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A Critical Analysis of the Premises Underlying North American Introductory Piano Methodologies

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A Thesis

in the

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ABSTRACT

A Critical Analysis of the Premises Underlying
North American Introductory Piano Methodologies

Thierry Prieur

This thesis critically examines the introductory stages of piano instruction as they are presented in contemporary North American piano methods. Proceeding from an interdisciplinary perspective — with references drawn from relevant sources in the pedagogical, psychological and educational literatures — it focuses on the current practice of reducing information to prescriptive formulas, while confining student-teacher interaction to unilateral verbally and visually transmitted instruction. The underlying assumption, here, is that the more complex aural, tactile, choreographic and aesthetic experiences will naturally follow.

This assumption not only oversimplifies the initial stage of an extremely complex and demanding skill, but communicates a vision of the relationship between pianist, piano and score that can be as counter-productive as it is naive. In developing its critical argument, the thesis treats the members of this relationship in terms of their interaction, rather than as mutually exclusive entities. The value of prescriptive methodologies is thrown into

question when considered in the light of its neglect of the long-term realities of music as a discipline. While they may, in some cases, produce apparently quick results, they have neither the philosophical acumen nor the methodological tools to set the pace for higher order musical performance. Indeed, a faithful adherence to the principles embodied in these prescriptions is more likely to plant the seeds of performing "blocks" that could seriously compromise the artistic development of the aspiring pianist.

As an alternative, suggestions are offered for the development of a methodology that cues more directly into the student's native musical potential by establishing links between his or her existing knowledge and intuitive resources.

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****

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Chapter 1: Introduction

A young pianist is preparing to teach the fundamentals of her craft to beginning students. Recognizing the crucial importance of the beginner's first contact with the instrument, she sets out to find the best that contemporary pedagogical methodology has to offer. Her search, quite naturally, begins with a perusal of piano methods on the shelves of various music stores. To her surprise, she finds herself confronted with a bewildering array of competing volumes, each claiming to be unique. This then, is our neophyte piano teacher's introduction to the world of North American piano methods, a world which, over the past several decades has grown into a market capable of filling shelves in music stores with eye-catching, colourfully illustrated beginner's books and teacher's manuals.

Given this apparent wealth of choices, the obvious question arises: how does a beginning teacher — or for that matter, any teacher — determine which of these methods will help provide his or her beginning students with the best possible foundation for the long-term development of their pianistic skills?

Between 1982 and 1985, the *Piano Quarterly* asked a number of prominent American pedagogues to submit critical reviews of "The American

Beginning Piano Method"[1]. Edited by Marienne Uszler of the University of Southern California, the articles concentrated primarily on the organisation of current North American method texts. Referring to a list of criteria, each contributor discussed factors such as the overall organization, the systematic introduction and reinforcement of materials, the use of illustrations and the sequencing of notational rudiments. A typical account would be conducted as illustrated in Table 1.1.

The content of the evaluations is instructive. As a reviewer would get into the presentation of the material, rarely would he or she offer insights into *the relation of the method to the performer's learning processes* or into *what benefits the learner might gain from the methodological approach in the long-term.*

Those are precisely the issues that will form the basis for this discussion — a discussion focusing on how North American piano methodologies prepare beginning pianists for long-term fulfilling experiences at the keyboard.

While the study will be presented from an interdisciplinary perspective — in particular, with reference to relevant thinking in cognitive psychology, education and of course, music pedagogy — the approach will primarily be the one of a performer/methodological analyst. It will, however, establish connections between psychological concepts and theories, and piano performance — even when the insights have not yet been thought of in terms

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[1] References to the articles are included in Appendix A.

TABLE 1.1

Typical Content of "The American Beginning Piano Method" review

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Below is a representative description:

"Technical development parallels reading development beginning in the first lesson and continuing systematically throughout the series. Early emphasis is on shaping a good hand position through the use of a five finger cluster position over three white keys which then extends to cover five white keys combined with free arm movements. Short pieces (using block fifths and the outside fingers of each hand) follow. Throughout the rest of DISCOVERIES A and into DISCOVERIES B, short Daily Exercises are included in eac' chapter which emphasize the particular intervals introduced. Specifically, appropriate finger exercises correlate with each new interval in the reading activities."

Aspects such as "Reading", "Rhythm", "Musicianship" were similarly treated. Below is a typical summary evaluation:

"It is the opinion of this writer that the authors do indeed fulfil their pedagogical objectives in the MUSIC PATHWAYS elementary series. All new concepts are carefully and logically sequenced throughout the four levels. Reinforcement of each concept and activity is consistently provided. Directions and illustrations are clear and concise and should be within the grasp of any beginner from age six or seven onward. The series is comprehensive in that the basic elements of reading, rhythm, technique, and musicianship relate to each other and develop simultaneously as each new phase evolves as an outgrowth of the previous one."

(Reviewer: Frances Larimer - Method reviewed: *Music Pathways* by Lynn Freeman Olson, Louise Bianchi, Marvin Blickenstaff - in the *Piano Quarterly*, winter 1983-84, **124**, 46-52).

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of direct implications for a performing discipline. Given its nature, the analysis will ultimately attempt to address an interdisciplinary audience — including musicians, psychologists and educational theorists; hence, in the interest of clarity, it will be necessary to confine the discussion to general language rather than rely on highly specialized musical terminology.

