24).

⁶⁶¹ Rosen, *The Romantic Generation*, p. 383.

“one-sided” legato will simulate legato in all voices, benefiting also those notes that were not played legato.⁶⁶²

Schenker concludes that ‘the impression of legato can be created even without actual legato playing inasmuch as the possibility of appropriate ways of dissembling exists’.⁶⁶³ What all this means for our purposes here is that the (doubly) illusory nature of legato playing in polyphonic contexts gives the player, when using unmarked arpeggiation, the necessary extra time to connect strands of voice leading which would otherwise prove impossible when playing completely or near-completely synchronously.

⁶⁶² *AoP*, p. 26.

⁶⁶³ *Ibid.* By ‘ways of dissembling’ Schenker means that ‘the author’s mode of notation does not indicate his directions for the performance but, in a far more profound sense, represents the effect he wishes to attain. These are two separate things’ (*ibid.*, p. 5).

CHAPTER 8

The Etudes (III): Case Studies in (Mostly) Polyphony and Double Notes

Special Features of Chopin's fingerings in Polyphonic Contexts

'Everything [is] to be read *cantabile*, even my passages; everything must be made to sing; the bass, the inner parts, etc.', Chopin famously told Hipkins.⁶⁶⁴ Indeed, because of Chopin's lifelong preoccupation with dynamic congruence (which should not be too hard to argue is present even at the compositional level), one would think finger choice needs to be at its sharpest when dealing with polyphony and polyphonic melody—especially when either occurs in one and the same hand. Lacking a comparable document to the three fingered fugues in Hummel's *Anweisung*, however, this chapter sets out with plausible reconstructions rather than Chopin's own sparse indications in such contexts.⁶⁶⁵

Applying what we have learned thus far to a couple of fragments almost devoid of fingering indications in the original sources will show how individual and creatively involved extrapolating from the original indications can be. Choices below reflect therefore a personal work-in-progress, neither intended to exclude others nor, perish the thought, lay hard claims to Chopin's unwritten, habitual fingerings. They are the result of much practical experimentation, obviously with Chopin's indications in particular but with contemporaneous practices and repertoire as well.

The goals in devising a working fingering for the A section of etude 3 are quite straightforward: to secure a quiet enough hand to be able to control the viola-like semiquaver RH figuration while also maximising expressive power in the top

⁶⁶⁴ Hipkins, p. 19.

⁶⁶⁵ With much assistance from Fontana, however, who provided additional fingerings for the FEE of op. 10. Despite his occasional changes to Chopin's original indications, Fontana's may be the closest we will ever get to those Chopin did not write down or publish.

part.⁶⁶⁶ We will focus mainly on two techniques: successive use of the same finger in the soprano (which in polyphonic contexts is often preferable to a series of agitated finger substitutions),⁶⁶⁷ and unmarked arpeggiation (used mostly in lieu of occasionally too laborious legato). Although the approach works especially well on a good period instrument or replica—even without any use of pedal,⁶⁶⁸ the resulting kinaesthetics should be largely unmistakable on any instrument.

From a finger choice perspective, the opening (and the reprise) of etude 3 are quite challenging on several counts (see **Example 8.1** below). At least to my hand, both of Fontana's alternatives for the RH result in mild but significant subjective discomfort:

⁶⁶⁶ In this context we should probably avoid notions of a 'split hand', i.e., the idea that one could isolate parts of it for separate tasks without one being affected in the least by the other—a 'metaindependence' of the fingers, if you will. This is clearly wishful thinking, not rigorous biomechanics. See, e.g., Cortot, *12 Études Op. 10*, p. 14, and, more recently, Kruger, pp. 55–62.

⁶⁶⁷ Finger substitutions can in fact promote organic rhythmic alteration and rubato effects, as intimated in Chapter 4 (p. 94n329). This is an area ripe for much further research indeed.

⁶⁶⁸ Artistic research in this area is generally slacking, as some otherwise remarkable studies of pedalling in Chopin do not take unmarked arpeggiation into account at all. To be fair, this is an unsurprising state of affairs because the technique is especially helpful in *unpedalled* contexts, something which modern-day pianists do not seem too keen to experiment with. Incidentally, a piece bearing too many resemblances to etude 3 to be purely coincidental is Moscheles's op. 70/9 etude. For Chopin's use of this collection (especially the first book) in teaching, see Goebel-Streicher, pp. 414–15.

Lento ma non troppo ♩ = 100

legato

Ex. 8. 1 Etude 3, 0-6 (F₂) with Fontana's fingerings superimposed

The fingering below is a slight variation from Fontana's, and aims to avoid even minimal stretching or lateral displacement through discreet arpeggiation:

Lento ma non troppo ♩ = 100

legato

Ex. 8. 2 Etude 3, 0-6 (F₂) with proposed fingerings

In bar 1, arpeggiation provides helpful pivoting on (possibly some overholding of) 2 while on the way to $f\sharp^1$ with 5—in turn also helping emphasise the $f\sharp^1$ through a

quite natural movement and weight transfer.⁶⁶⁹ And even if we wish to use a double substitution $\frac{5}{4} \widehat{4} \widehat{3}$ going into bar 2, this can take place gradually and unobtrusively. Fontana sees no need at all for substitutions, however, preferring consecutive use of 5 instead to come out of the tie on the downbeats of bars 2 and 3. Moreover, note that his choice for a nearly identical situation in bars 4–5 features not just consecutive use of a single finger, but *three*—which begs for Kurpiński’s ‘crawling’ motion and therefore some arpeggiation.⁶⁷⁰

The above goes to show once again how relatively short slurs in this repertoire often stand for a gesturally- and subjectively-oriented kind of unity rather than legato per se, and thus may imply some discreet arpeggiation. (And since Fontana’s solution surely does not imply pedalling semiquavers at about 200 per minute,⁶⁷¹ playing it completely unpedalled or with some unrepentant mixing of harmonies through pedalling on period instruments are probably our best options.⁶⁷²) Fontana’s $\frac{5}{4}$ on the second beat of bar 2 may be yet another inkling of implied arpeggiation: because of the 4 immediately before, and even if it is actually possible to avoid ballistic movement without recourse to arpeggiation, his fingering certainly invites arpeggiating as a more fluent option. Something along those lines would seem to apply as well to the second beat of bar 8 and the downbeat of bar 9.

From an expressive viewpoint, bars 3 and 4 are probably the most challenging, especially the beautiful appearance of the $c\sharp^2$ —a climactic point that

⁶⁶⁹ For a striking example along similar lines, see Hummel’s fingerings for the Bach fugue, bars 99–100 (Appendix A, p. 301).

⁶⁷⁰ See Appendix B, pp. 328–29.

⁶⁷¹ A befitting overview of the changes Chopin made to this tempo indication, and which makes a strong case for the (seemingly) fast $\text{♩} = 100$, is Rink, ‘Analyzing Rhythmic Shape in Chopin’s *E major Etude*’, in *Analytical Perspectives in the Music of Chopin*, ed. by Artur Szklener (Warsaw: NIFC, 2004), pp. 125–38 (p. 138n19).

⁶⁷² See Meniker, p. 52: ‘All this is markedly different on the modern piano: the attack is much less prominent, there is no “springing up” of the sound, and the decay of the sound is rather uniform and long. This attack is the same from bass to treble (at least through the second and into the third octave above middle C; the point at which the dampers stop on a modern concert grand — *g*” on a Steinway as opposed to around *c*” on a Pleyel or Erard of Chopin’s time — is an indication). As a result, through pedal use on the modern piano the sound of every note *adds up* to the sound of the notes played previously much more than on Chopin’s piano, where a certain blurring can occur without the notes getting in each other’s way’.

jolting could all too easily ruin. Fontana's fingering here is certainly a good option, though perhaps a $\frac{4}{3}$ fork for the semiquaver right before the $c\sharp^2$ would avoid any awkward lateral travelling of 2, reserving it for $d\sharp^1$ with the help of some outward tilting. Importantly, note that both choices practically demand arpeggiation to be effective. Fontana's subsequent 5 5 5 is probably our best choice for $c\sharp^2$ - b^1 - a^1 in bars 3-4, which benefit from substantial gliding motion, thus assisting not just with a feel for smooth note-to-note connection but also with the sheer expansiveness demanded of the hand—especially expressive from the player's subjective viewpoint. Foregoing strict legato for the ensuing a^1 - $g\sharp^1$ - $d\sharp^1$ and thus silent substitution can be a real (psychological) stumbling block, and I must admit to not being completely satisfied yet with the proposed fingering (see **Example 8.2** above).⁶⁷³ It is indeed challenging to find a solution which promotes not just superficially convincing sonic results (probably resorting to substitution in this case), but one that is also dynamically congruent for *both* parts. Fontana's solution is certainly sound (note for example how strongly it implies gestural legato for $g\sharp^1$ - $d\sharp^1$, as most players would *not* be able to hold onto the 4 on $g\sharp^1$), and yet something does not feel right: the very noticeable loss of expressive power coming from having to use 4 on the $g\sharp^1$ after the ampler, more expansive 5 5 5, and also possibly less than ideal angles of the hand. It may be, in other words, anticlimactic as a gesture. Whatever Chopin's own habitual fingering might have been in this case, I surmise a simpler and more expressively congruent solution to be more likely than what Fontana's indicates.

The sole extant (published) original fingering in the A section of this etude is a LH 3 1 over the second crotchet of bar 8, its function seemingly to prevent taking

⁶⁷³ The subjective discomfort, to be sure, also arises from the greater difficulty involved in attempting to slide *upwards* from a^1 to $g\sharp^1$. Put differently, no matter how much we can foster the (sonic) illusion of connection in one part by effecting literal legato in another, we still need a solid enough feeling of gestural connection for *subjective* reasons.

a-b-a-b with the LH.⁶⁷⁴ On the face of it at least, this indication would seem to render the RH *1 1* in the Dubois exemplar a bit superfluous:

[Lento ma non troppo ♩ = 100]

Ex. 8.3 Etude 3,⁶⁷⁵ 6-9 (Dubois)

But that would be too hasty a conclusion, perhaps, underscoring once again how much of a contextual challenge the student annotated copies pose for us today. Not being privy to any communication during lessons often makes divining Chopin's intent impossible, and many annotations will thus remain mysterious. For all we know, writing the *1 1* could have been a spontaneous nudge on Chopin's part to emphasise or focus on the descending 'thumb alto' line more than O'Meara perhaps did in her lesson,⁶⁷⁶ or perhaps his way of pointing to its logical culmination as heralded by the two arpeggio annotations (see **Example 8.3** above). Incidentally, this particular annotation may also point to Chopin's casual use of unmarked arpeggiation, which directly contradicts Mikuli's reporting and admonitions on the matter.⁶⁷⁷ Note also that Fontana's fingerings match the only two (known) Chopin fingering annotations (both found in the Dubois exemplar) in this etude: the RH *4 4* in bar 6 and *1 1* in bar 8.

The middle section of etude 6 poses very similar challenges to the above, especially at the prescribed tempo.⁶⁷⁸ The main difference probably lies in that this

⁶⁷⁴ This indication stands in most original editions yet not in the autograph *Stichvorlage* (PL-Wmf: M/192). Although Fontana omits the original LH *3 1*, he does indicate a-b-a-b to be played with the RH thumb, which is basically synonymous.

⁶⁷⁵ F-Pn: Rés F. 980 (I, 1), p. 11.

⁶⁷⁶ Apparently, Chopin wielded a pencil in his hand at almost all times during lessons. See Goebler-Streicher, p. 113, and Kallberg, 'Chopin's Pencil', 104.

⁶⁷⁷ There may be, again, intriguing performance parallels here with Moscheles's op. 70/9 (bar 28).

⁶⁷⁸ For more on the extremely confusing indications for alternation of the hands in this etude, see pp. 270-72.

piece appears to demand even *more* arpeggiation if we are not to disturb our proverbial quiet hand. Ironically, arpeggiation in this context fosters more ‘distant hearing’ than if we stuck to a more or less synchronous RH,⁶⁷⁹ thus promoting the illusion of a more sustained performance overall and befitting the piece’s string quartet-like texture.⁶⁸⁰ In this connection, it is also interesting to note how Czerny bemoans pianists’ excessive use of arpeggiation even in the playing of fugues and chorales:

In the modern style, all passages in many parts are now invariably played in *arpeggio*; and so greatly is this the case, that many pianists have almost forgotten how to strike chords firmly. Many, otherwise really good players, would not be able to perform the following passage quite *firm*; that is, to strike all the notes of each chord *exactly* together [shows a chorale-like excerpt]. We feel convinced, that the majority would play these chords in the following manner, without being at all aware of it: [shows the first three bars of the excerpt, with arpeggio signs for every chord] nay, that, even with the greatest care, some notes would be heard to fall in afterwards. In the free style of playing this may be often very well; but in fugues the firm, simultaneous touch is so essential, that any departure from it necessarily destroys the effect and spirit of strict compositions.⁶⁸¹

Whatever the appropriateness of Czerny’s normative bent may be (even before considering the likely discrepancies between his writing and piano playing), advanced players were clearly making use of asynchrony even in polyphonic contexts.

Returning now to etude 6, Fontana’s RH fingerings are again of great assistance, even if arguably not Chopinian down to their last detail:⁶⁸²

⁶⁷⁹ See, e.g., Schachter, *The Art of Tonal Analysis*, p. 282: ‘*Fernhören* (distant hearing). Perceiving connections of various sorts between musical events that are not immediately consecutive’.

⁶⁸⁰ See Marty, pp. 87–88. We should also be aware that the parts which would correspond to the viola and cello both surpass the normal ranges of those instruments, and that some of the double stops in all parts would be highly unidiomatic for stringed instruments—the writing seems to represent a glorified string quartet, in other words.

⁶⁸¹ Czerny, *A Supplement*, pp. 157–58.

⁶⁸² Indeed, Fontana makes quite a few (and quite personal) changes to the original fingerings throughout op. 10 which are well worth tracking and trying out.

[Andante ♩ = 69]

Ex. 8. 4 Etude 6, 17–21 (F1) with Fontana’s fingerings superimposed

For example, Fontana supplies the semiquavers on the second dotted crotchet in bar 17 (bereft of fingering in all other first editions and the only extant *Stichvorlage*) with a written-out *segue*.⁶⁸³ Most post-Chopin era editors tend to change Chopin’s clearly established pattern at that point, presumably to maximise legato which in turn leads to what must feel for them the ‘right’ fingering for the last quaver. In my view, however, this only makes the spot unjustifiably difficult.⁶⁸⁴ Note also how Fontana’s RH fingering for bar 17 coincides with the emendation featured in Stirling (RH 3, last quaver of bar 17).⁶⁸⁵

Although the proposed fingering for the second dotted crotchet (see **Example 8.5** below) possibly relies on arpeggiation more heavily than Fontana’s, it also benefits from keeping the pattern in the viola-like part until the very end of the

⁶⁸³ PL–Wmfc: M/194, p. 1.

⁶⁸⁴ See Badura-Skoda (p. 29) and Ekier (p. 38).

⁶⁸⁵ While Chopin’s fingering for the semiquavers in bar 17 is clear in that it allows the alto e^b_1 – d^b_1 to slide quite naturally with 4, the shorthand 3 on the last quaver actually raises some difficult questions. That is, if we take the indicated fingering (2 3 1 3 2 1) to imply a *segue* into the second beat it would force skipping with 3 from c^b_1 and d^b_1 . Most editors (including Fontana) feel compelled to change the pattern to accommodate for the last quaver, but we really cannot be so certain that this was Chopin’s preference. Arpeggiation does appear to be a solution if one wishes to keep to the pattern throughout the bar—even if in the process 3 happens to migrate to the upper part.

bar, reserving the next expressive expansion (together perhaps with an even more luscious arpeggiation) for the 9 8 suspension in the next bar:

[Andante ♩ = 69]

Ex. 8. 5 Etude 6,⁶⁸⁶ 17–21 (Stirling) with proposed fingerings

When one plays Fontana's a tempo (even allowing for generous rhetorical broadening), landing the awkward RH configuration on the downbeats of bars 18 and 20 completely synchronously is perhaps unnecessarily challenging—therefore unlikely to meet Chopin's demands for the quietest possible hand.

Incidentally, the jury is still out on whether the LH 2 1 for the last two semiquavers in bar 18 stand for a reversal of 1 2 as the result of a slip of the pen or a typo:⁶⁸⁷

⁶⁸⁶ F-Pn: Rés Vma 241 (I, 10), p. 26.

⁶⁸⁷ Both Ekier (p. 38), Badura-Skoda (p. 20) duly suggest reversing the 1 2 right before it so as to play the octave with 1 5 instead, implying the original indication may not be quite right. And Howat (p. 24) does away with the original fingering altogether, deeming it 'doubtless [an] erroneous transposition' (ibid., p. 61). Interestingly, Fontana (who was not at all shy about substituting his own fingerings) keeps the original, which further suggests that the indication may be correct.

[Andante ♩ = 69]

Ex. 8. 6 Etude 6,⁶⁸⁸ 18–19 (Stirling)

While it is probably best to draw the agnostic card here, there are some faint clues speaking for the indication's correctness as it stands. First, the fingering conforms to the same pattern as on the second beat of bar 16 (and possibly implied in bar 20), which hints at polyphonic melody: the LH draws a separation between a very compact hand configuration quietly neighbouring around B, then expands to reach BB–C much as the slur over F×–G# going into bar 21 seems to demand more explicitly (albeit less dramatically).⁶⁸⁹ In other words, the original fingering may point to use of the octave skip to effect a sizeable 'breathing' gesture, though ironclad ideas of continuous legato and the perceived need to use the pedal whenever such legato is unattainable may prevent us from even considering the possibility.⁶⁹⁰ Note also the similarities to the LH in the *Ab nouvelle étude*, where connecting the octaves with 1 5 would put undue emphasis on each beat.⁶⁹¹

⁶⁸⁸ F–Pn: Rés Vma 241 (I, 10), p. 26.

⁶⁸⁹ The resulting hand configuration is so compact, in fact, that 3 4 1 3 1 2 probably all touch one another till the very last instant.

⁶⁹⁰ Marty (presumably to comply with the usual assumptions of temporal and timbral equality) unquestionably takes the printed fingering to be correct, alluding somewhat tautologically to the 'doability' of octaves with 2 5 and pointing to similar stretches in the same etude (p. 91). But the 2 5 octaves he mentions simply cannot compare to the one in bar 18, which is far more disruptive if one attempts a wholly connected texture and steady rate of movement as demanded by most of the semiquaver figuration when playing a tempo. For a bona fide, original 2 5 octave fingering in an unequivocal legato context, see F minor *nouvelle étude*, bar 39, LH (Ekier, p. 129; Badura-Skoda p. 66; Howat, p. 3).

⁶⁹¹ In this context it may be quite significant that (unlike its two companions) this etude bears no pedal indications (other than a single one in bars 58–59 which only appears in two French reprints from 1844). See Howat, p. 12.

[Allegretto]

Ex. 8. 7 *Nouvelle étude* in Ab,⁶⁹² 19–21 (Autograph)

One could then use this gestural articulation as a recurring pattern in bars 24–29:

[Allegretto]

Ex. 8. 8 *Nouvelle étude* in Ab,⁶⁹³ 24–29 (Autograph)

(The reader may wish to compare this to shifting on every beat to accommodate the descending octave skips, as Badura-Skoda suggests.⁶⁹⁴ Even if pedalling every crotchet to mask such exactly regular shifting, it would be very difficult to argue that the huge subjective difference they make does not also seep through in performance.) And even though direct legato connection is indeed possible even

⁶⁹² Chopin, *Manuscripts autògrafs*.

⁶⁹³ *Ibid.*

⁶⁹⁴ Badura-Skoda, p. 69.

with 2 5 in etude 6, the physical discomfort and jolting involved ultimately do not warrant it—among other things, even the slightest loss of control would spill over to the next bar.

It is interesting once again to note the similarities to a specimen found in Hummel:

[Tempo giusto]

Ex. 8. 9 Hummel, Fugue in F# minor,⁶⁹⁵ 114–18

Without wishing to suggest direct influence here (though that may well be the case), the double-neighbour idea in bar 116 with the 4 on C# which then moves over to allow 3 on the lower neighbour BB# is nearly identical to the pattern found a few times in Chopin's etude 6—however contentious it may be for bar 18.

The question of whether to resolve the 9 8 suspension in bar 18 with 4 rather than with the seemingly obvious 3 is also worth considering:

[Andante ♩ = 69]

Ex. 8. 10 Etude 6,⁶⁹⁶ 18–19 (Stirling)

⁶⁹⁵ Hummel, *Anweisung*, p. 389, II/p. 309.

⁶⁹⁶ F-Pn: Rés Vma 241 (I, 10), p. 26.

As we have already seen,⁶⁹⁷ a salient aspect of Hummel's fingerings for the three fugues in the *Anweisung* involves carrying many a dissonance through their resolutions with one and the same finger, which is a surefire means of keeping an ear on them. The problem in this particular case is that there is no finger left to support any pivoting: 2 is busy with $c\sharp^1$ - $d\sharp^1$ (unless we use an unlikely fork with 3 on the $d\sharp^1$) and $\overset{5}{1}$ with the repeated octave. Much as it is challenging to hurdle over the $g\flat^1$ with 4, some arpeggiation coupled with Chopin's signature gliding and sliding on the keys helps keep a quiet hand and thus achieve the illusion of a beautiful melting legato into f .

Fontana also provides a fingering for the double suspension in bar 22, which, however obvious and possibly forced it may be, is still nice to see confirmed in print. The main point is that, even though 5 is quite forced in the top part throughout most of the middle section,⁶⁹⁸ we still can use arpeggiation *in lieu* of pedalling. Indeed, as Martin Hansen observes, pedalling 'the kind of chromatic inner voice in the middle register found in this work' would have been a highly unlikely choice.⁶⁹⁹ In my view, the pedal is not to be banned altogether here, however—there is potential for its occasional quick use, but for reasons of harmonic intensity and resonance rather than any need to effect strict legato. In other words, a satisfying enough sense of connection through the use of unmarked arpeggiation results even when using the same fingers consecutively, while pedalling (should we wish to) can provide the occasional finish.⁷⁰⁰

⁶⁹⁷ See pp. 102–03.

