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Preface

Learning how to play the piano has been for centuries a process largely, if not exclusively at times, relying on the classical tradition. In this sense by the term *classical* we generally mean the production of western music literature from roughly the late 16th to the end of the 19th century, an era marked by the advent of a system that has been the canvas of many genial and prolific creative minds. From Bach to Mozart, from Beethoven to Brahms, so strong has been their contribution that today we refer to the language of music as a "universal" language. The system in question is the *tonal system*.

We should probably point out that what we call "universal" mostly refers to the idioms of western music. Their use have undoubtedly shaped our individual and collective emotional responses, and having these withstood the passage of time, they seem to possess some inherent eternal quality. These idioms survive today, and they form in fact the basic foundation of most music laid out for western taste's consumption.

The XX century was a time of great transformation; from politics, to technology, to the many aspects of cultural life, this period was marked by an unprecedented level of unrest generating enough activity to leave a mark in every aspect of living for generations to come. Think, for example, of the invention of the motion picture, public electricity, wireless radio, x-rays, the first airplane flight, and Einstein's *theory of relativity*. They all happened in the decade spanning from 1895 to 1905, and it was only legitimate that the creative world would respond to such life-altering events with far reaching contributions of its own. In the west, the world of music was not exempt from the implications of these great many changes and immediately it began to witness their effect; for instance in the general movement away from tonal to non-tonal music.

Composers began to search for new ways to replace a language that seemed to have become inadequate to express the new found complexity of our world, and elude the gravitational pull of the tonic, while terms like *atonality*, *twelve tone*, and *serialism* (to name a few) entered the new vocabulary of music. The new names of this multifaceted revolution came to be composers such as Debussy, Bartok, then Schoenberg, Webern, and more recently Messiaen, Carter, Ligeti, or Cecil Taylor - as far as contributions to modern jazz are concerned.

Ever since the musical landscape of the western world has forever changed, as did the way we think about music; the way we create it, express it, and use it. The resulting process has had a very profound influence on the creative approach of many musicians throughout the bulk of the past century, and is still alive today. But despite the growing literature flourishing outside tonality the mindset of the majority has remained anchored to a pitch centered approach with one note functioning as the catalyst of all musical reactions, thereby guiding the learning process of musicians around the globe in much the same way it has always been.

It follows that back in her studio, the average piano student today will spend most of her time and energy studying standard piano literature, and supporting it with standard piano technique.

From a strictly technical point of view the student's brain and hand will be trained to conceive, adjust to, and reproduce at will the idioms contained in tonal music. And for that reason all of her focus will mainly be channelled onto the mastery of *major* and *minor scales*, *arpeggios*, *octaves*, *thirds* and *sixths*, with dissonances entering the picture usually only as part of chords which function is still strictly tonal. Just as it has been for the past four centuries and beyond.

Is all this bad? Not at all. But it is a limited approach. When I thought about writing this book I was trying to address a personal need. I had been classically trained, but had always been interested in other kinds of music as well. At this particular point in time I was interested in modern and contemporary music, both classical and jazz, and I had been experimenting with non-tonal improvisation for quite some time. I was struck by the fact that if a pianist wished purposely to build a technique around non-tonal idioms he would be at a loss. I was.

The question I asked myself was: If the world were to accept a total transition to non-tonal music, how would we learn to play an instrument? Wouldn't we have to change the technical approach to it to reflect the language we're using? Of course we would. One could object that clearly we haven't witnessed such an overwhelming transition and we probably won't in the foreseeable future. That is true, but a lot of new language has stimulated our musical brains since the dawn of the twentieth century, and my thought exercise was to show that if there is a condition that demands the absolute need of new technical material, there has to be a point - along the line that connects it to its absence - that begs for at least a sign. It is undeniable in fact that, as methodical as we have been in addressing matters of tonal technique, the technical literature specific to non-tonal piano hasn't produced anything significant in over a century* .

Plenty of analytical books have been written on the subject of non-tonal music, from the nature of *free atonality* to *serialism*. This is not one of them. These studies are a first look into non-tonal relationships from a technical point of view. In them I tried to keep a balance between a good workout for the hand and for the mind, as the two are inseparable.

What I hope to achieve is to give the musician a chance to practice and improve her technique around idioms that, although have entered the musical arena for quite some time, are usually blindly reproduced with a sense of foreign abandon. A serious musician should always be armed with curiosity, patience, and a sense of awareness of the object of his study. This book wishes to contribute in bringing about some of that awareness.

T.M.

New York 10/31/11

* Nicolas Slonimsky's *Thesaurus of Scales and Melodic Patterns*, New York, C. Scribner 1947, is worth mentioning. It is an important and comprehensive work to be familiar with. However, its focus is to investigate and present a vast collection of note combinations without particular relevance to pianistic technique, and it is not primarily concerned with issues of non-tonal applications.

Introduction

This is first and foremost a book of "technical" studies. Their purpose is to enhance the student's cognitive ability to recognize intervallic relationships and derived patterns characterized by a non-centric behavior, and to address issues of finger dexterity associated with expressing those patterns while offering a fresh new alternative to the art of daily practice.

It comprises two volumes, The first volume is divided into three units: *Chromatic*, *Whole Tone* and *Octatonic Studies*. The second will contain, in addition to these, a fourth unit on *Dodecaphonic Studies*. Each unit will be further subdivided into sections.

The first volume presents short and long-fingers monophonic patterns within a fixed intervallic framework limited to two technical settings: that of a "collected" hand and that of a "stretched hand". Here the hands will articulate a pattern up and down a prescribed range always maintaining the same extension and without crossing the thumb. This should facilitate the process of acquiring familiarity with the non-tonal terrain in question before tackling the more challenging studies of the second volume.