There are, of course, a number of considerations to keep in mind when developing, let alone evaluating, a musical methodology appropriate for a rapidly changing society. One of these is a possible conflict between the teacher, who might understand the purpose of the lessons in terms of artistic development, and the parents or student, who might understand the music as serving a leisure-time function. Among the possible sources of conflict, one must note both the content of a North American child's free-time and the potential incompatibility between the reality of an artistic discipline and the expectations of a clientele that, more often than not, appreciate music lessons in terms of consumer-oriented considerations.

The place of music in a child's free-time schedule

As has often been noted, children have become intensive viewers of television: in 1982, the Committee on Social Issues — Group for the Advancement of Psychiatry — reported that children, on average, watch T.V. three hours or more a day. Conditioned to accept information presented to

them by most programmes graphically and literally, viewers (including youngsters) mostly watch, yet rarely are they motivated to think, to judge for themselves, to imagine, let alone search for creative means of discovery or individual fulfilment (see Postman, 1985). By the same token, we might well expect that when a child appears to be interacting with a video display — say a Nintendo game — his or her involvement might remain emotionally shallow and creatively passive despite a certain apparent amount of fine motor action and coordination. These responses consist mostly of increasingly faster reflexes learned as systematic responses to visual signals; they certainly are not challenges of creative organisation.

On the other hand, watching television often becomes a central activity around which a child's free-time is programmed (see accounts of various children's week or day schedule in Winn, 1985). Besides, it even appears that more and more often, children are being exposed to so many different activities that they can rarely find the necessary time to progress and develop a real sense of satisfaction in any one of them. As a most likely consequence, the perception of a hobby tends to often shift from the notion of a creative and fulfilling stimulation toward the search for some *scheduled entertainment.* Rather than a long-term commitment (i.e., a passion for music), more often than not, children's experience with music becomes essentially an additional *ornament* in their developmental agenda.

Teaching piano in a consumer-oriented society

In a consumer oriented society, parents are likely to reason about piano lessons in terms of the best value for their money. Unless a child manifests uncommon desires, this value is typically related to a vague idea about studying music: a means to keep the child busy, the significance of getting the child acquainted with music, yet rarely the thought of a dedicated experience with an instrument.

Prior to the XXth century, at all levels of musical study, the idea of client-centred concerns would have been inconceivable in the musical field. For instance, in the late XIXth century, the many hundreds of musicians attending Franz Liszt's free classes (in Schonberg, 1987) would cherish every word uttered by the Master and be eternally grateful to be privy to his wisdom and knowledge. Today, even taking into account the difference in the level of comparison, the criteria for choosing teachers would more likely revolve about their proximity in one's neighbourhood and the fee they charge rather than their pedagogical skills and musical wisdom. Facing this reality, one may be tempted to confuse the practical matter of building a regular clientele[2] (i.e., making sure that a child will come back to his or her following lesson) with the objective of transmitting one's passion, experience as well as effective means

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[2] Note advertisements, articles in *Clavier*, *The Piano Quarterly*, or similar professional periodicals (e.g. Lewis, 1992; Jacobson, 1993) as well as Part VII and Chapter 2 respectively in guides by Agay (1981) and Bastien (1988).

for performing music. Here, indeed, lies a major challenge to the music teacher of integrity.

With this perspective in mind, if we wish to examine the long-term value to the learner of a particular method — beyond a descriptive analysis of its content, its structure, its logical coherence and organisation — we must first consider whether the method is intrinsically conducive to the serious study of music. This implies a reassessment of the interaction between the textual materials, the music student and his or her teacher — a living interaction that assumes a three-way communication in which the focus is on the differences that distinguish one young pianist from another (individual differences such as a learner's past history, expectations, cultural identity, living environment, psychological resources, physiological endowments, and so on). One must also keep in mind the multiplicity of factors (physiological, cognitive, kinaesthetic, acoustic, etc.) that still represent the intrinsic challenges facing the investigator of human performance.

This study will, therefore, ask whether the premises underlying North American piano-teaching methods provide students with a sufficient foundation for the development of a continually rich, fulfilling, long-term experience as musical performers. In particular, it will examine the principles underlying the relationship between building musical proficiency and immediate, easily-achieved results.

This question leads to a number of issues to be addressed in the following chapters and to be discussed within the premises of contemporary North American methodological approaches whose typical basic principles need first to be clarified.

Over the past decades, various strategies have been devised and implemented for approaching the first crucial encounters between a child and the notational language he or she will need to learn and handle. Unlike in some European countries, such as France, where music theory and reading abilities are still often taught apart from the instrument, North American methodologies have developed reading programmes to be integrated as part of piano instruction. As a consequence, a variety of new pedagogical devices and systems with accompanying terminologies have emerged, such as early reading approaches at the instrument (middle C, intervallic, multiple-key approaches) or strategies for counting rhythm (arithmetic, functional, nominative, syllabic systems), etc. Systematically organised curricula have been designed in most recent collections allowing them to demonstrate the rationale behind the learning process they suggest.

Whereas some contemporary French volumes still advocate the necessary establishment of what they understand as basic mechanical foundations, before providing attractive pieces to be performed on the instrument (e.g., Curie[3], 1985; Mangeot, 1985), North American series

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[3] Full references to method books are included in Appendix B.

emphasize the important role of pleasure, entertainment from the very beginning of music education.

Basically, whatever the underlying premises of an approach may be, all piano methods emphasize criteria and programmes for the structuring of the relationship between three main *actors*: the pianist, the piano and the score.