⁶⁹⁸ The possible exception being the last quaver of bar 21.

⁶⁹⁹ Hansen, p. 473.

⁷⁰⁰ See *PaT*, pp. 128–29n121 on the likely possibility that Chopin recommended somewhat restricted use of the pedals for *practicing*, which is 'supported (though less concretely) by Debussy [...]: "I have very precise recollections of what Mme Mauté de Fleurville told me. [Chopin] wanted his pupils to practise without the pedal, and, except on very rare occasions, to avoid its use altogether"'. (See *ibid.*, p. 129n* for doubts concerning Mme Mauté's studies with Chopin.) If veridical, the above account would mean that Chopin was for once not just in accord with Hummel, but also with Czerny, *A Supplement*, p. 4: '[T]he pedal must not be used until the piece has been well practised in regard to clearness, fingering and rapidity'.

Let us now consider Fontana's fingerings for Chopin's vocally evocative writing in the following:

[Andante $\text{♩} = 69$]

Ex. 8.11 Etude 6, 25–29 (F1) with Fontana's fingerings superimposed

[Andante $\text{♩} = 69$]

Ex. 8.12 Etude 6, 25–29 (F1) with proposed fingerings

Note, first of all, Chopin's written-out special redistribution. Its main objective seems to be the smoothest possible rendition of the 4 3 suspension in the RH, by letting the hand stay close to the $c^{\sharp 2}$ for as long as possible. This Fontana's fingering does allow, though he changes the original LH $1\hat{3}$ to $2\hat{5}$ (compare **Examples 8.11**

and 8.12 above), probably to avoid the stretch G \sharp -g \sharp with 3 1 but possibly also to keep a strict legato from the previous c \sharp . The RH, however, is forced to skip upwards in perhaps too much of a jolt—no matter how judiciously pedalled, agogically broadened, or how much arpeggiation or dislocation we may use, the disconnecting effect of this fingering may prove too challenging to mask here. Moreover, it forces the semiquavers on bar 26 to be played with just 1 and 2, which results in mild extension and the additional challenge of preventing the notes played by the thumb from sticking out too much. In short, Fontana's fingering results in a subtle yet uncomfortable enough subjective disconnect between means and effects.

The proposed fingering, despite requiring considerable tilting of the RH to accommodate the squeezed semiquavers with three fingers rather than just two, is more conducive to the c \sharp ²-b \sharp ¹ slide with 5 and, most importantly, to reach the downbeat of 26 without shock if assisted by some arpeggiation. All in all, Fontana's fingerings for these two fragments, though quite reasonably comfortable and musically thoughtful, possibly do not reflect Chopin's actual practices to a tee, especially as concerns the degree to which Chopin may have used unmarked arpeggiation and consecutive fingers in legato playing. But that is precisely where speculation stops, and experimentation begins—as does our individual (and also hopefully dynamically congruent) expression.

Let us bring the discussion on etude 6 to a close with a revealing textual issue. It is possible that the Stirling exemplar here affords us another rare glimpse into Chopin changing his mind over a fingering already in print.⁷⁰¹ Presumably, the emendation for just two semiquavers in bar 3 would apply to the whole bar and homologous places:

⁷⁰¹ See pp. 199–200.

Andante ♩ = 69
con molto espressione

p

sempre legatissimo

Ex. 8.13 Etude 6,⁷⁰² 0–4 (Stirling)

Marty's rationalisations notwithstanding,⁷⁰³ the 1 3 in bar 3 is a better solution by any standard, as the original fingering at or around the original tempo can make even advanced players falter because of the swift, awkward lateral movement needed to accommodate 4 on both g and f—it is a most uncomfortable fork fingering, in fact. This is once again the Chopin 'problem' at work, in the realm of fingering: without much contextualising and comparison of sources in that regard we would not arrive at a relatively accurate fingering 'text' but, more importantly, Chopin's *development* in this area.

Special Features of Chopin's fingerings in Double Notes

Let us now return to etude 3 and tackle a remarkable case of articulated legato head-on:

⁷⁰² F–Pn: Rés Vma 241 (I, 10), p. 25.

⁷⁰³ See Marty, *Vingt-quatre leçons*, p. 89. Denying this annotation any utility other than suiting Jane W. Stirling's limited technical abilities while extolling the printed fingering does seem both unfair and rigid.

[Lento ma non troppo ♩ = 100]
[Poco piu animato]

Ex. 8. 14 Etude 3, 38–39 (F2)

If one keeps to a quiet hand, the original RH $\begin{smallmatrix} 5 & 4 \\ 2 & 1 \end{smallmatrix}$ series pair off the tritones quite naturally, supplementing a layer of meaning the slurs would not convey on their own.⁷⁰⁴ Specifically, the second of each tritone pair gets shortened, due to the skips but also to conventional slurring practice which should hold even—as is the case here—in the absence of nested slurs.⁷⁰⁵ This way the hand remains relaxed throughout the passage, making any acceleration through the hairpins (should we wish to effect them) far more doable than if we attempted strict legato as the notated slurs would *seem* to command.⁷⁰⁶ In other words, because of the fingering's clarifying function, the slurs once more point to a unified musical gesture rather than legato per se. In contrast, some modern editors' insistence on 5 3 for the top part quite possibly results in uncomfortable extensions and adjustments which impede a flowing gesture.⁷⁰⁷

Although discussion of the complexities of bimanual coordination resulting from finger choice is surely beyond the scope of this study,⁷⁰⁸ pianists need consider the following with extreme care from that perspective:

⁷⁰⁴ See Kurpiński, p. 48 ('Moderato', bars 15–16), for an almost identical figure and fingering, though Moscheles, *Études*, p. 45 (etude 9, bar 15) is more likely to be a direct case of influence.

⁷⁰⁵ See, e.g., Hummel, *Anweisung*, p. 96, I/105, and Moscheles, *Études*, p. 10.

⁷⁰⁶ For a recent apropos discussion of the agogic meaning of hairpins in Chopin, see Snedden, pp. 116–17.

⁷⁰⁷ See, e.g., Ekier, p. 25.

⁷⁰⁸ See, however, Parncutt, Sloboda, and Clarke, 'Interdependence of Right and Left Hands in Sight-read, Written, and Rehearsed Fingerings of Parallel Melodic Piano Music', *Australian Journal of Psychology*, 51/3 (1999), 204–10.

[Lento ma non troppo ♩ = 100]
[Poco piu animato]

Ex. 8.15 Etude 3,⁷⁰⁹ 38-42 (Stirling)

(Note that in the autograph the LH A on the downbeat of bar 40 clearly bears a 5, whereas the FFE shows 4 and 5 somewhat superimposed. Modern editions tend to favour the 4.) Obviously, a few of the LH crossing-overs are intermittently at odds with the RH movement between paired semiquavers. And attempts to completely match the LH with the RH in bars 39 and 41 would almost certainly result in lurching—not to mention considerable psychological discomfort, especially if we allow for the noticeable accelerations the sequence seems to demand. Even when using a relatively high LH wrist position as the most conducive to swift and easy crossing-overs, seemingly negligible amounts of time and effort are in fact quite noticeable to the player. A simple solution may be to avoid such straightforward pairing of the LH semiquavers, thus making the outward realisation of each hand more independent of the other. While not claiming this to be *the* solution for everyone, it may (among other things) organically lead to hand asynchrony possibilities. The larger point here being that different players will find their unique

⁷⁰⁹ F-Pn: Rés Vma 241 (I, 10), pp. 12-13.

expressive solutions to this bimanual coordination problem if they are watchful about keeping a quiet hand and avoiding any incongruent lurching.

Similar considerations for subtle nuancing abound in etude 18 (see **Example 8.16** below), though thankfully not as terrifying coordination-wise.⁷¹⁰ The traditional objection to the original fingering (especially from a modern-instrument perspective) is that its frequent consecutive use of the thumb precludes *legatissimo* playing.⁷¹¹

The image shows a musical score for Etude 18, measures 5-6 (F1). The score is in treble clef, key of F major, and common time. It shows two measures of a chromatic scale in thirds. The first measure contains six chords, and the second measure contains six chords. Fingerings are indicated by numbers 1-5 below the notes. A 'Ped.' marking is under the first measure, and an asterisk is under the second measure. A dynamic marking '8va' with a dashed line is above the second measure.

Ex. 8. 16 Etude 18, 5–6 (F1)

Mdm gives fingerings for chromatic scales in thirds that do not use the thumb consecutively even before objecting to Chopin's, then voice their misgivings about the latter lacking 'symmetrical order'.⁷¹² This anxiety is probably unfounded, however, as the fingering affords a *gestural* sort of unity here as well, regardless how much actual legato one wishes to imprint to the ascending scales. It helps forego mechanical equality while also maintaining a fairly lurch-free, regular rate of

⁷¹⁰ See, however, Goebel-Streicher, p. 82, for Chopin's being quite satisfied with Müller's RH scales in thirds, but not so much with her LH, which she was not 'singing beautifully enough' ([...] mit den Terzläufen [...] war er recht zufrieden, weniger mit [der] linken Hand, die nicht schön genug gesungen).

⁷¹¹ See, e.g., Bülow, p. vii: 'As the peculiar fingering adopted by Chopin for chromatic scales in thirds appears to us to render their performance in "legatissimo" utterly unattainable on our modern instruments, we have exchanged it, where necessary, for the older method of Hummel'—a strange rationalisation, to say the least. As we will see below, the age-old argument for changing Chopin's fingering because of differences in piano construction may be somewhat deflating. For a few alternative fingerings by prominent pianists bent on 'improving' this perceived problem, see Yevgeniy Karafin, 'Grigory Kogan's *A Pianist's Work: An Annotated Translation*' (D.M.A. dissertation, The Manhattan School of Music, 2006), pp. 146–47.

⁷¹² *Mdm*, pp. 50–51 (p. 51): 'The following fingering is a complete and important deviation from the above principles, but quite a bit harder. It is similar to the one Hummel indicates in his Method. It forces the thumb twice in a row, and lacks symmetrical order' (Le doigtier suivant est une déviation complète et importante, mais bien moins facile, des principes précédents. Il a de la ressemblance avec celui que Hummel a indiqué dans sa Méthode. Il oblige à employer le pouce deux fois de suite, et manque d'ordre symétrique).

movement and thus our individually congruent temporal and timbral nuances. It is also no cop-out, however, as any nuancing at around the prescribed tempo does prove challenging—though naturally more so on modern- than on period-instruments because of key size and overall sturdier construction. Yet, regardless of instrument type, forcing temporal and timbral equality upon the original crossing-overs by pushing through them requires masking many resulting accents, all of which goes against Chopin's all-important principle of calmness.

In that regard it is also worth noting that the ascending chromatic scale pattern throughout the etude is not Chopin's, as it is still commonly believed.⁷³ At least provisional credit may be due to a Johann Nepomuk Rieger,⁷⁴ who seems to have published it well ahead of Chopin's opus 25.⁷⁵ I surmise Hummel then reproduced it exactly in the *Anweisung*,⁷⁶ as well as an excerpt from Rieger's prelude in C major from the same collection.⁷⁷ We would do well also to trace the origins for the fingering which appears in a pencilled-in annotation in Dubois (see **Example 8.17** below),⁷⁸ as it may once again point to Chopin's use of fingering to

⁷³ For a taste of the confusion regarding this fingering's origins already among players in the late nineteenth century, see Huneker, pp. 188–93.

⁷⁴ 'Provisional' because of a long-standing confusion as to Rieger's date of death, which alternates between 1828 and 'post-1833'. Taken presumably from the publication of his *Nouvelle méthode pour apprendre le piano-forte* (Paris: J. Frey, n.d. [1833]), Rieger's possible later passing would complicate the 1828 *terminus ante quem* (see note immediately below). In short, the (remote) possibility that it was Rieger who borrowed from Hummel's *Anweisung* (at least the fingering for chromatic scales in thirds) rather than the reverse cannot (yet) be ruled out. Whatever the case might be, this obscure German was instrumental in disseminating Beethoven's and Hummel's music in Paris. See Jeanne Roudet, 'La question de l'expression au piano. Le cas exemplaire de la fantaisie libre pour clavier (1780–1850)', in *Guide-Mains: Contexte historique et enseignement du pianoforte au XIXe siècle*, ed. by Leonardo Miucci, Suzanne Perrin-Goy and Edoardo Torbianelli (Schliengen: Edition Argus, 2018) pp. 45–63 (p. 51).

⁷⁵ Rieger, *Exercices en forme de préludes pour le forté-piano* Op. 49 (Paris: The Author, n.d. [ante 1828(?)]), pp. 9–10. Note, incidentally, how close the title is to Würfel's own (lost) collection.

⁷⁶ Hummel, *Anweisung*, p. 188, II/p. 88.

⁷⁷ *Ibid.*, p. 231, II/pp. 132–33 ('Ex. 203'). To make matters even more convoluted, Hummel apparently relied on an advanced student, Wenzel Hauck, to supply an undetermined number of fingerings for the *Anweisung*—but quite likely those involving double notes as that seems to have been Hauck's specialty (see Kroll, p. 245, and Hulbert, pp. 129–31). The only known source of information on Hauck's involvement in the *Anweisung* (which should be reliable) comes from fellow Hummel student Ferdinand Hiller, *Künstlerleben* (Cologne: M. Du Mont-Schauberg, 1880), pp. 16–17.

⁷⁸ Despite an uncharacteristic 5 towards the end, the rest does very much look like Chopin's handwriting. Yet Ekier and Kamiński (p. 19) dismiss it downright: 'We do not give it in the text since it is contrary to the precise and consistent fingering which Chopin prepared for print in the whole *Etude*'.

effect diverse kinds of expression—rather than for reasons of anatomical difference or to fulfill predetermined (usually equalising) outcomes:

[Allegro ♩ = 69]

Ex. 8. 17 Etude 18,⁷¹⁹ 4-6 (Dubois)

To my knowledge, this variant first appears in Starke’s treatise, where it is explicitly connected to Moscheles:

A. E. Bestimmt hier den Einsatz des 5ten. Fingers der rechten Hand. Rücksichtlich für die rechte Hand hinauf.
[Here, A and E show the use of the 5th finger in the right hand ascending.]

Ex. 8. 18 Starke, from *Wiener Pianoforte-Schule*⁷²⁰

Moscheles does in fact make use of it in a set of variations slightly predating Starke’s treatise:

⁷¹⁹ F-Pn: Rés F. 980 (I, 2), p. 21.

⁷²⁰ Friedrich Starke, *Wiener Pianoforte-Schule* (Vienna: The Author, 1819-21), p. 12: ‘Appendix to the scales. Thirds exercise in half steps for both hands, from an easy method by J. Moscheles’. Translation (also within **Example 8.18**) from Charles Howard Jones, ‘The “Wiener Pianoforte-Schule” of Friedrich Starke: A translation and commentary’ (D.M.A. dissertation, University of Texas at Austin, 1990), p. 108.

Var. IV
di bravura

f *sf*

Ex. 8. 19 Moscheles, *Grandes variations* Op. 32 (Var. IV),⁷²¹ 1–3

Note also how Moscheles himself slightly adapts his own ‘easy method’ at the beginning of the pattern instead of following it slavishly.

Yet another close alternative already appears in Adam and Lachnitz’s treatise as a suggestion for a passage in Dussek’s opus 43 sonata—over two decades before Starke’s treatise:

⁷²¹ Moscheles, *Grandes variations pour le piano-forte* Op. 32 (Vienna: Artaria, n.d. [1815]), p. 7.

[Allegro moderato con espressione]

Ex. 8. 20 Dussek, *Grande Sonate* Op. 43 (I),⁷²² 160–63, with Adam & Lachnith’s fingerings

This is basically the same as Moscheles’s, but which uses $\frac{5}{3}$ rather than $\frac{3}{1}$ for E and G and B and D.⁷²³

Clearly, we should not be too quick to dismiss the fingering in Dubois as studently or remedial offhand (see **Example 8.17** above), as the more frequent shifting makes it, if anything, even more challenging. Importantly, it lets keeping the same fingering pattern for the whole of bar 4 instead of having to tuck 4 under 5 and immediately after cross over to 3, which is also notoriously cumbersome and challenging to make work musically. Although we could speculate forever as to the actual rationale for this annotation, it is rather the thought that Chopin may have

⁷²² Dussek, *Grande Sonate pour le Piano Forte* Op. 43 (Paris: Pleyel Le Duc, n.d. [ante 1798]), p. 11. As originally published, it bears no fingerings whatsoever. Fingering shown as it appears in Adam and Lachnith, *Dictionnaire des passages*, p. 112. Interestingly, this kind of fingering does not appear in any of the editions of Clementi’s *Introduction*, but is found in *GaP I* (No. 15).

⁷²³ Pollini, p. 45, shows the exact same fingering.

condoned a diversity of groupings and inflections for this figure that is stimulating: the possibility that finger choices here as elsewhere offer not just alternatives to carry out some pre-determined (usually equalising) outcome, but are inherently expressive alternatives *in and of themselves* which Chopin surely must have used at different times to great effect. Whatever Chopin's actual preference(s) in the case of etude 18 may have been, what seems clear is that making *explicit* use of the features of whatever variant(s) we choose would be more in keeping with Chopin's ideal of calmness than attempting to mask them under some preordained, inexpressive equality of outcome.

There are a few other types of double-third fingerings which also beg for sensitive inflection in this etude:

[Allegro $\text{♩} = 69$]

8^{va} ----- loco

Ex. 8. 21 Etude 18, 11–12 (F1)

[Allegro $\text{♩} = 69$]

8^{va} ----- loco

Ex. 8. 22 Etude 18, 47–49 (F1)

Pianists trained in the twentieth and twenty-first centuries tend to disparage this 'carrying over of the third finger, which participates in two thirds in a row' as

somehow defective because it ‘prevents the attainment of high speed’.⁷²⁴ Yet the deliberate effortfulness of Chopin’s fingerings for the above couple of spots expressively match their harmonic poignancy. A letter from Müller is again tantalising in this regard:

There is a beautiful *Etude* for double notes in the right hand, which Chopin told me must sound like flutes. He played it for me, and his chords really had a special timbre [...]. *There are people who say this happens only in our imagination, but you and I can tell the difference. It does seem real to me, even though some won’t understand it—such things need a fine ear for tone quality, intelligence, and a heart to feel them [...]. Hummel played these notes excellently, he said, because as a Kapellmeister he knew how to treat the notes of the harmony wonderfully.*⁷²⁵

The last sentence, especially, highlights Chopin’s preoccupation with harmonic awareness and inflection—which Hummel also does amply demonstrate in his own etude ‘in thirds’ through highly sophisticated fingering.⁷²⁶

The two original fingerings for bar 3 in etude 20 (FFE and FEE vs GFE and its *Stichvorlage*) also demonstrate how crossing-overs may offer clues to subtle uses of inflection, not just articulation (see **Example 8.23** below). Although fingering possibilities are more limited here than in etude 18, the choice forces two radically different sets of kinaestheses and expressive outcomes.⁷²⁷ In other words, the crossing-overs reveal more than mechanical expediency—at a certain tempo,

⁷²⁴ Karafin, p. 143. Note that Grigory Kogan chooses to ignore this aspect of Chopin’s fingering for etude 18 while showering praise over that of the etude as a whole (ibid., p. 145).

⁷²⁵ Goebel-Streicher, p. 162: ‘Eine *Etude* ist wunderschön, im Violin sind Doppeltöne, die sagte mir nun *Chopin*, müssen klingen wie *Flöten*. Er spielte sie mir, und wirklich hatten seine *Accorde* einen besonders *timbre* [...]. *Il y a de personne qui disent que c’est imagination, mais puisque moi et vous nous trouvons une différence, il me semble que c’est une réalité plutôt; cependant il y aura beaucoup, qui n’y comprendrons rien; pour ces choses il faut posséder, un oreille juste pour saisir le timbre, de l’esprit pour le comprendre, et du coeur pour le sentir* [...]. Vorzüglich hat Humel diese Töne gespielt, er war *Capellmeister*, sprach *Chopin*, und hat daher die Harmonie Töne herrlich zu behandeln gewußt’.

⁷²⁶ Note that Goebel-Streicher, p. 164n3, believes the unnamed etude in Müller’s letter to be from *GaP III* (meaning probably no. 68 in A major), yet Chopin’s repeated mention (and praise) of Hummel in this context raises the intriguing possibility that it refers instead to Hummel’s own superb op. 125/3.

⁷²⁷ This idea runs counter to one of Jenkins’s long arguments, which is that Chopin and a few other contemporaries were definitively pushing for the independence of articulation from fingering. While some may well have been, the evidence clearly does not square with Chopin’s own practice. See, e.g., ibid., pp. 66, 73.

attempts to mask them become counterproductive. The upper fingering is from the *Stichvorlage*'s, the lower, from FFE:

[Vivace ♩ = 69]

Ex. 8. 23 Etude 20,⁷²⁸ 3-4 (*Stichvorlage* & F1)

The *Stichvorlage*'s pencilled-in fingering is especially challenging at the beginning,⁷²⁹ as it demands more time and effort to cross over the 5 towards $f\sharp^2$ as compared to the rest of the ascent.⁷³⁰ Moreover, but for a single dyad (g^2 - eb^3) the thumb is used throughout the run, which adds to the perceived difficulty (and also associates it, at least psychologically, to the other, fully chromatic ascent of bars 7-8, which also uses the thumb throughout in all the original sources).