In this first volume every study in the aforementioned units is subject to the same types of motions. These are *parallel* and *contrary*, as far as the general direction of the hands is concerned, *convergent* (c) and *divergent* (d), when considering the finger motion of each hand relative to the other. A detailed explanations of motions is given in the *Table of motions* found on page vi and vii. Each section begins with the scale/s relative to the studies that follow, the intervals subtended by them and their transposition. **It is very important that the student be familiar with such scales before tackling each unit**, as they map the geography of the studies. Other than the *Chromatic* scale the patterns are built upon two *Whole Tone* scales that we will identify with the acronyms WT1 and WT2, and three *Octatonic* scales that will be referred to as O1, O2, and O3.

Each study will then consist of a *Primary Pattern*, in which a short melodic (or dyadic) segment is articulated in parallel ascending/descending motion, and four successive variations. These are written in full form. For the *Whole Tone* and *Octatonic* studies we have limited the number of primary patterns to four permutations satisfying the condition that the first note never changes and that the first two fingers of each pattern be progressively farther apart, therefore: 1,2 - 1,3 - 1,4 - 1,5. The remaining conditions are:

1. That the second half of the pattern be the vertical mirror image of the first.
2. That none of the five fingers are excluded from the pattern.
3. That the last note of each pattern is not repeated upon its being transposed onto the adjacent step of the prescribed scale in order to facilitate flow. As far as Dyads are concerned we forbid repetitions of both notes but allow one of them to repeat.

Even with the implementation of such an array of conditions the number of possible permutations exceeds the four presented in each section, but writing them all would have made this book excessively cumbersome. However, for the sake of completeness we have included the remaining non-transposed primary patterns in the Appendix.

As mentioned a section on *Dyads* (groups of two notes) will also be part of each unit.

It is highly recommended that the student practice the studies in an "active" way, by moving the starting note each time and/or changing the spacing between the right and left hand.

For example she could practice a specific study starting from C one day, then from D the next day and so on. By the same token the distance between the right and left hand pattern could be of one, two or several octaves.

In all we have worked toward the idea of mapping a territory and create a balance between the strictly technical utility of the studies and their potential to inform about the non-tonal terrain under investigation.

Approaching the Chromatic framework

Since we're looking into creating a body of technical studies, we need to make sure that not only they are effective in accordance with their purpose, but they are also relatively easy to assimilate. Tonal exercises rely on a framework that has gone through centuries of validation both on a cognitive and practical level. This has generally allowed students to become quickly familiar with the material, therefore facilitating their daily practice.

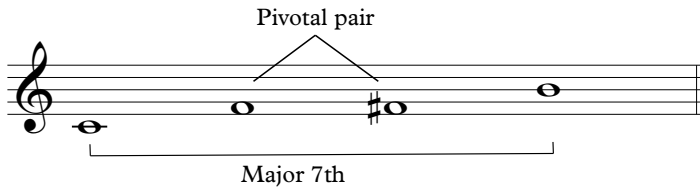
To build a body of non-tonal* technical studies we not only need to create patterns that are a-centric, but we need to bring to sharp focus a similar framework. From a strictly technical point of view this framework is generally provided mainly by the scales that characterize each of the sections we're investigating. When working with *Whole Tones*, or when dealing with *Octatonic* studies, the two Whole Tone scales and the three Octatonic ones provide us already with a reliable grid, other than a distinctive "color". This is also true of *Dodecaphonic* studies, where the framework is already built-in the method itself. *Chromatic* studies however are forged out of the Chromatic scale, that once stripped of its directionality (ascending-descending) suggests almost literally any number of options.

We then need parameters that will give shape to our patterns without the typical sense of directionality given by a centric framework such as the tonal system, but that will still enable us to compact our ideas without feeling like we've lost a viable reference point. I will appeal to *symmetry* as one of the needed parameter of cohesion throughout the entire collection, and particularly the first volume. This will enable us to make choices and circumscribe them within recognizable boundaries, so that the resulting patterns will have an informational weight that can be handled by our short term memory. Moreover, once established the range of the primary pattern for our first section we'll proceed by permutating its notes with the only condition that the first note be the same, thereby obtaining a manageable amount of total Chromatic patterns.

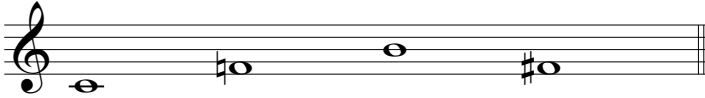
Let's begin by letting go of the octave as the interval within which patterns are usually contained, and substitute that with one that is more suitable to our scope. Such an interval should be large enough to allow movement within its boundaries to create useful expandable patterns. Let the Major 7th be that interval.

We'll proceed to split this interval right in the middle by way of creating two consecutive Perfect 4ths. You can easily divide an Octave in exactly half by placing a note that is a tritone up from the root. Here however, it will take two notes to obtain that result, and I will call them a *Pivotal pair*; not just a mnemonic device that helps us rotate the intervallic components of our pattern around a center, but the physical center around which to rotate the wrist . It is in fact recommended that the student does not articulate the fingers but reaches the keys by means of a slight rotation of the hand. Each of them will be equidistant from the boundaries. Let's begin.

*It is important to stress the fact that here the term non-tonal refers to only the absence of pitch hierarchy, and the absence of a tonic. The repetitive aspect of patterns needs to be taken as a necessary tool for their development across the pitch/position spectrum and not as a reinforcing element somehow suggesting a new type of centrism.



We can obtain several such patterns by permutation while keeping in mind to let the first note be the same.



Note how switching their order will show the two tritones embedded in the pattern.