Throughout this thesis, I will refer to the participants in this triadic relationship as *actors*. While the pianist is clearly the performer, the exchange that takes place involves a quality of feedback in which all participants are assumed to be alive. In a performance, the musical judgements that are made, are indeed assumed to be sensitive to the possibilities of the instrument and the meaning implied in the notation. The real question in studying methodologies is whether the criteria that allow the transformation from the score into a living experience are met.

Thus, in the context of North American methodologies for the child beginner, it is this triadic relationship that will form the basis for the fundamental issues that will be discussed in this work. I will therefore begin by addressing these issues.

Issues to be addressed

Throughout the analysis, each of the three actors — pianist, piano, and score — will be discussed not only as entities in and of themselves but also in

terms of their relationship to each. This analysis will revolve around the following five recurrent themes.

(1) ***Individual differences:*** To what extent does a method allow a teacher to identify and respect the individual resources and needs of a beginning pianist? What are the most common assumptions about teaching music that, by their very nature, interfere with meeting the needs of individual students? What are the pedagogical alternatives, if any, that are capable of dealing with the likely consequences of these assumptions?

(2) ***Relationship between method and child:*** To what extent is a given child's way of thinking, as shaped by family environment and early experience in life, brought into the conception of a method, its sequencing, the approach to various activities, etc.? How does a method provide a means for motivating children to think, to intuitively find their own solutions, to trust their judgement and bring their own intuitions and understanding of their body, musical components, etc. into the learning process?

(3) ***Relationship between method and teacher:*** To what extent should the structure of a method be meant to be a prescriptive programme for an instructor to follow? In other words, how much room for thinking does a method provide a teacher?

(4) ***"Correctness":*** Piano instructors often rely upon elaborate terminologies and criteria to define "correct" approaches to aspects of a performance such as posture, the understanding of musical symbols, mechanical actions, fingerings, and so on. Is the concept of "correctness" a desirable tool? Could the concept of correctness possibly mask a pedagogue's search for convenience, security? For example, might an instructor who emphasizes and relies upon "the correct way" of playing the piano, feel protected from the responsibility of possible failure with a student? Does the method foster labelling a student as untalented who, when all else fails, cannot or is unwilling to adapt to "the correct method"?

(5) ***Quantitative measure:*** To what extent does a method organise pedagogical material in such a way that it might serve as a valid quantitative measure of a child's progress? Is a valid measure of the steps in a child's progress ultimately of value in his or her artistic development or is it mostly a convenient system for teachers and parents to comparing a student's abilities with others? Ultimately, can progress in an artistic discipline be quantified?

This thesis focuses on a critical examination of certain premises underlying pedagogical thinking that have been articulated from the earliest keyboard texts to appear in the XVIth century (see Gerig, 1974). These assumptions have become embedded in conventional wisdom with, for the most part, little analytical discussion of their development beyond the earliest stages

of study.

Chapter 2, the Prelude section of the thesis, will first briefly locate the role of a piano method within the broad set of interrelating factors that are intrinsic to music instruction. It will then clarify the perspective from which the foundations and long-term implications of current North American method texts are to be examined. For further reference throughout the exposition of this thesis, two broad approaches to piano instruction will be defined - namely *prescriptive* and *intuitively oriented* approaches to methodologies. A summary of the skills one would normally expect from an accomplished artist will then help clarify the underlying premises of this study, that is: do North American piano methods adequately prepare beginning students for the realities of music performance? The Prelude will conclude with an outline of the structure and courses of study most prevalent in North American method texts.

Chapters 3, 4 and 5 will look at representative introductory steps for approaching the interaction between a beginning pianist, piano and score. Chapter 3 will look at the issue of the student's general posture at the piano as commonly introduced at the very first lesson. The implications of *imposing* a posture will be discussed in the light of potential sources of later interference. As a possible alternative, the notion of balance will be suggested as a fundamental aspect of piano performance.

Chapter 4 will examine how the instrument is typically introduced to the beginner. In particular, it will emphasize the nature of the mission, judgement

and creative involvement that are likely to be presented. Finally, it will address the value of creatively exploring one's body resources in relation to the possibilities of the instrument.

Chapter 5 will focus on the reading of a score. On the one hand, it will outline the intrinsic limits of a notational system while, on the other hand, it will study how method texts take into account a child's empirical knowledge for introducing basic musical rudiments.

Chapter 6, the Finale of the study, will first summarise a general profile of existing North American piano methodologies, then discuss the direction of a possible alternative approach to the introductory stages of piano instruction.

Chapter 2: Prelude

Before conducting the core discussion of this thesis with its emphasis on the triadic relationship between the pianist, the piano and the score, we will first, in this chapter, acknowledge the various factors which, beside a given methodology, are fundamental to a successful experience at the keyboard. We will, in particular, briefly discuss the following: (a) the influence of a young pianist's surrounding *environment* on his or her artistic development and (b) the reinforcement of habit through *practice*. This will lead to (c) the notion of *interference* at the piano — a notion I will define with reference to basic concepts in cognitive psychology. These three issues will set the stage for the subsequent chapters on the pianist, the piano and the score.

In order to keep with the perspective of studying methodological introductory stages in the light of their long-term contribution to the development of artistic and pianistic skills, this chapter will also outline two broad approaches to piano instruction for further reference throughout the thesis. I will refer to the first one as a *prescriptive approach* and to the second as an *intuitively oriented approach*. Following this will be a discussion of the skills one would normally expect from an advanced performer, referred to here as the "creative pianist".