Incidentally, a fingering indication in Dubois for this etude may indirectly confirm Chopin's approval of the RH ties joining bars 26-27 that appear in FFE and EFE, but not in the extant autograph *Stichvorlage* (and obviously GFE itself):

[Vivace ♩ = 69]

Ex. 8. 24 Etude 20,⁷³¹ 26-28 (Dubois)

⁷²⁸ PL-Wn: Mus. 217 Cim., p. 24.

⁷²⁹ See p. 77n272.

⁷³⁰ Yet more admonitions for a *gestural* kind of legato can be found in *AoP*, p. 25: 'At times certain ways of dissembling can help to give an impression of legato even where, strictly speaking, legato is impossible. Thus a legato effect is attained in Chopin's Etude op. 25, no. 8, by means of gliding elbows. Here, in quickest tempo, the gesture stands for the effect'.

⁷³¹ F-Pn: Rés F. 980 (I, 2), p. 31.

The 5_4 at the beginning of bar 27 is not all that abrupt once we use the ties, as they allow for a quick top-up ‘wrist breath’ and thus make more sense of the $\frac{5}{2} \frac{4}{1}$ pairs series all the way through the downbeat of bar 28, a pattern which may also invite subtle off-beat outlining. Absent the ties, we might have been tempted instead to slide g^3-f^3 with $5\widehat{5}$ to prevent any awkwardness getting 4 to f^3 . While the latter is certainly a viable option, the version with ties (and the paired fingering to go with it in Dubois) does seem the more grounded option, somehow.⁷³² In this light, even in the absence of *Stichvorlagen* for the FFE and FEE, the version with the ties nonetheless strongly suggests a Chopin-approved ‘update’.

Let us now return to etude 3 and consider the notorious *con bravura* passage.

[Lento ma non troppo ♩ = 100]
[Poco piu animato]

The image shows a musical score for Etude 3, measures 46-48, in F major, 2/4 time. The score is for piano and includes fingering numbers (5, 3, 3, 5) and dynamic markings (f, con bravura). A dashed line above the staff is labeled '8va'. The score consists of two staves, treble and bass clef, with various chords and melodic lines. The tempo is marked as [Lento ma non troppo ♩ = 100] and the performance style is [Poco piu animato].

Ex. 8. 25 Etude 3, 46-48 (F2)

Though the mirrored fingering and resulting brisk skipping through $\frac{5}{2} \frac{3}{1} \mid \frac{3}{1} \frac{5}{2} \mid \frac{5}{2} \frac{3}{1}$ etc. (which Fontana does indicate) seem to be forced, that is, the only reasonable possibility,⁷³³ there is still much we can do to ground movement for expressive as well as technical reasons. And, as usual, Hummel is of great assistance:

§ 4. In passages where the notes of chords are taken in succession by skips, (a.) and in arpeggios (b.) the thumb may dwell somewhat longer on the key than the strict time of the note would require, while the other fingers play on; by this means the hand is kept more steady the performer has a more

⁷³² Note also that in the Dubois exemplar Chopin also substitutes *p* for the printed *f* in bar 28.

⁷³³ For a questionable alternative, however, see Bar-Niv, pp. 55-56.

certain point of support, and the execution becomes richer and more harmonious.⁷³⁴

§ 9. What was intimated in § 4, about the thumb dwelling something longer than usual on the key, applies here equally to the little finger.⁷³⁵

As the figure stretches a minor tenth span throughout, few hands can hold either the thumb or the little finger for much longer their written value—and furthermore, it could also prove counterproductive even for those who can. Yet, psychologically, even a fraction of an instant helps the player navigate the kaleidoscope of diminished chords by signalling the underlying harmonic framework, thus promoting a more secure performance overall.⁷³⁶ This kind of bird’s-eye view awareness can only bolster security and sensitivity in performance. We should also note, however, that such fleeting contact with the keys by the thumb and little finger is not the exclusive reserve of virtuoso *bravura* passages, as the following exquisite *pp* figure from Hummel’s etude 5 demonstrates:

[Allegro con brio]

The musical score shows two staves. The top staff is the treble clef with a key signature of one sharp (F#) and a 2/4 time signature. It contains a melodic line with eighth and sixteenth notes. Fingerings are indicated above the notes: 4, 5, 2, 1, 4, 5, 4, 5, 4, 5, 3. There are asterisks [*] under some notes. The bottom staff is the bass clef with the same key signature and time signature. It contains a bass line with eighth and sixteenth notes. Fingerings are indicated below the notes: 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1. The dynamic *fz* is written below the first few notes. The dynamic *[pp]* is written above the first few notes of the right hand. There are asterisks [*] in the right hand.

Ex. 8. 26 Hummel, etude 5, 35–37

Although etude 7 seems well-nigh the most straightforward case of double notes of all the Etudes, the autograph *Stichvorlage* features a fingering that reverses the pattern for bars 26–33 and which does not appear in any of the first editions:

⁷³⁴ Hummel, *Anweisung*, p. 168, II/p. 67.

⁷³⁵ *Ibid.*, p. 169, II/p. 69.

⁷³⁶ Rink, ‘Analyzing Rhythmic Shape’, warns us, however, that ‘this piece is probably best regarded as a study in syncopation’ (p. 134), and that no matter how well the player understands the underlying harmonic framework in this passage, when ‘taken out of rhythmic context to become *in itself* the basis of the performer’s rhythmic conception, [...] could have a downright pernicious effect on the performance’ (p. 136).

[Vivace ♩ = 88]

Ex. 8. 27 Etude 7,⁷³⁷ 25–28 (*Stichvorlage*)

If Badura-Skoda's characteristic '(sic!)' second-guessing is any indication,⁷³⁸ many pianists routinely dismiss this fingering as a slip of the pen or as too quirky to merit serious consideration.⁷³⁹ Yet that would render the very next indication in bar 33 superfluous, even though it *does* appear in all first editions (see **Example 8.28** below). Upon careful consideration, the fingering in bar 33 happens to be the most convenient way to revert to the 'normal' pattern—which suggests that the two things (*Stichvorlage*, bar 26, and all first editions, bar 33) are very likely connected:

[Vivace ♩ = 84]

Ex. 8. 28 Etude 7, 32–34 (F1)

In short, something seems to have gone amiss in the editorial process, resulting in a fragmented rather than complementary set of indications.

The above suggests that yet another sustained fingering reversal may be implied for bars 48 through 56 (see **Examples 8.29** and **8.30** below). For one thing,

⁷³⁷ US-NYpm: MA 2473 (unpaginated). Note also the slightly faster metronome indication as compared to the published version.

⁷³⁸ Badura-Skoda, p. 33. See also Howat, pp. 28, 62.

⁷³⁹ Quirky as in only suiting Chopin's unique anatomy, or so the argument usually goes. Incidentally, Chopin's pen would have had to slip twice in a row here, which seems unlikely.

why else would Chopin have felt the need to indicate the very obvious (and predominant) pattern for the final ascending arpeggio?

[Vivace ♩ = 84]

Ex. 8. 29 Etude 7, 48–52 (F1)

[Vivace ♩ = 84]

Ex. 8. 30 Etude 7, 56–59 (F1)

Now what is it that makes reversal of the initial fingering pattern so peculiar—why is it usually perceived to be extra difficult from a technical viewpoint? The most obvious answer would be probably the *1 1* (whether one slides or not) at the exact reversal point going from bar 25 to 26. Yet the fact that it marks the arrival of the pedal point in the bass should give it enough justification for unapologetic time-taking and (quite possibly) sliding as well—though neither of those things are (or should be) mandatory in any way. Whatever their approach to performance, most players do tend to mark this spot in some way or another—if anything else, to ensure enough energy for the LH octave. This is not just a matter of quantitative dynamics or timing—it is a *communicative* act, as the prominent effect of a dominant pedal point such as this is not something either performers or listeners can too casually take in. Whatever our analytic leanings, this structurally salient

point and the natural tendency to highlight it somehow does seem to justify the special fingering.

Even from a purely technical point of view, the hand welcomes the change as a chance to relax by being able to move in a different way, however shortly—not to mention the grounding effect that placing the thumb on stronger metrical points can have. This newfound protagonism of the thumb suits, for example, the increased frequency of skips during the ascent in bars 26–29, where keeping the initial pattern would mean less ability to use natural weight transfer for the long crescendo as well as less than ideal lateral movements of the fingers. And, as already mentioned, this is especially true of the treacherous descent in bars 48–52, where thumb-guiding at that point would also help immensely (see **Example 8.29** above).

Now before moving on to a discussion of etude 22—the most ‘punishing’ of etudes, as Rosen puts it,⁷⁴⁰ we need to digress slightly. Given the deliberate preference for presenting new information over well-trodden ground, it should come as no surprise that the issue of where to sit in relation to the keyboard—traditionally one of the first if not the very first issue treatises deal with—has not been broached yet. Chopin’s comments in *Pdm* are, like most other pedagogical writings of the period, unfortunately too vague to pinpoint anything concrete, despite Marty drawing from it the conclusion that the body should be centred in relation to the pedals.⁷⁴¹

The encouraging news is that Chopin himself may have left behind some clues as to this matter in etude 22. Instead of averaging the overall range of any one instrument or piece as this is generally done, here we could more fruitfully take as references 1) the extreme notes played by each hand *across* the body (LH thumb $g\sharp^2$

⁷⁴⁰ Rosen, *The Romantic Generation*, p. 383.

⁷⁴¹ Marty, *La méthode de piano de Chopin*, pp. 16–17. Although Marty is surely right in that the pedals tend to be placed at the exact centre of the instrument, making them the reference for sitting may be anachronistic: perhaps because of ongoing developments in piano construction and considerable variations in terms of range, players seem to have taken keyboard *landmarks* as their reference instead. In that regard Chopin seems to have been (however independently) close to Kalkbrenner, *A Complete Course*, p. 17: ‘When playing on Pianos of six octaves and a half, the seat should be taken before the fourth G [g^1]’.

bar 23, RH $f\sharp$ bars 1, 25 and 28 = $\pm g^1$), and 2) the point where the hands come closest (bar 21, LH thumb e^1 , RH thumb $f\sharp^1 = \pm f^1$). Averaging these two points would in turn yield the edge between f^1 and g^1 . But before we take any tape measures out to our navels, the basic takeaway should be that sitting quite a bit to the right of middle C seems to work for much of Chopin's music (especially when dealing with LH limp technique figurations), but that occasionally some flexibility is required and individual anatomies taken into consideration.⁷⁴²

Even taking into account the greatest range of (commonly) available instruments during Chopin's work on *Pdm* in the 1840s (CC – a⁴), this placement would allow to '[p]osition yourself so as to be able to reach both ends to the keyboard without leaning to either side'.⁷⁴³ Though the sitting clues in etude 22 may have been wholly unconscious and unintentional on Chopin's part, in playing double octaves with the hands so close to each other (see **Example 8.33** below) or so far across the body it is still imperative to keep healthy angles in all the joints involved.⁷⁴⁴ Discomfort—perhaps even injury—can indeed result from not giving enough thought to sitting matters.

Even being completely in the dark about Rosen's actual views on how to sit at the piano,⁷⁴⁵ it is hard to understand why he considers these octaves to be 'even more punishing than anything in Liszt', then astonishingly claim that 'Chopin's sadism is usually more subtle than that of his contemporaries, and in most of his work actual pain is associated with emotional violence'.⁷⁴⁶ Surely, this is taking technical problems too much to heart—and downright antithetical to Chopin's pedagogy as all the Etudes *can* be played with relative ease as long as a reasonable fit between finger choice, individual anatomy and expressive intent obtains. There

⁷⁴² This sitting position does seem to work for the Etudes as a whole, perhaps with exceptions such as etude 1, where the RH goes down to an F (bar 41)—a whole octave below the most extreme spot in etude 22. Yet even in such extreme cases, however, the difficulty is relational, e.g., the final chord G-e in etude 1 feels more extreme (even though it is higher) than F-B in bar 41 because of the greater extension between 1 and 2 and the angle this causes in relation to the body.

⁷⁴³ *Pdm*, as quoted in *PaT*, pp. 193–94.

⁷⁴⁴ Similar challenges are prominent in etudes 1, 8, 9, 15, 18, 20, 23, and 24.

⁷⁴⁵ Rosen, *Piano Notes*, pp. 3–4 discusses sitting *height* rather than the issue at hand.

⁷⁴⁶ Rosen, *The Romantic Generation*, p. 383.

should be no ‘punishing’ stretching nor contortionism to be found anywhere—if discomfort occurs it is probably a sign that we are not only overlooking Chopin’s dicta and intended bodily tasks, but also essential aesthetic concerns.

Aside from (possibly) some sitting clues, one wishes Chopin had been more pedagogically generous and gave fingering indications for the outer sections of etude 22, as that could have answered many technical questions specific to his music. Yet, here as elsewhere, once we embrace the notion that temporal and/or timbral equality may not be the most musical (or sustainable) outcome and explore our fingering options accordingly, their physical viability should be relatively easy to gauge. In other words, dynamic congruence should be the main measuring rod here as elsewhere: playing any of the Etudes should thus feel not just healthy and comfortable but also give us immeasurable pleasure and joy—challenging as that goal surely is through much of etude 22.

The following is representative of a mechanical approach to fingering chromatic scales in octaves, and which should apply only very loosely to etude 22 if at all:

The side of the octave that is not played with the thumb will usually have finger 4 on a black key and finger 5 on a white key, except when the black key precedes the group of two adjacent white keys in the ascending RH and in the descending LH, in which case, finger 3 will be on the black key, and fingers 4 and 5 on the two white keys.⁷⁴⁷

While applying such mechanical rules may occasionally work, here it does not for at least two reasons. First, in this etude there is obviously great variety in terms of where a ‘black key precedes the group of two adjacent white keys’, as not every passage in etude 22 is based so strictly on the chromatic scale. Second, meter can be an aggravating factor: the weaker the metric position, the more crossing-overs will potentially stand out—whether as expressively intended or unwanted lurching. Furthermore, crossing-overs in this context demand ever so slightly more time for

⁷⁴⁷ Bar-Niv, p. 185.

them to be satisfying and not injurious in some way. Take the following, for instance (though ignoring the RH inner parts for argument's sake):

[Allegro con fuoco $\text{♩} = 72$]

Ex. 8. 31 Etude 22, 11–13 (E1)

To claim that the time (and resulting kinaestheses) taken here by crossing-overs is negligible, or that one could completely mask them ignores both our body's perception of time during and through the twisting involved, as well as differences in sonic imprinting resulting from whether we use cross-overs or not—however subtle or minimal those may translate into at the highest levels of expert performance. A more extreme example for this aspect of octave playing than chromatic scales should help drive the point home:

[Presto $\text{♩} = 88$]

Ex. 8. 32 Etude 4, 12–13 (F1)

Regardless what the pianist's desired outcome may be, 4 on LH black notes rather than 5 throughout will require either more time or quicker twisting to pull off—even in staccato such as here. Somewhat counter-intuitive as the option without crossing-overs may be, at least it results in a phenomenologically smoother path to the actual melodic goal, the D-d octave on the fourth beat (but possibly also

smoother sonic results ‘out there’ as well).⁷⁴⁸ This is of course not to say one should use 5 for the outer parts throughout etude 22, but that we would do well to consider the impact the above factors have beyond pure ergonomics—that is, their impact on *expressive* outcome, which is almost by definition of an unequal nature.

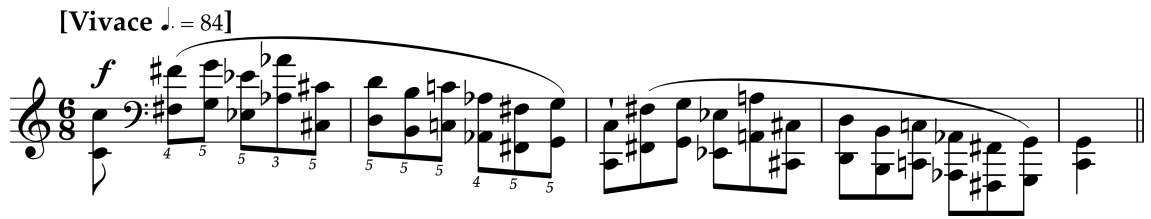
The following (see **Example 8.33** below) is a purposely extreme illustration, where 1) the hands are closest to each other and therefore at potentially strained angles—especially when using *any* finger other than 5 for the outer notes of the double octaves, and 2) both hands go ‘against the grain’—especially in bar 22, where crossing 4 over 5 should take considerable time and effort thus making 5 preferable for much of the bar. It also seems to make for better alignment for the *ff* chords in bar 23 if we wish to simply ram into them (rather than prepare and brace for the shock by using 4 immediately before). I have to insist again, however, that the *outcome* derived from this fingering is very personal, and that other players may have very different expressive concerns.

[Allegro con fuoco ♩ = 72]

Ex. 8. 33 Etude 22, 21–23 (E1)

As a last representative example for this discussion, the slurs in the following LH octave passage from etude 7 could also be misleading, as all they likely mean is that sharp accents should be avoided—that is, by not holding onto any keys if that results in any jerky movement.

⁷⁴⁸ Surely, some players can make a convincing *expressive* case for use of 4 in this passage, however much I cannot bring myself to it. Yet also speaking against use of 4 here is the fact that LH crossing-overs could somewhat thwart the *RH* arpeggio, which does seem to lend itself to a swift, flashy gesture.



Ex. 8.34 Etude 7,⁷⁴⁹ 48–52 (*Stichvorlage*)

Even for large hands, to insist on continuous legato with largely *any* fingering is likely to incur in noticeable lurching here. We may simply have to accept the idea of gestural legato for most of the passage, which in turn greatly affects how we may inflect it,⁷⁵⁰ as will *also* the bimanual factor—that is, whether we use the reversed fingering pattern in the RH or not has serious repercussions for the LH.

Miscellanea: (Mostly) Redistribution and Substitution

The following will tackle some of what are (in my view) the most enduring misconceptions as to Chopin's fingering practices. Let us first revisit the issue of redistribution—a kind of pianistic quicksand inspiring as many different approaches and perspectives as there are players, but which usually comes down to being for or against. As Chopin himself indicated at least eight of them in the student annotated scores, it would seem better to avoid too purist a stance, however.⁷⁵¹

David Rowland asserts that '[t]he notation of piano music is capable of representing one of two things: *what the performer does or what is heard*'.⁷⁵² While reasonable and succinct enough, this formulation leaves out a whole spectrum of effects that often require specific knowledge of historical fingering techniques and conventions to elucidate. To begin with, Chopin notated some strikingly sophisticated alternations of the hands which (even if they involve just the thumbs)

⁷⁴⁹ US-NYpm: MA 2473 (unpaginated).

⁷⁵⁰ Similar care should be given to the RH octave passages in etude 9, which can often benefit from a gestural legato approach for ergonomic as well as expressive reasons.

⁷⁵¹ See Clark, pp. 50–56.

⁷⁵² Rowland, 'Chopin's Early Piano Style: Compass, Notation and Texture', in *Chopin in Paris: The 1830s* (Warsaw: NIFC, 2007), pp. 369–86 (p. 381). (Italics original.)

are already a form of fingering, and discerning what the performer is to do or what the listener is to hear in each case is far from evident. The reader may try and imagine what effects (subjective or otherwise) *avoiding* these original alternations can have:

[Andante con moto]

Ex. 8. 35 Ballade Op. 52,⁷⁵³ 91–92 (Autograph)

[Allegretto]

poco più mosso

pp

Ex. 8. 36 Barcarolle Op. 60,⁷⁵⁴ 35–37 (Autograph)

Whether for subjective reasons or for outward musical effect, Chopin chose these alternations over other perfectly ergonomic possibilities involving a single hand (or one hand for more than just two notes at a time) instead. In light of that, it does not seem too much of a stretch to claim that *any* way we choose to distribute the hands does make a difference, however small. To suggest, as some do, that anything is admissible in that regard as long as we are not (visually) caught doing it ignores a wealth of evidence—much from Chopin himself—against such blanket use. Although *some* redistributions can and are probably meant to be both ‘masked’ for the listener while also ‘make sense’ to the player subjectively (as in the case shown

⁷⁵³ Oxford, Bodleian Library (GB–Ob: MS. M. Deneke Mendelssohn b. 2, fol. 53^v). See Chopin, *Ballade in F Minor*, Op. 52, facs. Series A I/52 (Warsaw: NIFC, 2010).

⁷⁵⁴ Krakow, Biblioteka Jagiellońska (PL–Kj: Muz. Rkp 2204, p. 3). See Chopin, *Barcarolle in F sharp major*, Op. 60, facs. series A XI/60a (Warsaw: NIFC, 2007).

in **Example 8.37** below), others are *not* so innocuous and might all too easily distort vital voice leading or kinaesthetics, or both. In sum, the alternations shown in the above couple of examples (and many other kinds of redistributions) are clearly not a matter of convenience, but carry distinct kinaestheses and occasionally structural implications as well, all of which should spill through in performance to some degree.

[Sostenuto]

Ex. 8. 37 Prelude Op. 28 No. 15,⁷⁵⁵ 8–11 (Debussy)

The written-out hand alternations in etude 6 (see **Examples 8.38** and **8.39** below) constitute a particularly thorny case, partly because of the usual textual problems, but also because they take place in a more overtly polyphonic context:

[Andante ♩ = 69]

Ex. 8. 38 Etude 6, 7–9 (F1)

⁷⁵⁵ F–Pn: Rés F. 980 (I, 4), p. 5.