Finally, after a brief discussion of the validity of relying on piano method

texts for illustrating the proposed analysis, this chapter will conclude with an outline of representative North American methodologies designed for the beginning pianist.

Despite the increasing selectivity in entering advanced level music programmes (e.g., graduate programmes in North America, *Conservatoires* in Europe, etc.) or the often overloaded classes in elementary music schools, piano still remains one of the most popular instruments chosen as a first experience with music. From the great number of children either wishing or encouraged by their parents to undertake the study of piano, many never manifest sufficient motivation to carry their curiosity or interest for the instrument beyond the performance of a few pieces. Others nurture various degrees of dedication and persevere until they acquire the requisite skills for performing a repertoire of intermediate difficulty and occasionally even achieve an impressive proficiency. Very few aspiring pianists, however, succeed in maturing into outstanding artists capable of presenting themselves as such, virtually unanimously to an audience and/or to professional musicians.

This is of course the familiar statistical distribution one would normally expect in any discipline, whether academic, athletic, or artistic. And as with most other skill-centred disciplines, music pedagogues over the years have sought methods by which they might cultivate and hopefully maximize their students' performing skills. As a consequence, we find traditional

methodologies vying for favour with newer designs — some innovative, others re-statements of old ideas in modern dress.

A central concern in most of these methodologies is the nature and role of interfering factors in the development of performance capability. Their goal is to, in effect, anticipate the potential obstacles a young pianist may have to cope with on the road to achieving the fullest possible maturation of his or her resources and motivation. In this regard, it is essential to consider strategies designed to minimize the consequences of these inhibiting factors both in the immediate and long-term.

There can be little question that achievement in a performance discipline requires considerably more than just an effective methodology. There is a complex web of interaction between the learner and the teacher (e.g., Mackworth-Young, 1990) as well as other significant adults, where the questions of motivation, environmental stimulation, and cultivation of commitment are as essential to success as the nature of the methodology and its presentation.

We will now briefly consider two of the most relevant aspects of this web. The first is environmental: the child's relationship with his or her surrounding adults. The second is related to this inherent aspect of music performance: practice which will be considered in terms of a double-edged sword.

Environmental issue — Child's relationship with significant adults

It is well recognized that in the early stages, approval and encouragement are of enormous significance (Bloom, 1985; Ericsson, Krampe & Tesch-Romer, 1993). In his biographical and anecdotal research with a hundred high-level experts in a selection of fields, Bloom (1985) confirms the asset — in the introductory stages — of both parental support and an affectionate relationship between a child and a teacher, as inherent components of a propitious atmosphere for enhancing motivation, dedication and potential success.

It follows that when parental priorities, however well meaning, lack the necessary empathy, as in the case where they impose a rigidly defined code of practice, the result could prove discouraging and possibly have permanent debilitating effects on a child's subsequent efforts in the discipline (Lorin Hallender, interviewed in Ward, 1991).

Antoine de Saint-Exupery (1943) provides a poetic illustration of parental interference in the first pages of "*The Little Prince*". The narrator recalls how as a young child, he had once been impressed by the picture of a boa constrictor eating an animal. Inspired by the scene, the boy depicted his own version, then "showed my masterpiece to the grown-ups, and asked them whether the drawing frightened them. But they answered: 'Frighten? Why should any one be frightened by a hat?'" (page 7-8). As the drawing was not meant to represent a hat but a boa constrictor digesting an elephant, the boy

replicated his attempt, showing the snake's inside. "The grown-ups' response, this time, was to advise me to lay aside my drawings, whether from the inside or the outside, and devote myself instead to geography, history, arithmetic and grammar. That is why, at the age of six, I gave up what might have been a magnificent career as a painter" (page 8).

A child's loss of commitment may also be seen as the result of pedagogical assumptions, imposition of goals or learning sequences on the part of the teacher, that may be premature or unsuited to the child's artistic formation. A child may be confused with what is expected from him or her: "*Am I supposed to play this piece beautifully immediately? Am I allowed to fool around with the instrument in the way I think it would be fun to? Am I allowed to toy with the movements I am making at the piano? What do I do to practise this piece? May I not do exactly what the teacher tells me? Does taking piano lessons make my school day longer or does it make it worthwhile?*" In other words, a child who drops out prematurely may very well be one who never had his or her expectations considered, let alone satisfied.

In his discussion of the related broader issue of the human search for happiness, Mihaly Csikszentmihalyi (1990) notes how our society tends to value the postponement of rewards. For example, he writes: "Teachers assure pupils that the boring classes will benefit them later, when the students are going to be looking for jobs" (1990, page 16). Csikszentmihalyi argues that one is more likely to achieve a measure of happiness if one has accepted intrinsic

rewards on the road to one's goal. For a musician, the objective may be to perform a piece of music as beautifully as possible. When practising towards that goal becomes satisfying and enjoyable in itself, then the longer term goal of happiness in and through one's activities becomes a distinct possibility. It follows that cultivating intrinsic motivation in the musical performer is crucial to the enlightened pedagogy.

Practice and the reinforcement of performing habits

As an inherent component of serious musical experience, the organisation of practice has recently become a central concern not only for performance theorists (e.g., Kochevitsky & McCallson, 1989; Payne, 1985-86) but also for scientists who are devoted to the understanding of the cognitive or biographical factors (Bloom, 1985; Sloboda & Howe, 1991) that may be determinant for becoming an accomplished performer. Sloboda (1992) notes for instance, that the intensity of practice has traditionally been understood as the "single greatest predictor of skill level". Ericsson *et al* (1993), for example, claim that a minimum of ten years of intensive practice is essential to the mastery of a given skill. However, Sosniak (1985) regards practice *content* and the ability of the individual to improve over time as more reliable predictors than the intensity and duration of practice time.

This shift of focus from quantity to quality of practice time throws into

question the assumption that a daily commitment of many hours at the instrument is sufficient to acquire the mastery of the art's most demanding challenges. (Many pianists will recall their teacher assigning Hanon exercises with the motto *"no pain, no gain!"*). The argument could be made of course, that a performer who is not benefiting from practice *may be in the wrong discipline.* Others may have the innate capacities and yet not have the environmental advantages to develop (Suzuki, 1969). Still others may have reinforced "blocking habits" that so blocked their development, that any discussion of "potential" becomes almost meaningless. Here, I am not only referring to "bad habits" in the commonly understood sense of the term which has to do with physiological mechanics (e.g., posture, position of the hands, fingerings, etc.) but to the consequences of obsessive, compulsive, and unreflective tendencies to imprint practising and performing behaviours that have a profound influence on a pianist's ability to organise his or her aural, mental, and physical resources.

Clearly, an enlightened methodology should also concern itself with the effects of negative habit patterns on the ultimate communication of one's artistic message. As Ching (1946) notes: "Habit ... is not second-nature, it is ten times nature!" (page 78), a fact that can easily be demonstrated while attempting to change an apparently simple habit like one's way of holding a pen or climbing a staircase. Ching (1946) further picks up on this point by noting the difficulty of changing habits "in our thoughts and actions even

though we may be convinced that such changes may be greatly to our personal benefit" (page 78).

Interference

This leads us to the central notion of interference in the act of playing the piano — a notion I will first clarify for further reference in this analysis. I will do so by briefly outlining two important concepts from the psychological literature: *automatic processing* and *encoding specificity*.

Automatic processing: One popular concept in cognitive psychology views performance as the blend of automatic and controlled processing (Ackerman & Schneider, 1985; Schneider, Dumais & Shiffrin, 1984). Controlled processes are normally slow, require attention as well as a conscious sequence of acts or thoughts, as for example, in one's first attempts at executing the basic steps of a waltz. In contrast, automatic processes are fast, effortless and refer to the performance of a learned action (or a skill) which no longer requires attention (for example, the dialling of a familiar phone number) and therefore may function independently of the individual's conscious control.

Automatic processing normally develops as a result of consistent mapping (e.g., Schneider, *et al.*, 1984): i.e., the systematic association of

response to a given stimulus. The following is an example of a psychological research paradigm using *consistent* as opposed to *varied mapping* (e.g., Ackerman & Schneider, 1985).

A set of one to four categories are first displayed on a screen (for example: *fruit, tool*). The subject is then shown a set of one or two words. If one of these words corresponds to one of the categories previously seen, the subject answers "Yes", if not he or she answers "No". In a consistent mapping situation, a given word is always associated with the same answer. If we take the example of "pineapple", the word will consistently be displayed after a category set including "fruit". The subject's answer will therefore always be "Yes". In a varied mapping context, the answer to "pineapple" may in some cases be "Yes" or in others "No". After a period of consistent training, the task is normally performed faster and reinforces a more direct access to the memory code in that the memory search needs no longer to be serial. In particular, response time ceases to vary with the size of the first set of one to four items. In the case of varied mapping, while practice also leads to faster responding, responses to a short initial list remains faster than to a long initial list, indicating that processing is still serial. Thus, in the case of consistent mapping, the performance has become faster, fairly effortless, and less demanding in terms of the attention it requires. In other words, the individual has achieved a certain degree of automaticity in performing the task (see Segalowitz & Segalowitz, 1993, for other indices of automaticity).

In piano performance, an example of a methodologically induced consistent mapping would be the explicit instruction of lifting the wrist at the end of each slur sign on a music score, as one finds in many North American method texts (e.g., Noona & Noona, 1973).

A given action may become so automated that it may be successfully executed while performing other unrelated tasks: one may, for instance, carry on a conversation while performing an exciting Viennese Waltz or while driving a car safely. Once an action has become automated, it becomes extremely difficult to modify, let alone prevent, its action, even if it is no longer appropriate (see study by Logan (1985) on the difficulty of inhibiting thoughts and actions once they have been stimulated).

Encoding specificity: In describing their theory of "encoding specificity", Tulving and Thomson (1971) provided a framework for considering both the facilitatory and the potential inhibiting properties of automatic processes in a performing discipline. They showed how information that is encoded within a specific context is most likely to be retrieved from memory when the retrieval context matches the input context.

Tulving and Thomson (1971) studied the effects of context on an individual's ability to access previously encoded information. Their paradigm showed that recognition for a previously seen item is most likely successful when the context at the time of retrieval is similar to the context at the time

of stimulus presentation.