[Andante ♩. = 69]

1 [sic] *cres*

sempre legato

Ex. 8. 39 Etude 6,⁷⁵⁶ 7–9 (*Stichvorlage*)

First, a close comparison of **Examples 8.38** and **8.39** shows that quite a few more fingering indications appear in the FFE than do in the only extant *Stichvorlage*—the infamous Chopin ‘problem’ at work again. Then note how in bar 7 the erroneous (or at least incomplete) placement of the first RH 1 only appears in the *Stichvorlage*, while the last RH 1 on c¹ is featured in all sources. The proposed reconstruction (see **Example 8.40** below) hypothesises an editorial mistake which ended up precluding hand alternation through (at least part of) the second beat:

[Andante ♩. = 69]

$\frac{4}{7}$ LH slide
 $\frac{4}{2}$ No LH slide

1 *cres*

sempre legato

Ex. 8. 40 Etude 6, 7–9 (F1) with proposed fingerings superimposed

In other words, it hinges on the idea that what looks like a LH thumb slide is likely to have been originally an alternation, which contributes to the inner agitation of the player but within clear limits and no excessive cognitive load. While this may seem mainly a textual issue and likely to remain contentious, in my view this slide is unjustified as it does not compare to many other instances in Chopin—it just rings too far from his usual expressive usage of the technique (more on this below). And since we are unlikely ever to know to the last detail what (if any) editorial

⁷⁵⁶ PL-Wmfc: M/194, p. 1.

troubles actually took place, confronting the sources ourselves does seem especially important here if we are to find an individually congruent, convincing solution.

Let us look at Fontana's fingerings one last time. As one can see from the transcription (which for once keeps the original English notation),⁷⁵⁷ his solution seems to rely on doing away with alternation for the first four semiquavers:

[Andante ♩. = 69]

Ex. 8. 41 Etude 6, 7–8 (E1) with Fontana's fingerings

Note, especially, that after he eschews alternation for the first beat it is not unequivocally clear whether the + + refer to a slide or an alternation, which certainly does not help settle the matter. In sum, establishing a definitive text—in the circumscribed sense of what is actually Chopin's and what is not—appears to be impossible in this case, leaving players no choice but to experiment for themselves.

The ending of etude 14 is another case where the apparent written-out redistribution may be just a form of simplified notation, that is, it may stand for keeping the same extended LH tenth as in the rest of the etude—to use Rowland's formulation, a case of notation reflecting '*what is heard*' rather than '*what the performer does*':

⁷⁵⁷ Keeping the English notation is needed for extra clarity here: the context makes things *mostly* intelligible, but readers may wish to check for themselves whether the transcription is correct as the original typography makes 'l' and 'r' virtually indistinguishable.

[Presto ♩ = 112]

dim

pp

* * *

Ex. 8. 42 Etude 14,⁷⁵⁸ 66–69 (*Stichvorlage*)

Put another way, does the notation unequivocally imply that the LH in bar 68 should take the f-c¹ dyad only, or should we also contemplate keeping the same characteristic open LH configuration of the whole etude and thus include the ab¹? The two options will elicit drastically different subjective results and performance decisions such as the ordering of the final arpeggio if we include the ab¹ with thumbs interlocking, or how to inflect db¹-c¹ if we do not.⁷⁵⁹ While not wishing to open an even bigger can of worms here, these few examples show that very often in Chopin's music it is simply not possible to glean hand distribution unequivocally from the notation itself. And in this he surely does not represent an exception from much other early nineteenth-century music.

Now as to finger sliding, by all accounts a signature technique of Chopin's, let us return to etude 3 and a single indication in the Dubois (see **Example 8.43** below). It best illustrates why we should not automatically assume every instance of consecutive use of the same finger—even those from a black to a white key—to constitute a slide.⁷⁶⁰ Indeed, the purpose of Chopin's annotating 4 4 for g^{#1}-a¹ in bar 6 could very well have been to demonstrate an 'illusory' kind of legato whereby connecting one of the parts results in the effect of *both* being so.⁷⁶¹

⁷⁵⁸ PL-Wn: Mus. 217 Cim., p. 7.

⁷⁵⁹ Bülow, for one, does indicate taking the ab¹ with the LH (p. 42).

⁷⁶⁰ See, e.g., pp. 305–09 (Appendix A, Handel fugue, RH bars 27, 38, 50, 52, 66) for use of 5 5 slides between white keys. As they are used motivically to signal the start of the semiquavers in the subject, they do seem to invite some sort of association in performance (even if just of a subjective nature).

⁷⁶¹ See **Example 4.6** (p. 99), and pp. 231–32.

[Lento ma non troppo ♩ = 100]

Ex. 8. 43 Etude 3,⁷⁶² 6–7 (Dubois)

As recommended by Hummel and others whenever there are these many accidentals, the hand here should be placed somewhat into the keys so as to easily accommodate *1* on $c\sharp^1$,⁷⁶³ as not doing so would further complicate realising the 4 4 fingering. Although a slide *is* certainly possible here, it would move the hand somewhat against the natural direction of grasping and could thus prove more awkward than useful. Comparing the above situation with that of the Trio of the Sonata opus 35—certainly a more idiomatic case of sliding—is illustrative:

Ex. 8. 44 Sonata Op. 35 (III),⁷⁶⁴ 31–33 (Stirling)

To compare this with a purposely extreme situation, note that while we could use a *glissando* motion in the RH part of the double octaves that crowns etude 5, the LH part is severely more limited in that regard simply because it goes ‘against the

⁷⁶² F–Pn: Rés F. 980 (I, 1), p. 11.

⁷⁶³ Hummel, *Anweisung*, p. 310, II/p. 224: ‘With regard to the position of the hand, it must be observed, that, in passages where both the thumb and little finger are frequently employed on the black keys the white keys are to be struck with the fingers, not in front of, but *between* the black keys’. And *ibid.*, p. 312, II/p. 226: ‘As much as possible, the white keys are to be struck close to, and even between the black keys, that the latter may be more conveniently got at, and that the hand may remain in its natural steady position’.

⁷⁶⁴ F–Pn: Vma 241 (IV, 35), p. 15.

grain'. Although this is obviously a very different situation from the 4 4 indication in etude 3, the point is simply that sliding can feel radically different when working with or against the naturally grasping configuration of the hand. (Putting aside any personal stand on whether or not to use *glissando* for these double octaves in performance, as Moriz Rosenthal and Ignaz Friedman certainly did, the point is rather that it is *possible*, especially for the RH.⁷⁶⁵)

There are many other instances of consecutive uses of the same finger which are quite clearly not meant to be slides, or even to be connected (other than psychologically). Some of this technique's functions are likely to remain as mysterious as the aforementioned issues of hand distribution. Arguably, the most striking illustration of it in Chopin comes from an annotation in the Dubois exemplar of the nocturne opus 48 number 1 (see **Example 8.46** below). But first, note the many ways in which it resembles the slow introduction of Würfel's *Rondo brillant* opus 24:

Adagio ♩ = 50

The musical score consists of two systems. The first system shows measures 1 and 2. The right hand begins with a quarter rest, followed by a half note G4, a quarter note A4, and a quarter note B4. A slur covers the remaining notes: G4, A4, B4, C5, D5, E5, F5, G5, A5, B5, C6, D6, E6, F6, G6, A6, B6, C7. The left hand plays a bass line with chords: G2, B2, D3 (measure 1); G2, B2, D3, F3 (measure 2). The second system shows measures 3 and 4. The right hand continues the melodic line with a slur: G6, A6, B6, C7, D7, E7, F7, G7, A7, B7, C8, D8, E8, F8, G8, A8, B8, C9. The left hand plays: G2, B2, D3, F3 (measure 3); G2, B2, D3, F3, G3 (measure 4). Fingerings are indicated by 'Red.' and '*' symbols. A dashed line labeled '8va' is positioned above the right hand staff between measures 2 and 3. The piece ends with a fermata over the final chord in measure 4.

Ex. 8. 45 Würfel, *Rondo brillant* Op. 24,⁷⁶⁶ 1-4

⁷⁶⁵ See Mark Mitchell and Allan Evans (eds.), *Moriz Rosenthal in Word and Music: A Legacy of the Nineteenth Century* (Bloomington: Indiana University Press, 2006), p. 159n10.

⁷⁶⁶ Würfel, *Rondo*, p. 2.

Lento

Ex. 8. 46 Nocturne Op. 48 No. 1,⁷⁶⁷ 1–3 (Dubois)

The problem, as always, is to discern what the intended musical effect may be, and how to bring it about. And so, let us first contest the idea that it is each finger *in and of itself* that produces its own peculiar sound, as Chopin is so often (mis)quoted as maintaining. Lapointe, for example, believes that here Chopin ‘wanted to maintain an unaltered timbre by using the same finger’,⁷⁶⁸ which I take to mean that 3 elicits distinct timbral qualities even when sounding isolated notes as is the case here. In my view, this misrepresents Chopin’s famous ‘As many sounds as there are fingers’ motto from *Pdm*,⁷⁶⁹ which is far more likely to mean that different finger choices *in a given context* necessarily effect differences in performance—both as kinaesthetically felt and in terms of sonic imprinting. Furthermore, the statement from *Pdm* should also be read in relation to Chopin’s insistence on the essential anatomical differences between fingers and the futility of the attempts to equalise them. Paraphrasing Chopin’s two statements into one could yield something to the effect of ‘Exploiting the inherent differences of the fingers leads to levels of artistry which the equalising of the fingers approach simply cannot’.

The simplicity of many situations involving a single digit can be deceiving, as it is difficult to appreciate the various ways they can affect the player subjectively, and even emotionally. In the C minor nocturne (see **Example 8.45** above) it results in potentially more expansive motions—and thus effort—than would the use of adjacent fingers, thereby bringing about a heightened intensity to the upper

⁷⁶⁷ F–Pn: Rés F. 980 (II, 6 (i)), p. 2.

⁷⁶⁸ Lapointe, pp. 16–17, *passim*.

⁷⁶⁹ *PaT*, p. 195.

neighbour note. In this particular case it makes sure there is subjective activity (and connection) even while moving through the rests, but its intensifying quality is not about keeping an ‘unaltered timbre’ at all and may even be meant to imbue the upper neighbour with its very own timbral hue (however subjective or illusory that may be). Indeed, the purpose of the annotation may even have been to ensure enough of an emphasis on the upper neighbour, but in the most flowing way possible.

Another important dimension of this technique is the possibility to couple it with a *carezzando* (‘caressing’) touch, which is quite likely what was also meant in the above example.⁷⁷⁰ As described by Antoine de Kontski (Antoni Kątski), a slightly younger Pole expatriate Chopin did not have a great opinion of,⁷⁷¹ this touch makes use of gliding on the key surface to elicit particularly rich and sensitive kinaesthetic and timbral connections.⁷⁷² Though it is also a somewhat overused example, the nocturne opus 37 number 1 (see **Example 8.47** below) illustrates the idea most clearly, as even at a moderato tempo this kind of single-digit playing might feel and sound much too mechanical and percussive if used without substantial gliding:

⁷⁷⁰ Gliding towards the palm of the hand was briefly alluded to in Chapter 3, as was its unmistakable connection to clavichord playing. Yet, at the clavichord, the technique is quite different from *carezzando* even if there is some sort of evolutionary relationship between the two. A crucial finding here is again Chopin’s almost certain knowledge of Pollini’s *Metodo*—which describes this kind of touch decades before Kalkbrenner and Kontski did. See Pollini, p. 60: ‘The student, whenever he wishes to realize a cantabile phrase WITH THE HIGHEST SWEETNESS, PIANISSIMO or LEGATO ASSAI, must try to place the finger on the key in a way so as to feel very slightly its surface before striking it; then he must strike it by almost caressing it [*scarezzandolo*], providing it with that degree of pressure required by the circumstance, and in this way, if the instrument is naturally provided with a sweet voice and a reliable reactivity, he will achieve a quality of sound almost comparable to a string instrument; he must be especially careful in placing the finger on the key, touching its surface but not moving it. This because even the lightest unperceived pressure could prevent the effect and risks striking the key without producing any sound’. (Translation from Miucci, pp. 82–83.)

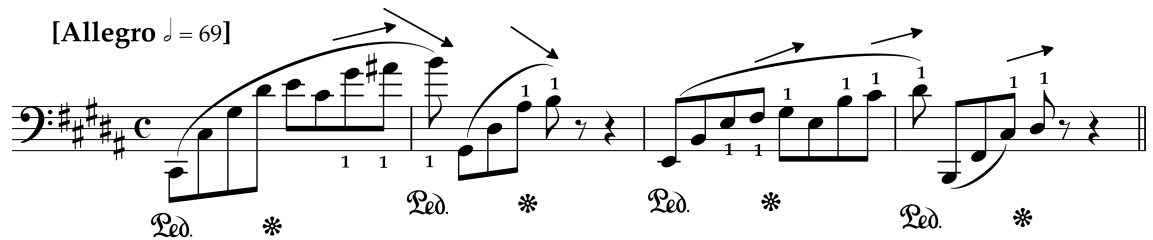
⁷⁷¹ See Uta Goebel-Streicher, e.g., pp. 459, and Bellman, ‘Frédéric Chopin, Antoine de Kontski’, 407n20.

⁷⁷² Antoine de Kontski, *L’indispensable du pianiste. Exercices quotidiennes pour le Piano* Op. 100 (Berlin : T. Trautwein, 1851 [1845?]), p. 16, even makes a sign for it: ‘(o)’. Kontski’s self-published 1846 edition (e.g., F-Pn: Vm8 S-372) makes absolutely no mention of *carezzando* but plenty of recommendations for mindless repetition and strengthening of the fingers. To my knowledge, Rosenblum, ‘Chopin among the Pianists in Paris’, pp. 287, 292n18, is the only source to indicate 1845 as the date for the first edition.



Ex. 8. 47 Nocturne Op. 37 No. 1, 5-6 (F1)

According to at least one claim, Chopin's use of *carezzando* may have entailed gliding in the opposite direction to Kontski's—that is, towards the nameboard.⁷⁷³ Since there seems to be no other documentary evidence to confirm or deny this, readers may want to experiment for themselves. But, from a purely mechanical perspective the approach is hard to square with the naturally grasping hand as posited by C.P.E. Bach and many others, including all the Viennese treatises.⁷⁷⁴ Thus, my contention is that occasionally reversing direction could be of use in some situations but not as a general approach—in Chopin's or any other music of the period. In the few examples shown below, the figurations occasionally do invite this kind of motion due to the greater possibility of forward sliding afforded by adjacent black keys (at times even of a 'round trip' kind):



Ex. 8. 48 Etude 18,⁷⁷⁵ 43-46 (*Stichvorlage*)

⁷⁷³ Kullak, *The Aesthetics of Pianoforte-Playing*, p. 195. Kullak, however, makes this claim without giving any sources. In my view, this is unlikely to have been Chopin's general approach to *carezzando*, but perhaps worth experimenting with on a case-by-case basis (see **Examples 8.48** and **8.49**).

⁷⁷⁴ From a clavichord-playing perspective, forward movement is simply too awkward and would in all probability incur in 'blocked sound'. See Speerstra, *Bach*, p. 95: 'Blocking occurs when the tangent does not introduce enough kinetic energy into the strings to set them vibrating, or when the contact between the tangent and the strings is broken too soon. The resulting note sounds like a dull thump, or stops sounding altogether'. Furthermore, the fact that the "Viennese touch" is perhaps best explained as a slight transformation of the "Bach touch" (Kobb, p. 124) does not make that kind of direction for *carezzando* any more believable as far as Chopin is concerned.

⁷⁷⁵ PL-Wn: Mus. 217 Cim., p. 19.

[Lento ♩ = 66]
pp

Ex. 8. 49 Etude 19,⁷⁷⁶ 1–5 (Stirling)

[Vivace ♩ = 116]

Ex. 8. 50 Etude 5,⁷⁷⁷ 47–49 (F2)

The many contemporary descriptions of Chopin's playing alluding to his smooth 'gliding' on the keys confirm beyond any doubt that he made use of the *carezzando* technique in addition to a variety of sliding types. Although this may be thought of as a very concrete effect used mostly in isolation, however, the evidence also suggests that Chopin may have used such gliding quite pervasively—that is, as a means to enhance awareness and as a means to keep a quiet hand at all times. Such an approach emphasises the importance of the feedback loop involved in tone production to a much higher degree than was—and still is—thought necessary or beneficial.

The most oft-quoted description of Chopin's handling of substitutions is possibly Hipkins's claim that Chopin 'changed fingers upon a key as often as an organ player'.⁷⁷⁸ As intimated in Chapter 3, however, this begs for much more

⁷⁷⁶ F–Pn: Vma 241 (III, 25), p. 26. Note the tiny, faint pencilled-in pedalling markings. (Missing LH hairpin taken from the *Stichvorlage*.)

⁷⁷⁷ Hansen claims the pedal indication in the FFE and FEE to have been 'forced to the right due to lack of space' (p. 472), and that the correct position for the pedal sign should be on the first quaver. I am not so sure that theory bears out, however. Note also how arpeggiation and sliding in this example would perfectly complement each other, no doubt aided by the long pedal which also frees the hands to the utmost.

⁷⁷⁸ Hipkins, p. 5.

contextualising than it is customary. We should be especially wary of the automatic assumption that any and all substitutions are there to effect or maintain strict legato, or simply for comfort. In short, these are late nineteenth-century views on finger substitution projected onto earlier times, when the practice differed greatly: only in chorale playing was substitution important at the organ in the tradition under purview.⁷⁷⁹ Thus, not only was substitution (generally) used much more infrequently in the early nineteenth century than we may have been led to believe by later players' projections, but also more conscientiously.⁷⁸⁰ Even the earliest-known example of it in Chopin belies the notion of merely facilitating legato, as the recurring 2 3 on semiquaver syncopations in the opus 2 Variations clearly is anything but casual:

Ex. 8. 51 Variations Op. 2,⁷⁸¹ 59–60 (*Stichvorlage*)

Here we get a sense of how substitutions can foster *dwelling* on particular notes or figures, and even effect moderate rhythmic alteration and rubato—wildly

⁷⁷⁹ See, e.g., Oortmerssen, p. 27: 'The number of exercises in organ methods could suggest that this technique could be applied without restriction. Looking at the music itself, we realize that this is not the case and that finger substitution was, especially in Germany, chiefly used for chorale playing. I believe that, through the development of symphonic organ music, the cultivation of legato in France came about much more quickly than in the more conservative Germany'. And with it previously unheard-of amounts of silent substitutions, it seems.

⁷⁸⁰ See Bellman, 'Cantabile Style', 65, and especially Oortmerssen, p. 20: '[Marcel] Dupré developed a system of fingering which, for the first time in history, came into conflict with the basic principle of a natural hand position. Dupré's pathological finger substitutions deformed the hand, and made the attack and release of a key more uncontrollable'. Apparently, increase in use of substitutions went hand in hand with a disregard for their subjective effects. Hipkins's simile of the organ player to communicate how much Chopin used the device thus fails to do either of them justice. What Hipkins may have been trying to suggest is challenging to grasp indeed, as the disconnect from the subjective effects of fingering is arguably even greater today.

⁷⁸¹ A-Wn: Mus.Hs. 16789, p. 3.

underexplored functions of fingering. Attempting to push through the above in equalising fashion would (at the very least) likely result in subjective bumping—yet another case of ‘executive mismatch’. There is, however, something else at work: the substitution pattern tends to cause ampler motion than we would be inclined to use (as in **Example 8.46** above).⁷⁸²

The *locus classicus* of finger substitution controversy—Beethoven’s *arioso* from the Sonata op. 110—merits revisiting, as it actually *does* relate to the discussion at hand:

The image shows a musical score for the third movement of Beethoven's Sonata Op. 110. It consists of two staves: a treble clef staff for the right hand and a bass clef staff for the left hand. The right hand part begins with a series of tied notes, with fingerings '4' and '3' indicated. Above the staff, there are performance markings: 'Adagio.', 'Cantabile.', 'Tutte le corde.', 'Dimin.: Ritard.', and 'Una corda'. The left hand part has a bass line with tied notes. Below the left hand staff, the instruction 'Sempre Tenuto.' is written.

Ex. 8. 52 Beethoven, Sonata Op. 110 (III),⁷⁸³ 5–6

Simplifying greatly the well-known exchange in *Early Music* for this discussion,⁷⁸⁴ one camp favours restriking the tied notes while the other just lets syncopes be syncopes (if that is what they are in this case, but it should be close enough for the sake of argument).⁷⁸⁵ Those in favour of restriking allude mostly to the notation’s otherwise apparent purposelessness, as Swinkin reckons in the nearly identical context of the Scherzo of Beethoven’s opus 69 Sonata:

Is this not a contradiction? That is, if the notes are tied and not to be repeated, of what use is the finger change? (A composer might indicate a

⁷⁸² See *Mdm*, p. 47: ‘It is not easy to understand the effect [that this fingering] proposes, unless it is to give a certain impulse to the note without restriking it’ (Il n’est pas facile de comprendre le but qui’il s’est proposé, à moins que ce ne soit pour donner une certaine impulsion à la note sans refrapper).

⁷⁸³ Beethoven, *Sonate pour le Piano-Forte seul* Op. 110 (Vienna: Cappi & Diabelli, 1822), p. 12.

⁷⁸⁴ Badura-Skoda, ‘A tie is a tie is a tie: Reflections on Beethoven’s Pairs of Tied Notes’, *Early Music* 16/1 (1988), 84–88, Jonathan Del Mar, ‘Once again: reflections on Beethoven’s tied-note notation’, *Early Music*, 32/1 (2004), 7–25, and Malcolm Bilson, ‘Beethoven’s tied-note notation’, *Early Music*, 32/3 (2004), 489–91.