In their experiment, the subjects were presented a list of words to be remembered for a subsequent recognition task. Three input categories were presented to all subjects: (a) a single word; (b) a pair of "weakly associated" words (e.g., *art, girl*); (c) a pair of "strongly associated" words (e.g., *hate, love*). In the recognition task, the subjects were asked to state whether a word had been previously seen or not. The results indicate that recognition was more successful when the test-words were presented in the same format as at the time of input. Thus, a single word at encoding time was better recalled when re-presented alone than when paired with a second word; members of pairs (whether strongly or weakly associated) were better remembered when paired with the same word than when coupled with a different one. Kolers (1979) presents other especially dramatic demonstrations of this effect in which text was better recognized weeks later when re-presented in the same print format than when shown in a different format.

These results suggest that individuals do not only process the information that is presented to them but also encode features of the environment in which the information was presented. Later accessibility of the information seems to be depending upon the environment at the time of retrieval: access being facilitated if the retrieval context matches the encoding one.

While the evidence in Tulving and Thomson's paradigm is primarily

linguistic, the potential applicability of the theory does not seem to be that far stretched if one considers performing contexts that — for given individuals — reawaken specific behaviours. These may include shaking, memory blanks in contests, hand-sweating or cold hands in nerve-racking situations, fear of a particular style (e.g., Mozart) or of a given technical challenge (e.g., double thirds), etc. Some pianists may also remember the experience of re-learning a work after a long period of time and re-encountering the mechanical problems or doubts they initially ran into. Finally, the context may simply take the form of a notational symbol on a score: for instance, if so reinforced, the symbol  may instantaneously stimulate a vertical movement of the arm.

These two psychological concepts — automaticity and encoding specificity — are central to our discussion in that they will help us to define interference at the instrument as an automatized action which is evoked by the re-instatement of the environmental conditions in which the action (as prescribed and reinforced by the method text or/and the teacher) initially occurred. A pianist may, for example, encode choreographic sequences related to expressive effects indicated in the musical score (again, the example of a sudden vertical movement of the hand in response to a staccato sign above a series of notes). These sequences may become so internalised that they may be automatically stimulated by the score, retrieved, and for that matter performed without the pianist's awareness of the action. Here is where the interference may arise: the apprehension of every detail, particularly at great

speed, could indeed conceivably interfere with the flow of the performance (e.g., the systematic vertical movement of the hand for the performance of a staccato may, for instance, interfere with the achievement of a *Presto* or with the continuity of the musical line).

"Prescriptive" versus "Intuitively oriented" approaches to methodologies

I propose in this work to look at methodologies in terms of two broad approaches to piano instruction.

The first relies upon highly structured programmes in which a set of visual and verbally expressed postural and mechanical principles are presented in reference to adult performance. A general silhouette or mould is thus conceived out of which young pianists are progressively shaped. Over the past decades, the tendency has been to guide the teacher through the method either in the learner's book, in a separate volume, or in both. Postural, mechanical and theoretical principles are introduced to the student in their *ultimate form*. For example, when the beginning pianist is expected to play with an arch-shaped hand, the method text instructs him or her to do so immediately through images or visual references to follow. The individual is then generally instructed to repeat a passage or a movement until it is fully integrated. In the process of automatizing habits and reflexes, rectifications may be suggested — mostly in terms of fingerings, position of the hands or fingers, etc. — in

order to meet the "correct" criteria. This approach will be referred to as a *prescriptive approach* or *prescriptive methodology*.

The central concern of the second approach is to identify the learner's individual differences and resources. Courses of action are then created for each student in order to both cultivate his or her resources and develop his or her skills. This is attempted not so much as an imitation of an idealised adult performance, but as a preparation for performing abilities as an adult. A concept or a movement may not, for that matter, initially be presented in its final form. It will however move toward the intended goal through constantly restructuring the concept, the movement, and ultimately, the performing task. Instead of assuming that all learners' needs are similar and adapt him or her to the method, an *intuitively oriented approach* attempts to adapt the method to the learner as a unique individual.

Most North American collections for beginners are conceived within the framework of a *prescriptive approach* from which several pianists may foster their inspiration at more advanced stages of their artistic development (see, for example, the review of Giorgy Sandor's book (1981) in Chapter 4). Others, probably as a consequence of reaching or perceiving limits for which a reliance on prescriptive principles may not provide satisfying answers, may adopt a more or less experimental approach to the instrument.

For example, the potential of a performer's intuitions has historically

been exemplified by pianists such as Chopin and Liszt who rose above the limitations of the systematic and reductive principles that were still prevailing in their time, such as the belief that one should articulate the fingers with the aim of equalizing their individual strength while maintaining the hands and arms as immobile as possible. Chopin, for instance, confirmed and explored, as no one else before him, the potential of the piano as a lyrical instrument (e.g., Gerig, 1974; Schonberg, 1987) that could imitate — through the use of romantic harmonic sequences — the style of the Italian Bel Canto. In her diary of lessons taken by her daughter from Franz Liszt, Madame Boissier (in Mach, 1973) reports the virtuoso's account on how, despite continuous public success, he once felt the need to rethink his approach to the instrument — most probably after witnessing Paganini's deeds on the violin (Ott, 1978) — by honestly and thoroughly analyzing, challenging and reorganising his own playing.

There can be little question that both Chopin's and Liszt's searches were intuitive, self-initiated and too central to their genius to be possibly inhibited by any prescriptive or categorizing system. They, of course, illustrate intuitive endeavours that were conducted by musicians who were already accomplished artists, each in their own way.

In contrast, the pedagogical and methodological literatures do not provide either illustrations, ideas or materials for stimulating a directly *intuitively oriented approach* to teaching the beginning pianist. This is the

reason why, in the process of discussing the various issues addressed in the Introduction, what will naturally emerge are (a) potential guidelines for encouraging a young learner's intuitions to be creatively and cooperatively brought into the learning process, whether systematic or otherwise, (b) thoughts on whether methodological principles for teaching music as a performing discipline can be devised to inspire intuitive responses from the learner and on how these could be applied in the early phases of piano instruction.

While this study will essentially devote itself to the introductory stages in current North American methodologies (references to European collections will however be made when appropriate), it will do so in the light of the skills one would normally expect from a highly accomplished artist. Thus, an essential part of the discussion will be a critical look at representative pedagogical collections in terms of their potential and limitations in laying the groundwork for a future fulfilling experience at the keyboard. For such an analysis to be accomplished, we need now to summarize those skills that would precisely characterize the accomplished performer — or as I will call him or her in the following paragraphs: the creative pianist.

The creative pianist

In order to transcend some apparent mechanical or artistic limits, a

pianist needs to develop a keen sense of introspection allowing him or her (a) to accurately perceive and recall the aural, tactile, and other related correlates necessary for the successful communication of his or her artistic intentions, (b) to be aware of the less reliable means and processes of organisation across performing situations. One must, for instance, be able to detect the difference between the organisational features that will invariably *flow musically* and those that could, under certain conditions, interfere with the musical continuity.

Interference may of course take any form: e.g., psychological, aural, perceptual, physical. Commenting on the latter, Ching (1946, page 18) wrote that: "the efficiency of any particular bodily movement may depend on taking precautions to prevent other movements of the body from taking place."

In the process of cultivating and trusting his or her introspective skills and imaginative powers, the creative pianist looks for solutions in order to anticipate and overcome possible challenges and interferences. Alternatives can for that matter be concerned with his or her artistic, aural, physical, spatial, emotional and visual organisations.

A performer must, for instance, deal with such aspects of a musical performance as the primary conception from a written score, the realisation and integration of the best possible means to communicate a constantly evolving artistic ideal, the reaction to the variability from one performing situation to the next, the interpretation of feedback and the necessary

adjustments to better access his or her potential.

Among others, questions such as the following become central to the learning process: How can a pianist organize himself or herself physically, mentally, aurally, etc., in order to best communicate an artistic message with the least possible interference, and the least possible effort? What organisation in space and time of the performance choreography may allow the best artistic control? What alternatives can a pianist cultivate in order to avoid interference from his or her practice and performance history (including the perception and anticipation of failure) or due to inappropriate training, etc.? How does one aurally organize a written score? How does the apparent look of the notational code relate to the aural perception and outcome? How does a pianist perceive and respond to the aural and physical feedback received from his or her own performance? etc.

With this in mind, this essay will look at some possible interferences, inhibitions, attitudes and limitations that are likely to be built in, developed, and reinforced from the first lessons of piano instruction, as a consequence of pedagogical and performing assumptions.

One may not necessarily expect method texts to provide a significant analysis of the musical learning environment. There can indeed be little doubt, that a conducive pedagogical climate is not only contingent upon what course is being used but also upon the interaction between the learner, his or her teacher, and the methodological material. Nevertheless, method texts

usually disclose commonly accepted assumptions, expectations, criteria and strategies derived from educational and theoretical sources. Furthermore, it should be noted that books are often imbued in Western culture with authority — as it appears in scholarly dissertations or through the language sometimes used in piano methods: e.g., "Sit with a straight back ..." [4] (Agay, 1987); "Don't let your feet dangle"[5] (Glover, 1989); "**RELAX!**"[6] [capital and bold in the text] (Noona & Noona, 1973); this book "is an activity book to be read *by* the teacher *with* the pupil"[7] [italics in the original text] (Kasschau, 1969).

The authority of books may further be illustrated with the following anecdote: Recently, a new student showed me one of these inexpensive and fashionable compilation books (including Bach's 'Prelude in C', arrangements of 'für Elise', and so on) her previous teacher had asked her to purchase. She was exclusively concerned with performing the pieces from this volume that contained, in her own words, "all the good songs". In order to strengthen her confidence in me, I first used some of the arrangements or compositions she was able to study. I soon needed, however, to suggest some new material. My suggestion triggered an unexpected conflict with her mother who wanted to make sure that her money had been well-spent. I explained how the volume

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[4] Book 1, page 4

[5] In *Pre-reading: Lesson,* page 4

[6] In *The Pianist,* volume 1, page 4

[7] In *Teach me to Play,* page 2.

was not planned in a progressive order and jumped from easy material to more difficult one at a rate that was not appropriate for most children. She did not trust my judgement at first and drew my attention to the book's cover where "progressive order" had been printed, then to the beginning of each piece which had been annotated with such indications as "Grade 1"; "Grade 2"; etc. This is a reflection of the clear power printed materials can have on readers especially those who are not experts in a given field.

Outline of representative North American method texts

A characteristic structure of most North American methods involves categorizing the different topics aimed at being cultivated within the beginning student. For instance, several popular collections suggest a set of different volumes to be used simultaneously (e.g., Bastien, 1985-87; Glover & Stewart, 1988-90; Olson, Bianchi & Blickenstaff, 1983; Palmer, Manus & Vick Lethco, 1981-90), each volume focusing on one of such aspects as the presentation and illustration at the piano of notational and performance concepts, mechanical proficiency, theory rudiments, repertoire collections and material for ear-training and sight-reading activities.