⁷⁸⁵ Czerny appears to have been the first to suggest the restriking practice. See Czerny, *A Supplement*, p. 88, and Badura-Skoda, ‘A tie’, 84.

silent finger change to facilitate a *legato* connection into the next note; yet, in this case, each note in question is followed by a rest.⁷⁸⁶)

More recently, Bilson rationalises restriking in such cases as representing ‘*an appoggiatura on the same note*’.⁷⁸⁷ The opposing (non-restriking) view claims either that the apparent notational overkill is simply a way of being extra clear during the transition from ‘ordinary touch’ to predominant legato (that is, to make sure notes were held long enough), or that it stands as the pianistic equivalent of *Bebung*, a clavichord technique whereby fluctuations in pressure result in subtle variations in pitch (*vibrato*). Now why clavichord technique should be invoked in this context does seem to be a bit of a stretch—regardless of Beethoven’s demonstrable experience with clavichords.⁷⁸⁸

Although agnosticism would be a safer stance, I obviously side with the non-restriking camp, believing that the finger substitution in and of itself fosters a type of gestural delivery which is (at least potentially) more *vocal* in character, and irreproducible (certainly phenomenologically speaking) without substitutions. This puzzling situation may be an attempt to mimic sobbing at the keyboard: the ampler non-restriking motion coupled with very high potential for *carezzando* all make for rich kinaesthetics which may also transmit sonically *at large*. As ever, the real issue is that how we feel those syncopations ultimately affects how we will perform the passage as a whole, and so even if there is no restriking the effect goes well beyond the ‘purely psychological’—*pace* Bilson and Swinkin. Although (one imagines) pianists would never think of restriking the semiquavers in the Chopin passage in **Example 8.51** above, they would also surely *not* claim that differences between playing it with or without substitutions would be ‘negligible’—or would they?

Thus, despite its importance for at least some players in the early nineteenth century, the literature remains almost completely silent on the issue of the

⁷⁸⁶ Swinkin, ‘Keyboard Fingering’, 7.

⁷⁸⁷ Bilson, ‘The Case of Beethoven: A Tie by Any Other Name’, *Journal of Musicological Research*, 39/2-3 (2020), 88–98 (92), presumably a more restrained version of ‘*Appoggiaturas Without Dissonance, on a Single Note or Single Chord*’ in id., ‘Beethoven’s tied-note notation’, 489 (all italics original).

⁷⁸⁸ See, e.g., Tilman Skowronek, *Beethoven the Pianist* (New York: CUP, 2010), pp. 27–32.

subjective effects of finger substitution.⁷⁸⁹ Take the central section of etude 22 (see **Example 8.53** below), which features the most indications for substitutions of all of Chopin's works. That he writes *ben legato* in addition to the characteristic extra long slurs—so long, in fact, they are 'clearly indicative of something other than mere phrasing'—belies the assumption they are there *just* for legato.⁷⁹⁰ A more encompassing view of this set of indications (bars 31–37) may help discern the likely effect intended:

[Lento ♩. = 42]

Ex. 8. 53 Etude 22,⁷⁹¹ 31–38 (*Stichvorlage*)

First off, if legato were the main function of fingering here, why have 3 5 3 instead of 3 4 3 on $c\sharp^2$ - $d\sharp^2$ - $c\sharp^2$ in bar 35? The answer may be that while 3 4 3 would be better suited to prepare 5 for a direct, connected motion towards $g\sharp^2$, the original 3 5 3 defines a grouping through *articulated legato*. In other words, it forces some separation (even if mostly psychological) between the first three quavers and what follows—despite the *ben legato* indication.

Similarly, the many substitutions that follow promote not just grouping and subtle local rhythmic alteration, but possibly some *rubato* (in the eighteenth-century sense of dislocating the melody from the bass) and quite noticeable expansive dwelling on the whole three bars as well. Again, this can be as subtle or obvious as need be, and around the specified tempo—that is, it does not necessarily

⁷⁸⁹ An exception is Schachter, who observes how in certain situations silent substitution '[...] lets the performer "feel" the syncopation' ('Introduction', p. viii).

⁷⁹⁰ Meniker, p. 20.

⁷⁹¹ PL-Wn: Mus. 217 Cim., p. 29.

give *carte blanche* for drastic overall slowing down. Incidentally, there is further (indirect) evidence for use of unmarked arpeggiation here coming from Chopin's student Schiffmacher, who includes an arpeggio sign for the LH, last beat of bars 59 and/or 79 (unspecified).⁷⁹²

Chopin is clearly not the sadist Rosen makes him out to be—even this etude could be played as comfortably as anything else as long as sufficient care goes into finger choice and function. The otherwise exceedingly uncomfortable stretch in bar 32 (the b-b¹ octave with $\frac{4}{1}$) almost certainly implies redistribution to free the hand to take the top d^{#2}-b¹ in a vocally expressive way. Once again, this option resembles one of Hummel's most sensitive uses of fingering to shape the inner parts, as the silent substitution at the perfect cadence in bars 24–25 makes for a deeply vocal effect on the player:

[Allegro]

The image shows a musical score for Handel's Fugue in E minor, measures 23-25. The score is written for piano and includes fingerings and articulation marks. The tempo is marked [Allegro]. The score consists of two staves: a treble clef staff and a bass clef staff. The treble staff contains a complex melodic line with many sixteenth and thirty-second notes, and the bass staff contains a more rhythmic accompaniment. Fingerings are indicated by numbers 1-5 above or below notes. There are also articulation marks like 'R.' and '1'.

Ex. 8. 54 Handel Fugue in E minor,⁷⁹³ 23–25, with Hummel's fingerings

Taking the b¹-b octave in bar 32 of etude 22 one-handedly would never do as expressively, regardless how much skill, practice time, or how ample a hand may be. Somehow it is very hard to imagine Chopin forcing students to do so for the sake of practising 'pure' technique, which, as he writes in *Pdm*,

doesn't teach us how to play the *music* itself — and the type of difficulty we are practising is not the difficulty encountered in good music, the music of the great masters. It's an abstract difficulty, a new genre of *acrobatics*.⁷⁹⁴

⁷⁹² Tasset, p. 47.

⁷⁹³ Hummel, *Anweisung*, p. 383, II/p. 303.

⁷⁹⁴ *PaT*, pp. 23, 193.

Let us close this miscellaneous case study with a fingering indication of Clementi's (see **Example 8.55** below). At first glance the RH double substitution might suggest a nice and simple way to facilitate legato, but the context hides something quite extraordinary—it is in fact one of the most sophisticated (explicitly notated) uses of fingering I have ever encountered:

[Allegro]

The musical score for Example 8.55 consists of two systems of piano music. The first system shows measures 62 and 63. The right hand (RH) has a double substitution, with a slur over the first two notes. The left hand (LH) has a triplet pattern. The second system shows measures 64, 65, and 66. The RH has a double substitution with a slur over the first two notes, and a dynamic marking of *fz*. The LH has a triplet pattern and a dynamic marking of *fz*. The score ends with a *8va* marking and a final chord.

Ex. 8. 55 Clementi, *Gradus ad Parnassum* No. 28, 62–66

What may be at play here is again the highly underexplored bimanual phenomenon whereby finger choice in one hand causes some effect in the *other*. That is, the slight difficulty that the double substitution poses in the RH (easily avoidable by other fingerings) subtly coaxes the player to accommodate the deceptive cadence rather expressively—it makes us slow down by just the right amount to inflect it. A drastic measure, to be sure, but after three unrelenting full bars the LH pattern might not be so easy to bend timing-wise at that precise moment just by mentally wishing it, so the substitution ensures a modicum of inflection despite the brisk tempo and automatisms due to repetition.

It does seem appropriate to close on a note of admiration for Clementi's pianism, as without it, Chopin's own art surely would have turned out to be quite different. But all (necessary) speculation should stop here.

Conclusions: Towards Dynamically—and *Individually*— Congruent ‘Rhetorics of the Hand’

*Everyone tells a story differently and that story should be told compellingly and spontaneously. If it is not compelling and convincing, it is without value, and I don't even care if all those notes are there or not!*⁷⁹⁵

—Radu LUPU

*In his way the genius artist surpasses even the religious founders, great philosophers, moralists, and politicians, who to be sure set out beautiful goals for mankind in beautiful words and thoughts but never—to speak pianistically—give the fingering to that end as well, that is, never teach the realization. If only Christ, for example, had been able to also give the fingering needed for the realization of his main precept!*⁷⁹⁶

—Heinrich SCHENKER

Today's utilitarian fingering systems represent a general approach to finger choice which has predominated only since about the mid-nineteenth century, rather than the inevitable *telos* of some five hundred years of ever-perfecting linear progress. Scholars (and pianists) have tended to ignore the transition from fingering as aesthetics to fingering as mechanics earlier in the century, quite likely because of enduring biases against figures like Clementi and Hummel.⁷⁹⁷ This phase of the

⁷⁹⁵ Carol Montparker, 'Radu Lupu in Conversation', *Clavier*, 31/6 (1992), 12–16 (16).

⁷⁹⁶ From a diary entry (22 November 1913), in Hellmut Federhofer, *Heinrich Schenker. Nach Tagebüchern und Briefen in der Oswald Jonas Memorial Collection*, University of California, Riverside (Hildesheim: Georg Olms Verlag, 1985) p. 305. Translation slightly adapted from Matthew Arndt, 'Schenker and Schoenberg on the tone and the genius' (Ph.D. dissertation, University of Wisconsin-Madison, 2008), p. 193.

⁷⁹⁷ See Rohan H. Stewart-MacDonald, 'Towards a New Ontology of Musical Classicism: sensationalism, archaism and formal grammar in the music of Clementi, Hummel and Dussek — and parallels with Haydn, Beethoven and Schubert' (PhD thesis, Cambridge University, 2004), pp. 1–24, and id., 'The Faces of Parnassus: Towards a new reception of Muzio Clementi's *Gradus ad Parnassum*', in *The Piano in Nineteenth-Century Culture: Instruments, Performers and Repertoire*, ed.

history of fingering and the repertoire associated with it deserves far more practice-led research, especially as regards outliers who (like Chopin) strongly resisted the burgeoning mechanistic paradigm, but also those who (like Schenker) still adhered to various historical fingering techniques even well into the twentieth century.

Clementi's and Hummel's fingering indications and their allegedly 'fingers only' technique—a misnomer if ever there was one—make up a vast repository of expressive resources to be explored (and exploited) by pianists wishing to engage in historicist yet also personal approaches to Chopin performance.⁷⁹⁸ As Chopin himself noted, Clementi's and Hummel's music (together with J.S. Bach's fugues) was 'the key to pianoforte-playing, and [...] training in these composers a fit preparation for his own works'.⁷⁹⁹ Extensive experimentation with the many fingerings contained in their pedagogical works is paramount in that regard, as affinities with Chopin's own practices cannot be gleaned solely from precepts as stated in the sources—or, indeed, solely through comparative analysis or try-out of their music *without* said fingerings.

Fingering techniques prior to the mid-century 'mechanistic turn' allowed for many different kinds of expression,⁸⁰⁰ whereas the systems that followed (despite alluring promises of mental liberation and optimal ergonomics) tended to even out expression because of their tendency to minimise motion. Intriguingly, the ways in which systematic fingering approaches restrict motion bring to mind how vocal and string playing styles have, since the early twentieth century, increasingly shunned portamento effects—and arguably became much less communicative because of it.⁸⁰¹ It may not be entirely coincidental that the Italian term for fingering in some

by Therese Ellsworth and Susan Wollenberg (London & New York: Routledge, 2016 [2007]), pp. 69–100 (pp. 70, 79).

⁷⁹⁸ To these two towering pedagogues we could also add Dussek, Cramer, Field, and Moscheles, to name a few relevant names.

⁷⁹⁹ Adolph Gutmann, as quoted in *PaT*, p. 61.

⁸⁰⁰ Tempting as it may be to hold Czerny responsible for spearheading such momentous turn, the trend was long brewing by the time he came into pedagogical prominence.

⁸⁰¹ Two indispensable articles on the demise of portamento are Leech-Wilkinson, 'Portamento and Musical Meaning', *Journal of Musicological Research*, 25 (2006), 233–61, and John Potter, 'Beggar at the Door: The Rise and Fall of Portamento in Singing', *Music & Letters*, 87/4 (2006), 523–50. Whatever the ultimate reason for its virtual disappearance from Western art music performance may be, clearly performance has also become less recognisably individualistic because of it.

eighteenth- and early nineteenth-century sources is actually *portamento della mano* ('the carrying of the hand'),⁸⁰² which hints at the conscious use of such 'in-between' motions by keyboard players wishing to impress vocality into their playing—very much a general goal for instrumentalists throughout the century, almost regardless of their technical affiliations and beliefs.⁸⁰³ Indeed, a seldom discussed function of finger substitution is that of helping enact *portamento*—here understood as another (mostly subjective) technique whereby the pianist connects a given interval in a purposely more effortful and time-costly fashion, thus mimicking vocal delivery.

In this study Chopin emerges as a clear representative of former fingering ideals, much as he is customarily still regarded as a revolutionary. Indeed, even during his lifetime top players such as Kalkbrenner seem to have mistaken Chopin's use of various older fingering techniques for actual novelties or, even more erroneously, significant departures from tried-and-true technique. Their confusion (or downright incomprehension) may stem from Chopin's subtly extended use of techniques already on the wane in combination with his signature 'gliding' touch that so struck his contemporaries—and which as we have seen may also have far-reaching phenomenological implications.

Somewhat paradoxically, then, Chopin appears to have used some old-fashioned fingering techniques also to *amplify* physical gesture.⁸⁰⁴ We should, however, probably resist equating such (hypothetical) gestural amplification with today's generally much ampler scope, which is the legacy of heavier actions, ever larger halls, and of prioritising force and evenness over expressive detail. Thus, in a *physical* (not just aesthetic) sense, Chopin's famously intimate playing may be even

⁸⁰² This may be my favourite conceptualisation of the phenomenon, in fact—that finger choice takes us *beyond* the fingers, that it affects how everything else moves. The earliest such use of the term appears to be Vincenzo Manfredini, *Regole armoniche o sien oprecetti i principi della musica* (Venice: Zerletti, 1775), p. 28. Much nearer our topic, *portamento della mano* is indeed the term Pollini uses throughout his *Metodo*.

⁸⁰³ See, e.g., Robb, pp. 54–69, 75.

⁸⁰⁴ Indeed, Chopin's writing in *Pdm* resonates with some of the more (seemingly) 'radical' pedagogical approaches today, which (as both Liley and Wheatley-Brown inform us) aim to develop highly precise coordination rather than to change and/or strengthen the body.

more elusive and antithetical to today's pianism than usually thought—the latter being certainly a closer descendant of Busoni's robust approach (inspiring as that may be for some) than of the calm deportments of Clementi or Hummel.⁸⁰⁵

What is original, perhaps even unique about Chopin's fingerings is how he adapts any available techniques to serve his individual music-expressive conceptions, imprinting them with subtly different qualities of movement. This occurs even at the compositional level, for example in the very special (and extremely specific) uses of fingering in etude 2—despite today's prevalent expectations of near absolute rhythmic and timbral equality, which tend to make fingerings out to be interchangeable as long as said equality is met. This widespread attitude, likely resulting from the ever more exigent pressures of professional performance, can shut us off from a more direct rapport with some of Chopin's most remarkable conceptions of music *as performance*—that is, of discernable bodily *actions* regardless how far off the mark we surely also are as regards the more concrete aspects of his style.

Chopin also used his obviously remarkable gliding to assist with smooth gestural legato, thus avoiding as many unnecessary extensions or substitutions as possible—unless, of course, these options happened to be congruent with any intended effects, as for example in the middle section of etude 22. Much also depends on the type of instrument used, and for that reason some historical fingerings may fare less well on the modern piano—especially if one believes strict legato playing to be paramount, that it should never betray any breaks whatsoever (as the very definition would seem to imply). As experiencing the data suggests, gestural binding *was* clearly a very significant preoccupation for these players, whether for phenomenological or acoustic reasons, or both.

⁸⁰⁵ For Busoni's own words on why 'masculinise' Chopin's music, see Erinn E. Knyt, 'Ferruccio Busoni and the "Halfness" of Frédéric Chopin', *The Journal of Musicology*, 34/2 (2017), 241–80, e.g., 255: "Chopin, after all, has something of the womanly in himself. (So that, for example, he becomes unbearably boring as soon as he begins to speak earnestly.) If we analyze the 'halfness' in Chopin, then we will understand him".

Many if not most of Chopin's fingerings *do* work perfectly well on the modern piano, however, and in fact may still be the most musically and phenomenologically satisfying—if one is also willing to let go of certain stylistic and technical givens, that is. Furthermore, barring impeding anatomical variations or pathologies, his fingerings are on the whole *more* ergonomic than many editorial fingerings up to this day, as they tend (for one thing) to use fewer extensions. In short, anatomical variation—especially hand size and stretching powers—as regards Chopin's original fingerings should be less of an issue than it is usually argued.

Beyond the virtuoso challenges the Etudes undoubtedly pose, the more difficult problem may be accepting the fact that it is impossible to fathom how Chopin or anybody in his immediate circle ever realised these pieces in sound. That is, in a nutshell, why aprioristic prescription is so unhelpful and knowledge of the original fingerings so important: the latter retain traces (however faint) of concrete gestures without which we could not begin to tackle reconstruction (however hypothetical) of Chopin's own 'rhetorics of the hand'.

* * *

This research will hopefully reinforce the idea that a player's own rhetorical and emotional dispositions turn out to be, rather than obstacles, great assets in the pursuit of meaningful historical recreations—a realisation which should not be news decades after the so-called 'performance turn'.⁸⁰⁶ And yet my personal (and almost always contrarian) view is also that, for all its mandatory glittering perfection, we now live in an extremely impoverished—and impersonal—age as regards emotional expression in classical music performance. The mechanistic paradigm (allied with pressures from the recording industry, now fast approaching its sesquicentennial) may have brought piano pedagogy close to not just 'casting music itself out of piano lessons', as Laor puts it,⁸⁰⁷ but all too often even from the stage. Seen in that light, the search for alternatives to current practices (fingering or

⁸⁰⁶ See, e.g., Doğantan-Dack, 'In the Beginning Was Gesture', pp. 245–46.

⁸⁰⁷ Laor, 'Mechanistic Paradigm', 10.

otherwise) does seem to me less an exercise in nostalgic re-enactment of foregone pianisms than part of a much-needed process of expressive renewal and individual discovery.⁸⁰⁸ Surely, if said search could lead to more emotionally compelling, personal performances, should not players be allowed to experiment with *any* techniques of expression, even those now deemed obsolete?⁸⁰⁹

Some clarification on what I mean by emotional expression is probably in order. If music is to evoke in listeners more than (oxymoronic-sounding) ‘detached appreciation’, it would seem that performers need to be emotionally moved *themselves*—which is certainly not a new proposition.⁸¹⁰ Moreover, if performers are to transmit their emotions in performance they should (somewhat paradoxically) appeal to *universals* of human communication rather than comply with convention or artifice just because the latter happen (or seem) to be the currently accepted practice. To clarify, perhaps turning to our innate capacity to identify the kinds of gestures in performance that are recognisably *vocal* may be a more authentic option—even if it goes against currently accepted practice.⁸¹¹ To clarify further, because music evolved alongside a cluster of temporal arts rooted in ceremony, we may be evolutionarily predisposed to engage in music performance as *shared* ritual behaviour promoting social bonding and cooperation through heightened

⁸⁰⁸ For some useful ideas and guidelines for exploring ‘radical performance’ see Leech-Wilkinson, ‘Classical music as enforced Utopia’, 333–34, 335.

⁸⁰⁹ A far from exhaustive list would include asynchrony, rhythmic alteration, unmarked arpeggiation, quantitative accentuation, tempo flexibility, and various types of *rubato*.

⁸¹⁰ See, e.g., Bach, *Essay*, p. 152: ‘A musician cannot move others unless he too is moved. He must of necessity feel all of the affects that he hopes to arouse in his audience, for the revealing of his own humour will stimulate a like humour in the listener’. A contrasting view would be that (like some schools of acting profess) musicians are at least at one remove from the emotions they aim to portray—that emotions in performance are feigned and suggested rather than felt, in other words. Yet while that may often be the case, we would do well to remember that the interconnection of motion and emotion is such that one easily elicits the other. On the intriguing possibility that it may be to some degree in musicians’ command to be moved or not even when ‘passively’ listening to music, see Antonio Damasio, *The Feeling of What Happens: Body and Emotion in the Making of Consciousness* (New York & Others: Harcourt Brace & Company, 1999), pp. 49–50.

⁸¹¹ An essential review article in that regard is Patrik N. Juslin and Petri Laukka, ‘Communication of emotions in vocal expression and music performance: Different channels, same code?’, *Psychological Bulletin*, 129/5 (2003), 770–814. See also Arnie Cox, ‘The mimetic hypothesis and embodied musical meaning’, *Musicae Scientiae*, 5/2 (2001), 195–212, and Andrew Mead, ‘Bodily Hearing: Physiological Metaphors and Musical Understanding’, *Journal of Music Theory*, 43 (1999), 1–19.

emotional states—a clear-cut demarcation between performer and audience may not actually exist, in other words. As Ellen Dissanayake observes,

ceremonies composed of music and associated arts are the behavioural or expressive counterpart of religious doctrine and belief, providing something “special” (shaped, embellished) to do for humans cognisant of and attempting to cope with the problems and uncertainties of mortal existence, whether past, present or future. In ceremonies, the temporal arts, based on the protoaesthetic operations of communicative musicality, could similarly coordinate and conjoin individuals, providing emotional reassurance that the group’s efforts would prevail.⁸¹²

Making now explicit an undercurrent running through much of this thesis (that is, Dissanayake’s idea of art as ‘making special’ and, more broadly, of the biological drives that undergird artistic behaviour),⁸¹³ we could say that historically *involved*—as opposed to merely ‘informed’—approaches to performance are those which invite gestures that elicit emotion in the player, but may *also* resonate more with listeners because of their shared, recognisable origins in emotional communication. In other words, such bodily involvement may be one of the ways players could bridge over the great divide that exists today between emotional communication and (arguably excessive) expectations of competence display in performance.

Because gestures (from the minutest to the most bombastically flamboyant) do not just express outwardly but also help clarify one’s own states, they are clearly integral to any genuinely felt performance. And so, while deriding pianists wiggling their fingers vibrato-like as delusional or insincere (or both) may *seem* warranted, many other pianistic effects thought to be purely imaginary such as portamento—

⁸¹² Ellen Dissanayake, ‘Root, leaf, blossom, or bole: Concerning the origin and adaptive function of music’, in *Communicative Musicality: Exploring the Basis of Human Companionship*, ed. by Stephen Malloch and Colwyn Trevarthen (Oxford: OUP, 2009), pp. 17–30 (pp. 24–25), but also ead., *ibid.*, ‘Bodies swayed to music: the temporal arts as integral to ceremonial ritual’, pp. 533–44 (pp. 533–34): ‘Such a view of ceremony will not be fashionable today, either with anthropologists or ethnomusicologists (their fields being critical of what are called essentialist, overly general, or scientific approaches) or even with evolutionary psychologists (who emphasize cognition and consider emotion primarily as a proximate phenomenon that alerts or guides behaviour to ultimate adaptive ends)’.

⁸¹³ Dissanayake, “‘Making special’: An Undescribed Human Universal and the Core of a Behavior in Art”, in *Biopoetics: Evolutionary Explorations in the Arts*, ed. by Brett Cooke and Frederick Turner (Lexington, KY: ICUS, 1999), pp. 27–46 (p. 30): ‘Making special refers to the fact that humans, unlike other animals, intentionally shape, embellish, and otherwise fashion aspects of their world to make these more than ordinary’.

or silent substitution for no obviously quantifiable reason—are not so easily dismissable because they *can* be incredibly affective, not just effective. In sum, the expressive vs effective gesture construct is rather limiting, and we should probably let go of it if we wish to go beyond merely visual communication models of musical expression and thus further our knowledge of the phenomenology of the pianist’s body and its reception.

Throughout this thesis, I have aimed to show how incorporating historical fingering techniques to our repertoire of ‘kinetic melodies’ is far from easy, as is also switching to more rhetorically personal modes of expression in general. It is not enough, as Snedden points out,

merely to add a handful of 19th performance elements to otherwise standard presentations—performers need to basically enter a new cultural and philosophic world, to constantly look through the lens of Romanticist culture, lest the letter of musicological research quench the spirit of the music.⁸¹⁴

The largely unquestioned expectations of note-perfection in performance (not just recordings) do seem to complicate any such immersions, however, and so shedding some of our deep-seated, modernist habits of performance may be just as difficult. As Anna Scott suggests in the context of chamber music but just as valid here, we may need to

explore what might lie beyond competence and unanimity, [...] to make sudden, bold, and risky moves in solo and accompanimental materials alike, where individual parts are allowed to organically diverge and reunite, and where missteps of tuning, technique, timing, and balance are tolerated and even amplified in order to create a more spontaneous, conversational, and improvisational atmosphere—one in which compromise can be just as perilous as intransigence.⁸¹⁵

⁸¹⁴ Snedden, 96.

⁸¹⁵ Scott, ‘Doesn’t Play Well with Others’, in *Rethinking Brahms*, ed. by Nicola Grimes and Reuben Phillips (Oxford: OUP, 2022), pp. 177–92 (p. 178). In an homonymous presentation at Surrey University (7 December 2022), Scott is even more hard-hitting: ‘[P]layers and audiences alike are hungry for more than competence and unanimity in performances of canonic chamber works, but [...] in order to get more of what they want they may also have to accept more of what they fear’.

Serious study of historical fingering practices is of course merely one of many complementary tools to which we may turn to in our resistance to ever more normative ‘competent and unanimous’ styles of piano performance. But, as Snedden further points out, another serious challenge we face is that no element of performance can be understood in isolation:

In performance reconstruction, it is [...] insufficient to merely apply a reductionist methodology. Data concerning, for example, Chopin’s asynchronous use of hands, or Liszt’s tempi, or Brahms’ arpeggiation of chords is almost meaningless unless applied within a web of stylistic nuance. An understanding of the integration of HIP elements is essential for an accurate and musically coherent reconstruction.⁸¹⁶

Aside from fingering, many other possible pathways to historically involved performance will no doubt be challenging to integrate and involve difficult choices of their own, especially as deviations from condoned performance styles are not without professional risks. But *not* doing *something* about the encroaching normativity may spell bigger disasters in the long run.

* * *

Ending on a rather personal note should not come as a shock after insisting so much on reclaiming individualistic expression. Although writing has always come as a great struggle, nothing could have prepared me for the misgivings I now feel about leaving so many important things unsaid—even if it is all justified by word limits and a manageable research focus. It help matters even less that a projected companion recording (on a restored Pleyel from 1845) never materialised.⁸¹⁷ Yet, after spending the last few months of this project lamenting that eventuality, it now hits me that not appending a sound recording may be in fact all for the best: what good could have come from capturing and releasing my timid excursions inspired on, say, Francis Planté’s recordings? That certainly would not have been the most

⁸¹⁶ Snedden, p. 185.

⁸¹⁷ The recording was to include the three fugues featured in Appendix A, plus of course a selection of etudes by Chopin, Clementi, Cramer, Hummel, and Moscheles.

fruitful way to tickle the reader's imagination and curiosity any further.⁸¹⁸ But I do hope that this thesis will nevertheless encourage *some* re-discovery and exploration, not only of Chopin's fingerings but also of the vast body of contemporaneous practices still awaiting our advocacy—and of more of our own individuality while we are at it.

⁸¹⁸ While Koczalski's beautiful recordings are usually taken to be the most reliably Chopinian because of Mikuli's tuition and therefore the worthiest model for imitation, Planté's (b. 1839) are arguably more inviting as aids for creative reconstruction, for the simple reason that he was the earliest-born pianist to record some Chopin Etudes (if not the first to do so). For an impressive article which explores year of birth as a more reliable indicator of *general* style than any 'apostolic succession', see Michael Rector, 'Historical Trends in Expressive Timing Strategies: Chopin's Etude, Op. 25 No. 1', *Empirical Musicology Review*, 15/3-4 (2020), 176–201.

Appendix A

Three Fugues from Hummel's *Anweisung* (Part II, Chapter 10)

FUGA I

J.S. Bach

Rechte Hand
right hand

Linke Hand
left hand

*) R.

L.

L.

R.

L.

*) Anmerkung. R. (rechte) L. (linke) zeigt an, in welche Hand die Stimmen vertheilt und aufgenommen werden sollen. Observation. R right, or L left, points out to which hand the parts are assigned, and with which they are to be played.

26

Musical score for measures 26-31. The piece is in D major (two sharps) and 3/4 time. The right hand features a complex melodic line with many slurs and ties, including a trill marked 'R.' in measure 27. The left hand provides a steady accompaniment with eighth and sixteenth notes. Fingering numbers 1-5 are indicated throughout.

32

Musical score for measures 32-36. The right hand continues with a melodic line, showing a trill in measure 33. The left hand accompaniment remains consistent. Fingering is clearly marked for both hands.

37

Musical score for measures 37-40. The right hand has a more active melodic line with slurs and ties. The left hand accompaniment features some chords and moving lines. A trill marked 'R.' is present in measure 38. Fingering is indicated.

41

Musical score for measures 41-44. The right hand features a melodic line with many slurs and ties, including a trill marked 'R.' in measure 42. The left hand accompaniment is active with eighth notes. Fingering is indicated.

45

Musical score for measures 45-48. The right hand has a melodic line with slurs and ties. The left hand accompaniment is active with eighth notes. Fingering is indicated.

49

5 1 2 1 3 2 1 1 2 1 1 2 1 5 4 3 4 3 2 1 2 3 5

53

3 1 2 3 1 2 2 1 2 1 1 2 1 2 3 1 2 3 1 2 3 4 1 5 5 5 5 4 5 5

R. L.

57

5 4 5 1 2 1 2 1 2 1 2 1 2 1 2 1 2 3 2 3 1 3 4 5 5 5 3

61

L. R. 2 1 3 2 1 2 1 2 3 1 2 3 1 2 3 4 1 2 3 2 1 2 3 2 1 3 5 2

65

4 5 4 3 1 2 3 2 3 1 2 3 2 1 2 3 4 1 3 2 1 2 3 4 5 2 3 4 5 2

69

Musical score for measures 69-72. The piece is in A major (three sharps). Measure 69 features a triplet of eighth notes in the right hand and a single eighth note in the left hand. Measures 70-72 continue with complex rhythmic patterns and fingerings, including a 4-measure phrase in the right hand and a 5-measure phrase in the left hand.

73

Musical score for measures 73-76. Measure 73 has a 5-measure phrase in the right hand and a 4-measure phrase in the left hand. Measures 74-76 show a right hand (R.) with a 4-measure phrase and a left hand (L.) with a 4-measure phrase. The notation includes various fingerings and articulation marks.

77

Musical score for measures 77-80. Measure 77 has a 5-measure phrase in the right hand and a 2-measure phrase in the left hand. Measures 78-80 continue with a 4-measure phrase in the right hand and a 5-measure phrase in the left hand, featuring intricate fingerings.

81

Musical score for measures 81-84. Measure 81 has a 3-measure phrase in the right hand and a 2-measure phrase in the left hand. Measures 82-84 show a 4-measure phrase in the right hand and a 5-measure phrase in the left hand, with complex rhythmic patterns.

85

Musical score for measures 85-88. Measure 85 has a 4-measure phrase in the right hand and a 2-measure phrase in the left hand. Measures 86-88 continue with a 4-measure phrase in the right hand and a 5-measure phrase in the left hand, featuring various fingerings and articulation.

89

Musical score for measures 89-92. The piece is in D major (two sharps) and 3/4 time. The right hand features a melodic line with a trill in measure 90 and a descending eighth-note pattern in measure 91. The left hand provides a bass line with a descending eighth-note pattern in measure 89 and a more active line in measure 90. Fingering numbers 1-5 are indicated throughout.

93

Musical score for measures 93-97. The right hand continues the melodic development with a trill in measure 94 and a descending eighth-note pattern in measure 95. The left hand has a descending eighth-note pattern in measure 93 and a more active line in measure 94. A 'L.' (Lento) marking is present in measure 95. Fingering numbers 1-5 are indicated throughout.

98

Musical score for measures 98-102. The right hand features a melodic line with a trill in measure 99 and a descending eighth-note pattern in measure 100. The left hand has a descending eighth-note pattern in measure 98 and a more active line in measure 99. Fingering numbers 1-5 are indicated throughout.

103

Musical score for measures 103-107. The right hand features a melodic line with a trill in measure 104 and a descending eighth-note pattern in measure 105. The left hand has a descending eighth-note pattern in measure 103 and a more active line in measure 104. Fingering numbers 1-5 are indicated throughout.

108

Musical score for measures 108-112. The right hand features a melodic line with a trill in measure 109 and a descending eighth-note pattern in measure 110. The left hand has a descending eighth-note pattern in measure 108 and a more active line in measure 109. Fingering numbers 1-5 are indicated throughout.

112

The musical score consists of four measures. The key signature has one sharp (F#) and the time signature is 4/4. The piece is written for piano, indicated by the grand staff notation. Measure 112 starts with a treble clef chord (G4, B4, D5) and a bass clef chord (G2, B1, D2). The treble line has a half note G4 with a fingering of 3, and the bass line has a half note G2 with a fingering of 2. Measure 113 features a treble line with a half note G4 (fingering 1) and a bass line with a half note G2 (fingering 1). Measure 114 has a treble line with a half note G4 (fingering 2) and a bass line with a half note G2 (fingering 1). Measure 115 concludes with a treble line chord (G4, B4, D5) and a bass line chord (G2, B1, D2). The piece ends with a double bar line and repeat dots.

FUGA II

G.F. Händel

Allegro

First system of musical notation (measures 1-3). The right hand (R.) begins with a treble clef, a key signature of one sharp (F#), and a common time signature (C). The left hand (L.) begins with a bass clef and the same key and time signatures. Fingerings are indicated by numbers 1-5. Measure 1: R. has a half note G4, a quarter note A4, and a quarter note B4; L. has a half note G3. Measure 2: R. has a quarter note C5, a quarter note D5, and a quarter note E5; L. has a half note G3. Measure 3: R. has a quarter note F#5, a quarter note G5, and a quarter note A5; L. has a half note G3.

Second system of musical notation (measures 4-6). Measure 4: R. has a quarter note B4, a quarter note C5, and a quarter note D5; L. has a half note G3. Measure 5: R. has a quarter note E5, a quarter note F#5, and a quarter note G5; L. has a half note G3. Measure 6: R. has a quarter note A5, a quarter note B5, and a quarter note C6; L. has a half note G3.

Third system of musical notation (measures 7-9). Measure 7: R. has a quarter note D6, a quarter note C6, and a quarter note B5; L. has a half note G3. Measure 8: R. has a quarter note A5, a quarter note G5, and a quarter note F#5; L. has a half note G3. Measure 9: R. has a quarter note E5, a quarter note D5, and a quarter note C5; L. has a half note G3.

Fourth system of musical notation (measures 10-12). Measure 10: R. has a quarter note B4, a quarter note A4, and a quarter note G4; L. has a half note G3. Measure 11: R. has a quarter note F#4, a quarter note E4, and a quarter note D4; L. has a half note G3. Measure 12: R. has a quarter note C4, a quarter note B3, and a quarter note A3; L. has a half note G3.

10

Musical notation for measures 10-11. Treble clef contains a melodic line with slurs and fingerings (5 4 3 5, 5, 5, 5 4, 3 1 4 5, 5). Bass clef contains a bass line with slurs and fingerings (5 1, 5 4 3, 1 2, 1 1 2, 1 2, L., R., 4 3 2, 1 3 2 1).

12

Musical notation for measures 12-13. Treble clef contains a melodic line with slurs and fingerings (5, 1 5, 2 1, 1 5, 2 1). Bass clef contains a bass line with slurs and fingerings (L., 1 4, 2, 4, 5, 2 3 4 1, 2, 1 2 3, 1 2).

14

Musical notation for measures 14-15. Treble clef contains a melodic line with slurs and fingerings (5 4, 5 4 5 4, 5 2 5, 5, 5). Bass clef contains a bass line with slurs and fingerings (4 2 4 2, 5 2 5 2, 5 2 1 4, 5, 5, 4 5, 2 1 3).

16

Musical notation for measures 16-17. Treble clef contains a melodic line with slurs and fingerings (5 4, 3 4 5, 2 3 4, 2 3 4, 2 1 2). Bass clef contains a bass line with slurs and fingerings (2 1 5, 1 3 2, 5 1 2 1, 2, 5 1 2 1, 3, 5, 4 3 2 1).

18

Musical notation for measures 18-19. Treble clef contains a melodic line with slurs and fingerings (5, 5 4 3, 4 5 3 5, 2 5 2 5, 1 5 4 1, 2 5 4 1, 2 5 4 3, 4 5 3 5). Bass clef contains a bass line with slurs and fingerings (L., 2 4, 1 3 2, 1 3 2, 1 2, 1, 2 1, 2, 1 2, 1, R., 1).

20

Musical score for measures 20-22. The right hand features intricate sixteenth-note patterns with fingerings such as 4 2 5, 3 2 1 5, and 5 5 4 3 4 5. The left hand provides a steady accompaniment with notes like 3, 5, 4, 5, 4, 1, 5, 3. Hand indicators 'R.' and 'L.' are used throughout.

23

Musical score for measures 23-24. The right hand continues with sixteenth-note runs, including a triplet of 34 and a group of 45. The left hand has notes like 5, 1, 4, 5, 4, 5, 4, 3, 1, 5. Hand indicators 'R.' and 'L.' are present.

25

Musical score for measures 25-26. The right hand has notes like 5, 3, 2, 2, 2, 3, 4, 5, 3, 4, 5, 3, 4, 5. The left hand has notes like 3, 5, 1, 1, 3, 5, 3. Hand indicators 'R.' and 'L.' are present.

27

Musical score for measures 27-28. The right hand features sixteenth-note patterns with fingerings like 5, 2, 2, 1, 1, 2, 3, 4, 5, 4, 3, 2, 1, 3, 1, 2, 1. The left hand has notes like 5, 1, 1, 4, 5, 3, 5, 1, 3, 5, 1, 2. Hand indicators 'R.' and 'L.' are present.

29

Musical score for measures 29-31. The right hand has notes like 4, 4, 3, 5, 5, 4, 5, 4, 5, 4, 3, 5, 3, 5. The left hand has notes like 5, 5, 5, 1, 4, 1, 4, 5, 4, 5, 2, 1, 4. Hand indicators 'R.' and 'L.' are present.

31

Musical score for measures 31-32. The piece is in G major (one sharp). Measure 31 features a treble clef with a melodic line starting on G4, moving up to B4, and then down to G4. The bass clef has a steady eighth-note accompaniment. Measure 32 shows a right-hand (R.) trill on G4 and a left-hand (L.) trill on G3. Fingering numbers are provided for all notes.

33

Musical score for measures 33-34. Measure 33 continues the melodic and accompaniment patterns. Measure 34 features a right-hand (R.) trill on G4 and a left-hand (L.) trill on G3. Fingering numbers are provided for all notes.

35

Musical score for measures 35-36. Measure 35 features a treble clef with a melodic line starting on G4, moving up to B4, and then down to G4. The bass clef has a steady eighth-note accompaniment. Measure 36 shows a right-hand (R.) trill on G4 and a left-hand (L.) trill on G3. Fingering numbers are provided for all notes.

37

Musical score for measures 37-38. Measure 37 features a treble clef with a melodic line starting on G4, moving up to B4, and then down to G4. The bass clef has a steady eighth-note accompaniment. Measure 38 shows a right-hand (R.) trill on G4 and a left-hand (L.) trill on G3. Fingering numbers are provided for all notes.

39

Musical notation for measures 39-40. The system consists of a treble clef staff and a bass clef staff. Measure 39 features a right-hand (R.) melodic line with notes G4, A4, B4, C5, and a left-hand (L.) accompaniment with notes G3, F3, E3, D3. Measure 40 continues the melodic line with notes D5, C5, B4, A4, G4 and the accompaniment with notes C3, B2, A2, G2. Fingering numbers 1-5 are present above and below notes.

41

Musical notation for measures 41-43. Measure 41 has a right-hand (R.) melodic line starting with G4, A4, B4, C5 and a left-hand (L.) accompaniment with notes G3, F3, E3, D3. Measure 42 continues the melodic line with notes D5, C5, B4, A4, G4 and the accompaniment with notes C3, B2, A2, G2. Measure 43 features a more complex melodic line with notes G4, A4, B4, C5, D5, C5, B4, A4, G4 and the accompaniment with notes G3, F3, E3, D3. Fingering numbers 1-5 are present.

44

Musical notation for measures 44-45. Measure 44 has a right-hand (R.) melodic line with notes G4, A4, B4, C5, D5, C5, B4, A4, G4 and a left-hand (L.) accompaniment with notes G3, F3, E3, D3. Measure 45 continues the melodic line with notes G4, A4, B4, C5, D5, C5, B4, A4, G4 and the accompaniment with notes G3, F3, E3, D3. Fingering numbers 1-5 are present.

46

Musical notation for measures 46-47. Measure 46 has a right-hand (R.) melodic line with notes G4, A4, B4, C5, D5, C5, B4, A4, G4 and a left-hand (L.) accompaniment with notes G3, F3, E3, D3. Measure 47 continues the melodic line with notes G4, A4, B4, C5, D5, C5, B4, A4, G4 and the accompaniment with notes G3, F3, E3, D3. Fingering numbers 1-5 are present.

48

Musical notation for measures 48-49. Measure 48 has a right-hand (R.) melodic line with notes G4, A4, B4, C5, D5, C5, B4, A4, G4 and a left-hand (L.) accompaniment with notes G3, F3, E3, D3. Measure 49 continues the melodic line with notes G4, A4, B4, C5, D5, C5, B4, A4, G4 and the accompaniment with notes G3, F3, E3, D3. Fingering numbers 1-5 are present.

50

Musical score for measures 50-51. The system consists of a treble clef staff and a bass clef staff. Measure 50 features a complex melodic line in the treble with many slurs and fingerings (1-5), and a bass line with a few notes and fingerings. Measure 51 continues the melodic line with more slurs and fingerings, and the bass line has a few notes with fingerings. A 'L.' marking is present in the bass line of measure 51.

52

Musical score for measures 52-53. The system consists of a treble clef staff and a bass clef staff. Measure 52 features a complex melodic line in the treble with many slurs and fingerings (1-5), and a bass line with a few notes and fingerings. Measure 53 continues the melodic line with more slurs and fingerings, and the bass line has a few notes with fingerings. A 'L.' marking is present in the bass line of measure 52.

54

Musical score for measures 54-55. The system consists of a treble clef staff and a bass clef staff. Measure 54 features a complex melodic line in the treble with many slurs and fingerings (1-5), and a bass line with a few notes and fingerings. Measure 55 continues the melodic line with more slurs and fingerings, and the bass line has a few notes with fingerings.

56

Musical score for measures 56-57. The system consists of a treble clef staff and a bass clef staff. Measure 56 features a complex melodic line in the treble with many slurs and fingerings (1-5), and a bass line with a few notes and fingerings. Measure 57 continues the melodic line with more slurs and fingerings, and the bass line has a few notes with fingerings. A 'R.' marking is present in the bass line of measure 56.

58

Musical score for measures 58-59. The system consists of a treble clef staff and a bass clef staff. Measure 58 features a complex melodic line in the treble with many slurs and fingerings (1-5), and a bass line with a few notes and fingerings. Measure 59 continues the melodic line with more slurs and fingerings, and the bass line has a few notes with fingerings.

60

Musical notation for measures 60-61. The system consists of a treble clef staff and a bass clef staff. Measure 60 features a complex melodic line in the treble with fingerings 1, 2, 3, 4, 1, 4, 5, 1, 3, 4 and a bass line with fingerings 5, 1, 2, 1, 1, 3, 1, 2, 1. Measure 61 continues with fingerings 5, 1, 2, 3, 4, 1, 3, 2, 1 in the treble and 5, 1, 3, 5, 4, 3, 1, 2 in the bass.

62

Musical notation for measures 62-63. Measure 62 has treble fingerings 5, 1, 2, 3, 2, 1, 2, 2, 1, 3, 1, 4, 1, 3 and bass fingerings 1, 3, 5. Measure 63 has treble fingerings 1, 2, 1, 2, 3, 2, 1, 3, 2, 1, 3 and bass fingerings 5, 5, 4, 3, 1, 2, 3.

64

Musical notation for measures 64-65. Measure 64 has treble fingerings 5, 2, 1, 4, 4 and bass fingerings 2, 4, 3, 1, 4. Measure 65 has treble fingerings 5, 2, 1, 3, 1, 2, 3, 1, 2 and bass fingerings 3, 4, 3, 2, 1, 2, 4.

66

Musical notation for measures 66-67. Measure 66 has treble fingerings 3, 2, 1, 2, 4, 3, 2, 4 and bass fingerings 1, 1, 5, 5. Measure 67 has treble fingerings 5, 3, 2, 1, 5, 4, 5, 4 and bass fingerings 5, 4, 5, 4. Labels 'L.' and 'R.' are present with arrows pointing to specific notes.

68

Musical notation for measures 68-69. Measure 68 has treble fingerings 1, 5, 4, 4, 3, 3, 2, 1, 5, 1, 5 and bass fingerings 4, 5, 5, 2, 1, 4, 5, 4. Measure 69 has treble fingerings 4, 5, 4 and bass fingerings 5, 1, 2, 4, 5, 2, 1, 4, 5, 1, 2, 4, 4.

70

Musical notation for measures 70-71. The system consists of a treble clef staff and a bass clef staff. Measure 70 features a complex melodic line in the treble with many slurs and fingerings (e.g., 3 4, 5 4 2, 3 4 2, 5 5, 5 4 5, 5 2, 4 3). The bass line is simpler, with fingerings like 2 1 4, 2 1, 5, 1, 4 3 4, 4 5. Measure 71 continues the treble line with slurs and fingerings (5 4 3, 5 4 3 2 1, 2 3 4 5, 1 2 5 4 3 1 4 3 2 1 2 3 4 5) and the bass line with fingerings (1, 5, 3, 5, 4, 1, 3, 4 2 3 4).

72

Musical notation for measures 72-73. Measure 72 has a treble line with slurs and fingerings (5 4 3, 5 4 3 2 1, 2 3 4 5, 1 2 5 4 3 1 4 3 2 1 2 3 4 5) and a bass line with fingerings (1, 5, 3, 5, 4, 1, 3, 4 2 3 4). Measure 73 continues with treble slurs and fingerings (5 4 3 2 1, 2 3 4 5, 1 2 5 4 3 1 4 3 2 1 2 3 4 5) and bass fingerings (1, 5, 3, 5, 4, 1, 3, 4 2 3 4).

74

Adagio

Musical notation for measures 74-75. Measure 74 features a treble line with slurs and fingerings (5 5 3 1, 5 4 3 2 1 5 4, 5 4 3 2 1 5 4) and a bass line with fingerings (1, 2 1 2 3 3 3 4, 4, 2 1 2 1 2 1 2, 5, 5, 5, 5, 5, 5, 5). Measure 75 is marked *Adagio* and includes a right-hand (R.) section with slurs and fingerings (5 4 3 2 1 5 4) and a left-hand (L.) section with slurs and fingerings (5 5 5 5 5 5 5 5). The system concludes with a double bar line.

FUGA III

J.N. Hummel

Tempo giusto

Musical notation for measures 1-6. The piece is in 3/4 time with a key signature of two sharps (F# and C#). The right hand features a melodic line with various ornaments and fingerings (3, 4, 2, 1, 4, 3, 2, 4, 1, 2, 3, 5, 3, 5, 1, 2, 3, 5, 4, 5, 1, 2, 4, 5, 4, 2, 1, 5, 4, 3). The left hand provides a simple harmonic accompaniment.

Musical notation for measures 7-11. Measure 7 begins with a trill (tr) on the right hand. The right hand continues with a descending melodic line and includes a trill in measure 11. The left hand has a bass line with fingerings (3, 1, 2, 1, 2, 1, 4, 2, 4, 5, 3, 2).

Musical notation for measures 12-17. The right hand continues with a melodic line, featuring a trill in measure 14. The left hand has a bass line with fingerings (3, 1, 4, 5, 3, 1, 2, 1, 4, 5, 3, 2, 1, 4, 5, 1, 2, 3, 5, 1, 2, 3, 1, 4, 2, 1, 2, 3, 5).

Musical notation for measures 18-22. The right hand continues with a melodic line. The left hand has a bass line with fingerings (1, 2, 1, 3, 1, 2, 1, 2, 3, 4, 1, 3, 4, 2, 1, 2, 1, 2, 3, 1, 1, 2, 3, 1, 2). The piece concludes with a final chord in the right hand and a bass note (5) in the left hand.

23

Musical score for measures 23-27. The piece is in G major (one sharp) and 3/4 time. Measure 23 features a right-hand melodic line starting with a half note G5 and a left-hand accompaniment of quarter notes. Measure 24 has a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 25 shows a right-hand line with a half note and a left-hand line with quarter notes. Measure 26 has a right-hand line with a half note and a left-hand line with quarter notes. Measure 27 concludes with a right-hand line of quarter notes and a left-hand line of quarter notes. Fingerings are indicated by numbers 1-5. Hand positions are labeled 'L.' and 'R.'. A circled '45' is above the first measure.

28

Musical score for measures 28-32. Measure 28 has a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 29 features a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 30 has a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 31 has a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 32 concludes with a right-hand line of quarter notes and a left-hand line of quarter notes. Fingerings are indicated by numbers 1-5. Hand positions are labeled 'L.'. A circled '45' is below the first measure.

33

Musical score for measures 33-37. Measure 33 has a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 34 features a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 35 has a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 36 has a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 37 concludes with a right-hand line of quarter notes and a left-hand line of quarter notes. Fingerings are indicated by numbers 1-5. Hand positions are labeled 'L.'. A circled '45' is below the first measure.

38

Musical score for measures 38-42. Measure 38 has a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 39 features a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 40 has a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 41 has a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 42 concludes with a right-hand line of quarter notes and a left-hand line of quarter notes. Fingerings are indicated by numbers 1-5. Hand positions are labeled 'L.'. A circled '45' is below the first measure.

43

Musical score for measures 43-47. Measure 43 has a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 44 features a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 45 has a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 46 has a right-hand line with eighth notes and a left-hand line with quarter notes. Measure 47 concludes with a right-hand line of quarter notes and a left-hand line of quarter notes. Fingerings are indicated by numbers 1-5. Hand positions are labeled 'L.'. A circled '45' is below the first measure.

48

Musical score for measures 48-53. The piece is in D major (two sharps) and 4/4 time. The right hand features a melodic line with many slurs and ties, including a triplet of eighth notes in measure 50. The left hand provides a rhythmic accompaniment with eighth and sixteenth notes. Fingering numbers (1-5) are placed above or below notes. Hand indicators 'L.' and 'R.' are used to specify the left and right hands.

54

Musical score for measures 54-58. The right hand continues the melodic development with slurs and ties. The left hand has a more active role with eighth and sixteenth note patterns. Fingering and hand indicators are present throughout the system.

59

Musical score for measures 59-63. The right hand has a melodic line with slurs and ties. The left hand accompaniment includes some chords and moving lines. Fingering and hand indicators are used.

64

Musical score for measures 64-68. This system features a complex texture with many slurs and ties in the right hand. The left hand has a steady accompaniment. Fingering and hand indicators are clearly marked.

69

Musical score for measures 69-73. The right hand has a melodic line with slurs and ties. The left hand accompaniment is active with eighth and sixteenth notes. Fingering and hand indicators are present.

74

Musical score for measures 74-78. The piece is in D major (two sharps). The right hand (R.) features a melodic line with various fingerings (1-5) and slurs. The left hand (L.) provides a bass line with chords and single notes, also including fingerings. Measure 78 ends with a fermata over a whole note chord.

79

Musical score for measures 79-83. The right hand continues the melodic development with slurs and fingerings. The left hand has a more active bass line with eighth and sixteenth notes. Measure 83 ends with a fermata over a whole note chord.

84

Musical score for measures 84-88. This section features a prominent sixteenth-note scale in the right hand. The left hand consists of sustained chords and single notes, with some chords marked with a fermata. Measure 88 ends with a fermata over a whole note chord.

89

Musical score for measures 89-93. The right hand has a melodic line with slurs and fingerings. The left hand features a bass line with eighth notes and chords. Measure 93 ends with a fermata over a whole note chord.

94

Musical score for measures 94-98. The right hand continues with a melodic line, including slurs and fingerings. The left hand has a bass line with eighth notes and chords. Measure 98 ends with a fermata over a whole note chord.

100

Musical score for measures 100-104. The piece is in D major (two sharps) and 4/4 time. Measure 100 features a complex piano accompaniment with a descending bass line and a treble line with slurs and fingerings (1, 4, 1, 5). Measure 101 continues with similar patterns. Measure 102 has a descending bass line with fingerings 1, 2, 3, 4. Measure 103 has a treble line with fingerings 2, 4, 1, 2, 3, 5. Measure 104 has a treble line with a slur and fingerings 5, 5.

105

Musical score for measures 105-109. Measure 105 has a treble line with a slur and fingerings 3, 4, 5, and a bass line with fingerings 1, 2, 3. Measure 106 has a treble line with a slur and fingerings 3, 1, 4, 3, and a bass line with fingerings 4, 2, 1, 3, 2. Measure 107 has a treble line with a slur and fingerings 1, 3, 5, and a bass line with fingerings 1, 2, 1, 2, 3, 4. Measure 108 has a treble line with a slur and fingerings 4, 2, 5, 1, and a bass line with fingerings 1, 4, 2, 4, 5, 3, 2, 3. Measure 109 has a treble line with a slur and fingerings 5, 5, and a bass line with fingerings 3, 1, 2, 3, 4.

110

Musical score for measures 110-114. Measure 110 has a treble line with a slur and fingerings 5, 5, and a bass line with fingerings 2, 3, 2, 1, 2, 4. Measure 111 has a treble line with a slur and fingerings 5, 5, and a bass line with fingerings 2, 3, 1, 2, 3, 4. Measure 112 has a treble line with a slur and fingerings 5, 5, and a bass line with fingerings 2, 3, 1, 2, 3, 4. Measure 113 has a treble line with a slur and fingerings 5, 3, 4, 2, 3, and a bass line with fingerings 1. Measure 114 has a treble line with a slur and fingerings 5, 3, 1, and a bass line with fingerings 2, 1, 3, 2, 5, 4.

115

Musical score for measures 115-119. Measure 115 has a treble line with a slur and fingerings 5, 2, 1, and a bass line with fingerings 2, 1, 3, 1, 3, 2. Measure 116 has a treble line with a slur and fingerings 5, 4, 1, and a bass line with fingerings 4, 1, 3, 2, 5, 4. Measure 117 has a treble line with a slur and fingerings 5, 3, 4, 2, 3, and a bass line with fingerings 1. Measure 118 has a treble line with a slur and fingerings 4, 2, 1, and a bass line with fingerings 5. Measure 119 has a treble line with a slur and fingerings 5, 4, and a bass line with fingerings 1, 3, 2, 1, 2, 3.

120

Musical score for measures 120-124. Measure 120 has a treble line with a slur and fingerings 3, 4, 2, 1, 3, 2, and a bass line with fingerings 4, 3, 2. Measure 121 has a treble line with a slur and fingerings 5, 4, 2, 1, 3, 2, and a bass line with fingerings 1, 1, 2, 1, 3. Measure 122 has a treble line with a slur and fingerings 5, 4, 2, 1, 3, 2, and a bass line with fingerings 2, 4, 1. Measure 123 has a treble line with a slur and fingerings 4, 5, 2, 1, 4, 5, and a bass line with fingerings 1, 2, 3, 3. Measure 124 has a treble line with a slur and fingerings 3, 5, 2, 1, 4, 5, and a bass line with fingerings 1, 2, 4, 5.

126

Musical score for measures 126-131. The piece is in G major (one sharp) and 3/4 time. The right hand features a melodic line with various rhythmic patterns, including eighth and sixteenth notes, and rests. The left hand provides harmonic support with chords and single notes. Fingering numbers (1-5) are indicated above and below notes. A dynamic marking of *f* (forte) is present at the end of the system.

132

Musical score for measures 132-136. The right hand continues the melodic development with more complex rhythmic figures. The left hand features a steady bass line. Fingering is clearly marked. A dynamic marking of *f* (forte) is present at the end of the system.

137

Musical score for measures 137-141. The right hand has a melodic line with some grace notes. The left hand has a bass line with some chords. A dynamic marking of *f* (forte) is present at the end of the system. The word *rallentando* is written in the right hand part, indicating a gradual deceleration of the tempo.

Appendix B

Excerpt on Fingering from Karol Kurpiński's *Wykład*

O Aplikaturach w Ogólności Bez Których niemożna doysć do dobrego grania.

Aplikatury są to odmiany Pozycyi
palców; dla tego będziemy je nazywać
poprostu *Odmianami*. Odmian
Aplikaturnych iest więcej dziesięciu |:
do których proszę aby iak nayusilniey
palcę obudwoch rąk, lecz z osobna,
wprawiać :|

1.) Odmiana przez podeyscie:
NB: uważać dobrze z iakiego tonu są
przykłady.

General notions of fingering, without which it is impossible to play well

Fingerings are variations in the position
of the fingers, and so we will simply call
them that, *variations*. There are more
than ten such variations |: to which I
am asking you to apply yourself, but
with each hand separately :|

1.) Variation by approach:
(NB: Mind the key in which the
examples are set.)

PRAWA
RIGHT

The image shows two staves of musical notation for the right hand in C major, 4/4 time. The first staff is labeled 'podeyscie approach' and contains several measures of eighth-note patterns with various fingerings indicated by numbers 1-5. The second staff is labeled 'loco' and contains a similar pattern with a trill (tr) and a dynamic marking of *8^{va}*. Fingerings are indicated by numbers 1-5 below the notes.

Każdy przykład dopoty wprawiać
dopoki gładko niepoydzie.

Go through the examples in order, but
make sure you can play them correctly
before going on to the next.

LEWA
LEFT

The image shows a single staff of musical notation for the left hand in C major, 4/4 time, labeled 'podeyscie approach'. It contains several measures of eighth-note patterns with various fingerings indicated by numbers 1-5 below the notes.

2.) Odmiana przez przełożenie:

2.) Variation by shift:

PRAWA
RIGHT

przełożenie
shift

LEWA
LEFT

przełożenie[enie]
shift

3.) Odmiana przez pogoń i ucieczkę: 3.) Variation by chase and escape:

PRAWA
RIGHT

pogoń
chase

ucieczka
escape

LEWA
LEFT

ucieczka
escape

4.) Odmiana przez opuszczenie palca: 4.) Variation by finger under:

PRAWA
RIGHT

Jeden palec opuszczony
First finger under

LEWA
LEFT

5.) Odmiana przez rozszerzenie czyli 5.) Variation by extension or reaching:
dosięgnięcie:

PRAWA
RIGHT

LEWA
LEFT

Ped. *

Ped. * Ped. * Ped. *

6.) Odmiana przez odebranie:

6.) Variation by takeover:

Andante

f

dolce

tr

Odebrać z piątego na 1szy
niepuszczać klawisza
Silently substitute 1 for 5

LEWA
LEFT

7.) Odmiana przez Skok:

7.) Variation by skip:

PRAWA
RIGHT

LEWA
LEFT

Alta Field

[LEWA
LEFT]

[Alta Field]

8.) Odmiana przez odebranie ręczne.

8.) Variation by hand takeover.

9.) Odmiana przez Krzyżowanie czyli przełożenie ręczne.

9.) Variation by hand crossing or shifting

10.) Odmiana przez splątanie ręczne.

10.) Variation by entanglement.

Te trzy odmiany weźmiemy widać
przykład. NB: Uczeń powinien tu
uważyć że nóty wiązane w dół należą
zawsze do lewej ręki, a wiązane w górę
do prawej. litera P. znaczy prawą rękę.
n.p.

Let us take these three last variations in
a single example. (NB: The student
should consider here that notes with
beams pointing downwards always
belong to the left hand, those pointing
upwards belong to the right. 'R.' stands
for the right hand.), e.g.,

Capricio | : marzenia dziwaczne : |
| : bizarre dreams : |

Alla Müller

przełożenie
shift

: odebranie: |
: takeover: |

loco

: splatanie: |
: entangled: |

lewa ręka na wierzchu
the left hand on top

: splatanie: |
: entangled: |

lewa ręka
wewnątrz prawa
the left hand inside
the right

: splatanie: |
: entangled: |

Musical notation for the first system, featuring a treble and bass clef. The treble clef part has a series of eighth notes with a slur and a fermata. The bass clef part has a similar pattern with fingerings 4 and 2. A fermata is present at the end of the system.

Musical notation for the second system. The treble clef part has a series of chords with fingerings L. 5, 3, 1 and R. 2, 3, 2, 5. The bass clef part has a series of notes with fingerings L. and L. The instruction "krzyżowanie crossing" is written in the treble clef. A fermata is present at the end of the system.

Musical notation for the third system. The treble clef part has a series of chords with fingerings R. 3 and R. 3. The bass clef part has a series of notes with fingerings R. 3 and 3. A fermata is present at the end of the system.

Musical notation for the fourth system. The treble clef part has a series of chords with fingerings L. and L. The bass clef part has a series of notes with fingerings R. 3, L., R. 2, L., and L. The instruction "cresc." is written in the treble clef. A fermata is present at the end of the system.

Musical notation for the fifth system. The treble clef part has a series of notes with a slur and a fermata. The bass clef part has a series of notes with a slur and a fermata.

First system of musical notation. The treble clef staff contains a sequence of eighth-note chords and single notes, with some notes marked with 'L.' and 'R.' above them. The bass clef staff contains a simple accompaniment of eighth notes.

Second system of musical notation. The treble clef staff continues the melodic line with eighth-note chords and single notes, marked with 'L.' and 'R.'. The bass clef staff continues the accompaniment.

Third system of musical notation. The treble clef staff continues the melodic line. The bass clef staff continues the accompaniment.

Fourth system of musical notation. The treble clef staff continues the melodic line. The bass clef staff continues the accompaniment. A dynamic marking *p* is present in the first measure of the bass staff.

Fifth system of musical notation. The treble clef staff continues the melodic line. The bass clef staff continues the accompaniment.

First system of musical notation. The right hand (RH) plays a sequence of eighth notes with fingerings 5, 3, 1, 2, 3, 4, 5, 4, 3, 2, 1, 2, 3, 4, 5, 4, 3, 2, 1. The left hand (LH) plays a simple accompaniment. The text "prawa na spodz[ie] right hand below" is written between the staves.

Second system of musical notation. The RH continues with eighth notes and fingerings 1, 3, 1, 3, 2, 4, 3, 2, 1, 2, 3, 4, 5, 4, 3, 2, 1. The LH has fingerings L., L., 3, 1.

Third system of musical notation. The RH has fingerings 1, 2, 1, 2, 3, 1, 2, 3, 4, 5, 4, 3, 2, 1, 2, 3, 4, 5, 4, 3, 2, 1. The LH has fingerings 1, 2, 1, 2, 3, 1, 2, 3. The tempo marking "8^{va}-----loco" is present.

Fourth system of musical notation. The RH has fingerings 1, 2, 4, 1, 2, 1, 2, 3, 4, 5, 4, 3, 2, 1, 2, 3, 4, 5, 4, 3, 2, 1. The LH has fingerings 5, 3, 2, 1, 3, 2, 1, 2, 3, 4, 5, 4, 3, 2, 1. The text "prawa na spodzie right hand below" is written between the staves.

Fifth system of musical notation. The RH plays a complex pattern of sixteenth notes and chords, ending with a double bar line. The LH plays a simple accompaniment.

11.) Pozostaie mi tylko mowić ieszcze o Odmianach czyli Aplikaturach uchwytnych. Te są wielorakie. iako to:

11.) All that remains for me to talk about are the 'gripping' fingerings or variations. These are many and are

w Akordach, w Oktawach, w Arfikach, w Tryllach, etc: do tego iedne są wybiiająco-chwytne, inne zwięzłochwytne czyli czołgające. A chcąc do kaźdey dać purzykład musiałbym się ieszcze bardzo rozszerzyć. Przestańmy więc tylko na niektórych przykłałach, Które będą stosował naybzzhn ardziej do znanych nam iuz Gamm. Trzeba nam tedy wiedzieć że pochod Gammy lub Akordów może być Tercyowo-dwubrzmienny. np:



used in chords, octaves, arpeggios, trills, etc., of which some use a striking grip, others a close-up or crawling one. But if I wanted to have an example for each of them, I would have to carry on for too long. Let me then give just a few examples as applied to the scale, which we already know. It is important to know that scales or chords can proceed by thirds, e.g.,

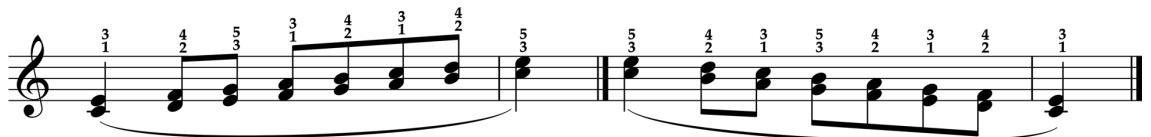
i Sextowo-troy-brzmienny np:

and six-three chords, e.g.,



Jeżeli tercyowo-dwubrzmienny i Sextowo-troybrzmienny pochod, ma być wybitny, używa się nieprzemiennych palcy |: iak okazują powyższe przykłały :) Jeżeli zaś tercyowo-dwubrzmienny pochod ma być zwięzły, używa się przebierającej Aplikatury np:

If one wishes the thirds and six-three chords to be crisp, use the same fingers |: as the examples above show: | If, on the other hand, we wish each of the three parts to be distinct, a fingering is used, e.g.,



Sextowo-troybrzmienny pochod, jeżeli ma być wykonany zwięzle, lubo zawsze tey samey i nieprzeberney używa się Aplikatury, trzeba iednak unikać wybitności przez czołgające

But to avoid any notes sticking out in the successions of six-three chords (whether we use a striking or a close-up fingering) we will use a crawling sort of guiding motion, which can only take

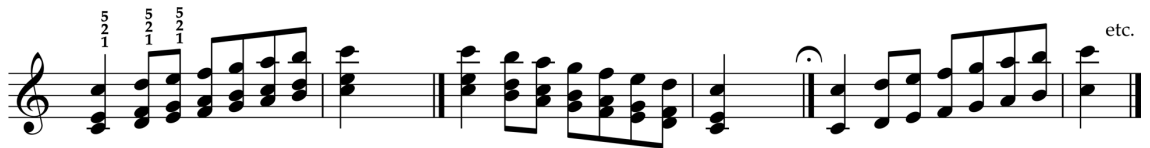
prorowadzenie ręki Które odbyć się może tylko przez nieznaczne Arfikowanie każdego Akordu np:

place by slightly arpeggiating each chord, e.g.,



Toż samo rozumie się o Oktawowo-troybrziennym lub dwu-brziennym Akordzie np.

The same is true of eight-three chords or simple octaves, e.g.,



Uczeń teraz powinien wprawiać palce obu rąk wtakowe Gammy, a to zewszystkich tonów. Przestrzegając go za wczasu że wtonach Krzyżykowanych i bemolowanych należy mu unikać brania krótkiego Klawisza pierwszym palcem, tak w tercyowo-dwubrzmiennych pochodach związanych i wybitnych: iako też w Sextowo-troybrziennych pochodach z związanych i wybitnych

The student should now practice scales in all keys with *both hands*, mindful that in keys with sharps and flats he should avoid taking a black key with the thumb, just as with double thirds and six-three chords gripped either by striking or close-up fingering.

|: Except for all kinds of passages involving octaves, where use of the thumb cannot be avoided:| Let us look at the following examples:

|: wyiąwszy pochody Oktawowe wszelkiego rodzaju, wtórych użycia wielkiego palca uniknąć nie można :| obaczmy następujące przykłady.

Zapewne dowcipny uczeń biorąc wzór z powyższych przykładów potrafi sobie ułożyć palce do pochodów ze wszystkich tonów: a zadowód dobrej Aplikatury niech bierze naywygodniejsze i naypłynniejsze przebieranie. Dobrze będzie jeżeli uczeń zastanowi się nad tem, że powyższe pochody mogą być wykonane wrozmaitych postaciach. np: Pochód tercyowy może być wtakiej postaci:

A clever student will surely take his cue from the above examples and find fingerings to proceed in all keys. And the proof of a good fingering is that it should result in the most convenient and smooth movement. It will be good if the student reflects on the fact that the above derivations can be performed in various ways. For example, the succession of thirds can take of the following form:



albo zaczynając od Tercyi.

or, when starting with the thirds,



Wtakowej postaci użyć można naywygodniej 4^{tego} i 2^{go} palca bez żadnego wyjątku tak w prawey iako też i lewey ręce, a to ze wszystkich

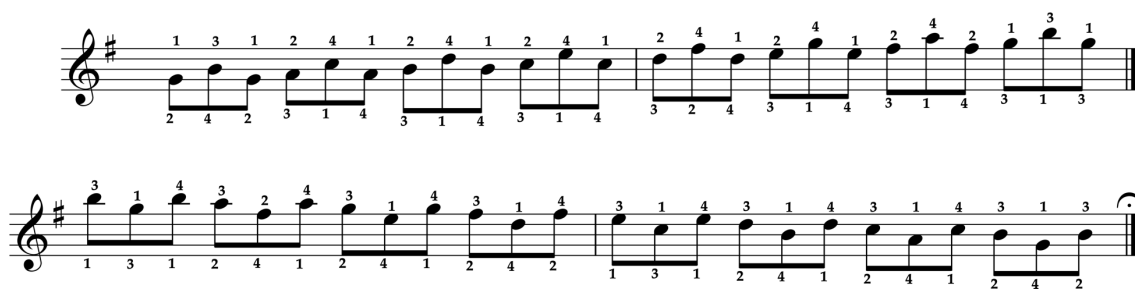
The following figure can be taken, for example, by the 4th and 2nd fingers without any exception with the right as well with the left hand, and in all

(*) w Sextowym pochodzie trzeba naprzod wziąć małym palcem ten ton z iakiego mamy wykonać pochod Sextowy, a wdole dopiero dobrać szósty stopień i względem niego trzeci. Jeżeli te pochody trudno będzie uczniowi wykonywać z pamięci, będzie mu zapewne łatwiej wypisać ie sobie znając już wszystkie Gammy, z ich Krzyżykami i bemolami, a dopiero zwłasnego pisma wygrywać.

(*) In series of sixths we must first take care of the sixth with the little finger, and only then choose a finger for the third. If the student finds any difficulty playing these successions from memory he could write them down (minding all necessary sharps and flats) and play from his writing.

wszystkich tonów, tak w sposobie wybitnym iak i zwięzłym. Pochód Tercyowy wtakiej postaci, używa Odmiany przez pogoń i ucieczkę. np:

keys, both in a crisp and distinct manner. Series of thirds, such as this figure, use the variation by chase and escape, e.g.,



J tak ze wszystkich tonów, uważając najbardziej w tonach z wielu Krzyżkami i z wielu bemolami, aby niebrać ile możności krótkiego klawisza wielkim palcem. Obaczmy insze przykłady, w których wielki palec do krótkiego klawisza musi być czasem użytym.

And as with those keys with many sharps and flats, let us avoid as much as possible taking a black key with the thumb. Let us consider some other examples where the thumb must be sometimes used on a black key.

Te same przykłady mogą mieć postać przewrotną, a wtedy wymagają innego układu palcy. np:

The same examples could appear in a more challenging form and thus require a different finger pattern, e.g.,

Uważny uczeń potrafi z powyższych wzorów ułożyć sobie dogodnie palce do takowych pochodów ze wszystkich tonów. Co zaś do pochodów Oktawowo-akordowych w rozmaitych postaciach, te prawie zawsze zachowują iednakowy układ palcy we wszystkich tonach. np:

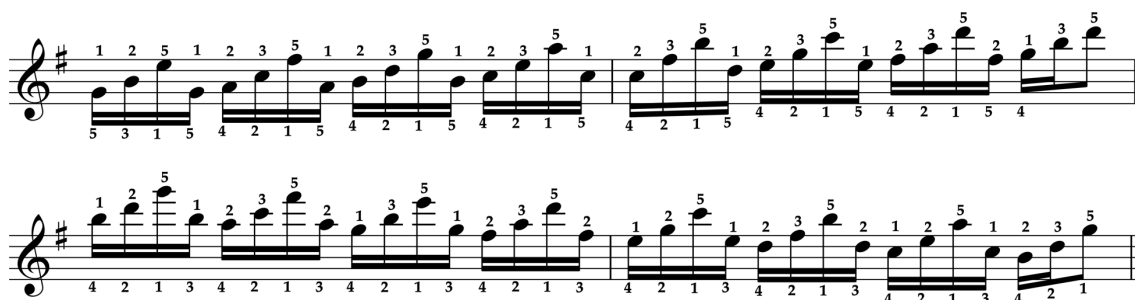
An attentive student can use the above patterns to find fingerings for such successions in all keys. As for octaves, they almost always retain the same finger pattern in all keys, e.g.,

1.)

2.)

Co zaś w rozmaitych postaciach Sextowych pochodów, mogą się zdarzyć niektóre odmiany w palcach. np:

As for the various ways sixths can be arranged, some variations may take place, e.g.,



Tenże pochod winney postaci wymaga innego układu palcy np:

In the following, the same progression requires a different fingering, e.g.,

W zwiężłych Oktawach Gammy Chromatycznej, można sobie tak ulżyć. np:

In the concise chromatic scale in octaves, you can avail yourself of, e.g.,

Są jeszcze rozmaite ukośne odmiany uchwytne, które trzebaby choć cokolwiek poznać.

There remain several oblique variations, which one should know at least something about:

Prz. 1.
Ex. 1.

Prz: 2
Ex. 2

Prz: 3
Ex. 3

Prz: 4
Ex. 4

Prawa Right
Lewa Left
Oktawa Niżej
Lower octave

Prz: 5
Ex. 5

Prz: 5
Ex. 5

Prz: 6
Ex. 6

Prz: 6
Ex. 6

Znajdują się także Akordy Gitarowane. You will also learn guitar-like broken chords:

Zdarzają się też trylle z notami uchwytymi. np:

There are also trills while gripping other notes. e.g.,

Na ostatek, znajduję się sztuki w których pochody środkowe Kombinują się rozmaicie, przeto też rozmaicie się chwytają: to jest, raz palcami prawej ręki, drugi raz lewej. np:

Finally, there are pieces in which the middle parts combine in various ways, and therefore need to be gripped differently: they are alternately taken with the fingers of the right hand and with the left. e.g.

Moderato

The musical score is divided into four systems, each with a treble and bass clef staff. The tempo is marked 'Moderato'. The score includes various fingering instructions: 'Pra.' (Piano Right Hand), 'Lew.' (Left Hand), and 'L.' (Left Hand). The first system shows a melodic line in the treble and a bass line in the bass. The second system continues the melodic line with more complex fingering. The third system features a more active bass line with frequent chords and single notes. The fourth system concludes the piece with a final melodic phrase in the treble and a supporting bass line. The score is rich with numerical fingering (1-5) and includes some slurs and accents.

Takie wypadki zdarzają się najwięcej w Fugach i kanonach, gdzie się pochodzą imitują w różnych kombinacjach, a przeto chwycić należy do nich Aplikatury bardzo uważnie. |: Przypomnij sobie wzmiankę „O nierównych odmianach

Such events happen in fugues and canons, where the parts imitate in various combinations and therefore should be gripped very carefully. |: This recalls the mention 'On the uneven fingering [variation] of notes in a chord,

nót wstępnie Akordów, iako też o
pauzach w Akordach[”], na karcie. 47

as well as on the pauses in chords' on p.
47.

ANTR-AKT. czyli, Między-Akt z Opery Jadwiga
ENTR'ACTE from the Opera Jadwiga
Allegro molto

The musical score is presented in four systems, each with a grand staff (treble and bass clefs). The key signature is G minor (two flats) and the time signature is 3/4. The tempo is marked 'Allegro molto'. The score includes various musical notations such as slurs, accents, and dynamic markings (*f*, *sf*, *p*). Fingerings are indicated by numbers 1-5 above or below notes. Specific instructions include 'Prawa Right' and 'Lewa Left' for the first system, and 'Lew. L.' for the fourth system. The piece concludes with a final chord in the bass line.

The image displays three systems of musical notation for piano, likely from a technical exercise or study. The notation is in a key signature of two flats (B-flat and E-flat) and a common time signature. The first system shows a melodic line in the right hand with various fingering numbers (1-5) and dynamics markings of *f* and *p*. The second system continues the melodic line, with a section labeled 'Pr. 4' and 'Lewa' (Left) indicating a change in the left hand's accompaniment. The third system concludes the piece with a final *ff* dynamic marking and a fermata over the final chord.

Gdybym tu chciał wykazać wszystkie kombinacje i mieszaniny wszystkich Aplikatur iakie się wydarzać mogą, musiałbym napisać wiele Tomów; i zniemi jeszcze niebyłbym wstanie obić ogółu: Któż albowiem zgadnie co jeszcze wprzyszłości będzie wynalezionem i jakim kształtem wydoskonalonem? A że jedynym celem moim było Systematyczne wykazanie zasad, przeto o dalszej wprawie Palców rozciągać się niebędę, ile że przedemną, biegli Mistrzowie Muzyki Klawikordowej, pisali o wprawie palców z taką wykładnością jakiej ja zapewne nieposiadam. (*)

Co do Metody exprefsyiney, tey żadna pisana szkoła nieiest wstanie udzielić. Gdy jdzie o wzbudzenie i sprostowanie uczuć, wtedy potrzeba zasiągnąć rady biegłego Nauczyciela, albo przysłuchiwać się biegłym

If I wanted to show here all combinations and mixtures for all possible fingerings that could take place, I would have to write many volumes and I would still not be able to cover all of them. And who can guess what else will be invented in the future, and what other forms will be perfected? Since my sole purpose was to systematically demonstrate the principles involved, I will not extend further on fingering skills. Many masters of keyboard music have come before me and wrote about it with a lucidity of exposition that I probably do not have. (*)

As for methods of expression, no written school could communicate those either. Thus, when it comes to exciting and correcting feelings it is necessary to seek the advice of an expert teacher or listen to expert

Kunstownikom wszelkiego rodzaju Muzyki, albo nakoniec oddać się swemu własnemu uczuciu, pamiętając na następujące przestrogi:

1.) Nieżądaj dopoty nowości, dopóki się dokładnie niewycyzysz tego co masz przed sobą.

2.) Uważaj zawsze na porządek układ palcy, bo z niego tylko wynika płynne, pewne i przyjemne granie. Częste zmiany bez potrzeby, psują porządek i sprawują nieład: gdzie niema ładu, tam niema żadney pewności: gdzie tey niema, tam niema ani piękności ani przyjemności; wszystko się wiecznie zaczyna i wiecznie urywa; A wtakim stanie, czuie się tylko przykrość. Odmień w ten czas tylko, kiedy uczuiesz jstotną potrzebę.

3.) Niespiesz Tempa bez przyczyny, i niepsuj jego równości.

4.) Uważaj na znaki Informacyjne i exprefsyjne.

5.) Palce wytrzymuj na klawiszach tyle tylko ile wymiar nót wymaga. Bo wielu z uczących się maią tę wadę że, albo niedotrzymują wielkiej nóty, albo przetrzymują małą, albo wszystkie palce zostawiają na klawiszach.

6.) Nie natężaj zbytęcznie ręki, bo nieotrzymasz biegłości ani przyjemności w granu.

7.) Strzeż się pracować wiele pierwszym i piątym palcem, osobliwie na krótkich klawiszach; bo te dwa palce przez własnę krotkość, są mniej giętkimi od jnych. Lecz gdy potrzeba wymagać będącie, użyj ich śmiało.

craftsmen of all kinds of music before finally indulging in your own feeling. But keep the following admonitions in mind:

1.) Do not ask for new material until you have perfectly learned what you have before you.

2.) See that you always maintain a neat arrangement of the fingers, because only thus will your playing sound well, smooth, and confident. Too frequent or unnecessary changes of finger position spoil the order and create disorder. Where there is no order there is no certainty, and neither beauty nor dullness; everything then seems always just beginning or ending. And in that state, you will only feel sorry. Therefore, change finger position only when you feel it to be essential.

3.) Do not hasten the tempo without reason. Keep it steady.

4.) Watch out for informative and expressive terms.

5.) Fingers should remain on the keys only as indicated by the duration of the notes. Many beginners either fail to sustain notes long enough or to strike short ones short enough, or they simply leave all their fingers on the keys.

6.) Don't force your hands too much, otherwise you will play neither proficiently nor pleasantly.

7.) Beware of giving too much work to the first and fifth fingers, especially on the black keys; because of their shortness, these two fingers are less flexible than the others. But use them boldly when the need arises.

8.) w Basie gdy masz czystą Oktawę, niedobieray do niey Akordu, bo ta wada iest nieznośną a zarazliwa dla wszystkich bierz ją czysto.

9.) Nie używaj pedału, tylko tam gdzie jestznaczony, albo gdzie jest stały Akord.

(*) Szczególniey zalecam Szkoły Panów Clementi, Cramer, Steibelt, Müller, Dufsek i iego ucznia P^a Würfel którego Exercises w Krótkce z pod prafsy wyida.

10.) Jeżeli w ciągu sztuki znajdziesz jakie przebiegi trudne, powtarzaj je tak długo, póki się niewprawisz, poczynając w pierwszych razach z wolna, a w następnych co raz prędzey.

11.) Nie czyń swoich dodatków ani trylików: to staie się niebardzo przyjemnem u wprawnych, což dopiero w uczącym się. Jest to Muzyczna kokieterya, która doświadczonym i prawym znawcom niewiele sprawia omamienia, tem mniej gdy jest użytą niezręcznie i niewczesnie.

12.) Staraj się mniej obiegłe czytanie nót, a więcey o wyuczenie się przedsięwziętey: bo Kto sie poświęca biegłemu czytaniu nót, ten niewygrywa podług płynney Aplikatury, ale podług przypadkowego uchwytu palców: |: przypomniey sobie przestroę 2^{ga} :| Niewierz w to, że jest na świecie taki czytacz nót Klawikordowych któryby naytrudniejsze sztuki wygrywał od razu jak się należy: jest to rębacz który kaliczy dzieło, a rany zadane, obwija swemi Akordami lub Pafsażami które do całości nienależą bynawnymniey. Ja w cale nie lubię dziwić się bieglności w czytaniu: ja lubię rozkoszować się w wyuczonym i dobrze wykonanem

8.) When there is a clean octave in the bass, it is inadmissible to make it into a chord. Because everyone finds this defect unbearable and infectious, take it cleanly.

9.) Only use the pedal whenever it is marked, or wherever there is no change of harmony.

(*) I especially recommend the schools of Messrs Clementi, Cramer, Steibelt, Müller, Dussek and his student Mr Würfel, whose Exercises will soon be in print.

10.) If you find some runs difficult to play repeat them until you succeed, starting slowly and then gradually increasing the speed.

11.) Do not make your own additions or trills. While that does not come across as silly with the skilled, it does in the hands of beginners. It is a musical coquetry which the experienced and righteous connoisseurs will be little impressed with when used awkwardly and untimely.

12.) Try less to read the notes and more to learn from what you have already made yours. He who wholly devotes himself to proficient sight-reading does not play according to smooth fingering, but rather by the accidental grip of the fingers. |: Let us recall the 2nd admonition :| Don't believe it that there is any reader of keyboard music in the world that would get through the most difficult pieces right at sight: that is a handyman who damages the work, who wraps his inflicted wounds with chords or runs which by no means belong to the whole. I do not like to be surprised by my proficiency in reading: I would rather enjoy learned and well-executed playing which will impress

graniu, które zajmuję wszystkim, i dać poznać że grający nie tylko zgłębił myśl Autora, ale przez swoje mocne uczucia posunął się do sztuki. Jednak nienależy zaniedbywać wprawę do czytania nót: ja chciałem tylko przestrzedz aby się zupełnie tylko temu nieposwierać. — Odłóż więc trzy kwadransy twojej Lekcji na wyuczenie się jakiej sztuki i na powtórzenie niektórych dawniej nauczonych; Kwadrans zaś odłóż na czytanie co raz innych nót; A wolnego czasu od twoich prac, poświęć małą część na Exercytowanie trudniejszych niektórych miejsc, Gamm i Akordów w rozmaitych postaciach, słowem na to co ci się tylko wydaie trudnem.

13.) Jeżeli chcesz jaką rzecz zagrać dla kogo z wszelkim uczuciem i przytomnością umysłu, wyucz więc iey dobrze: bo gdy będziesz pewnym swego, niezmięszasz się. A jeżeli ci się uda zagrać dobrze bądź skromnym; bo wysokie o sobie mniemanie jest trucizną wydoskonalenia: Pamiętaj zawsze o tem że doskonałość niema końca.

14.) Niegryway Uwertur albo mało gryway, bo ręka od nich cięższe i Aplikatura się psuie: chyba później gdy nabierzesz więcej siły i doświadczenia.

15.) Jeżeli sztuka którą grasz sprzykrzy ci się kiedy bardzo, zaniechaj ją; bo nie tylko, przypominając ją sobie, będziesz się mozolił bez smaku, ale czas na to łożony będzie straconym daremnie: obróć go lepiej na co nowego, ciekawszego, a przeto pożyteczniejszego.

16.) Używaj najwięcej dzieł Autorów załconych, i staraj się słyszeć rozmaitych Wirtuozów abyś nabrał dobrego smaku: innych zaś Autorów

everyone by showing how the player not only explored the composer's thoughts, but through his strong feelings he attained the art. However, one should not neglect the practice of sight-reading either: I just wanted to be careful not to devote myself entirely to it. So, set aside three quarters of an hour of your lesson to learn some pieces and to repeat some of those formerly learned; set aside the remaining quarter, on the other hand, to read every single note. And spare time from your work, devote a small part to some exciting difficult passages, scales, and chords in various forms. In short, whatever seems difficult to you.

13.) If you want to play something with feeling and presence of mind, learn how to play legato well, because when you feel secure, you will not fumble. And if you manage to play well, be modest, for self-esteem is the poison of perfection. Always remember that perfection has no end.

14.) Do not play overtures or play them as infrequently as possible because the hand gets heavy, and the fingering breaks down. When you gain more strength and experience you will probably be able to play them more connectedly.

15.) If you ever get tired of a piece that you are working on, give it up for a while. For not only will you toil tastelessly by recalling it, but the time spent will be in vain. Time would be better spent on something new, more interesting, and therefore more useful.

16.) To acquire good taste, try to hear virtuoso musicians and use mostly works by established composers. You may judge other composers by starting

działa probuy i sądz o nich jak możesz, poczynając od wyrazów „Mnie się zdaie” Bo chcąc sądzić zgruntu Autora, trzeba także być Autorem. Czucie nie jest jeszcze rozumem. Ponieważ Doskonałość kunsztów niema końca, i ja też na wszystkie wypadki, przestroǳ dać nie jestem w stanie. Zastanawiaj się sam, badaj i niech ci Bóg z resztą dopomoże.

with the words “it seems to me”, because to judge a composer’s domain you would need to be also a composer. Feeling is not yet reason, and since perfection of craftsmanship has no end, I am not able to give any warnings either. Ponder the same for yourself, research, and may God help you with the rest.

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