At a deeper level, the most common strategy approaches the earliest lessons by basically taking apart the three *actors* (namely the pianist, the instrument and the score) whose intimate and reciprocal interactions are

described by Neuhaus (1973) as one of the most fundamental characteristics of a music performance.

The following chapters will examine how each of the three actors is isolated from the others and ask how each is introduced to the student in relation to his or her early experiences in life, how each is cultivated and reinforced. Particular attention will be drawn to the possible interferences — such as doubts, blocks, obstacles that may inhibit the full cultivation and maturation of a child's initial creative and artistic resources — whose seeds may be created and nurtured from the introductory stages of instruction. Matters of approaching the interaction and integration of the main aspects involved in piano performance will be considered along the following guidelines: What to integrate? How? When? For whom?

Chapter 3: The Pianist — issues on posture

> *"Teachers found that by constantly practising exercises with the hand in a certain stereotyped position, they were able to attain a certain automatic action... which served them up to a certain point. Beyond that point only the great players progressed... because their power of imagination and inspiration conveyed itself to their physical movements as well as to their aesthetic expression: indeed their aesthetic expression was the result of their physical movements."* (Fielden, 1943, page 3)

It seems to have always been a tradition, since the very first keyboard methodologies, to deal primarily with the body in terms of a general and **still** or **static** posture when sitting in front of the instrument. Whether Diruta, Couperin, Carl Philip Emmanuel Bach, Clementi or Czerny (in Gerig, 1974), whether Marie-Jaëll (in Benoit-Heu, 1986) or Bartók & Reschofsky (1913) — all included in their pedagogical works a more or less elaborated description of postural principles they considered to be essential foundations upon which skills could be maximally developed.

Most current pedagogical series for children carry on with this practice by defining principles which they treat not only as primary concerns but also employ as relevant criteria for judging a child's early achievements. Contemporary postural *groundworks* are unquestionably much less detailed —

and may therefore appear less physically and artistically reductive[8] than the descriptions contained in early treatises, sometimes in older volumes still available (e.g., Beyer: see example in Table 3.1) or in some recent European method texts (e.g., Curie, 1985: see example in Table 3.2). In most cases, a few general guidelines are now typically organised (see example in Table 3.3) and often illustrated by drawings (e.g., Agay, 1991; Bastien, 1985[9], 1987[10]; Palmer *et al.*, 1981[11], 1988[12]) or pictures (e.g., Bartók & Reschofsky, 1913; Curie, 1985; Hervé & Pouillard, 1993; Vinck, 1964).

Despite their apparent simplicity and conciseness, postural principles — as taught, agreed upon and applied by many piano instructors — reveal a number of assumptions that deserve to be examined carefully in relation to the needs of the performer at an advanced level.

This discussion on posture will begin with a critical analysis of "the correct position" as it is typically presented in North American piano methodologies. Since I will argue that piano performance essentially involves

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[8] The adjective *reductive* will be used in this work to refer to mechanical and artistic principles that are confined within a set of rules and may in the process discourage and perhaps even inhibit a performer's imagination and experimental resources at the piano.

[9] In *Piano, Primer Level.*

[10] In *Piano for the Young Beginner, Primer A.*

[11] In *Piano, Lesson Book, Level 1A.*

[12] In *Prep Course for the Young Beginner, Lesson Book,* Level A.

TABLE 3.1

Example of an older presentation of postural principles

"Position of the Body and the Hands

The player must be seated upon a stool or chair, the height of which must be determined according to his size, and which should enable him to hold his arms in a horizontal position with the keys. He must be seated exactly in front of the middle of the keyboard, and remain at such a distance that his fingers can reach all the keys with perfect ease and without the least bodily motion. Constant movement of the body is a great fault, interfering as it does with the purity and clearness of execution, as well as with the general correct and graceful attitude of the player, and should be guarded against from the very beginning by the pupil... "

BEYER, F.: *ELEMENTARY METHOD* (early XXth century); Carl Fischer, Inc. (page 3)

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a *dynamic* posture, we will then address fundamental issues concerning the concept of balance as it may apply to the act of performing at the keyboard. This will be followed by a comparison of the premises behind *prescriptive methods* — including in particular a brief section on declarative as opposed to procedural knowledge in a skill-centred discipline — and *intuitively oriented* approaches to the question of posture at the instrument. The discussion will conclude with suggested solutions of the problems raised.

TABLE 3.2

Example of reductive postural principles in a contemporary European method text

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The following is quoted (translated from French for purpose of illustration) from three pages of postural instructions accompanied with aspects to be avoided:

"Shoulders low, fix an imaginary horizontal line in the scapula. The upper part of the body slightly leaning forward... Make sure that the pelvis remains solid (it must be the support, the centre of gravity)...

AVOID

tight shoulders, raising shoulders, arms that would not be absolutely free, elbows that open, the body leaning forward..."

CURIE, Madeleine (1985): *LE NOUVEL ENSEIGNEMENT DU PIANO, Méthode commentée.* Éditions Alphonse Leduc. (Volume 1; page 9)

"The correct position"

Every method relies upon its own presentation of the general appearance of the body, the most appropriate height of the seat, or *the* ideal position of the wrist or elbow, etc. Most advise a round-shaped hand with the frequent image of holding a ball in the palm. Almost invariably, the most

TABLE 3.3

Example of a complete set of postural instructions in a contemporary North American method text

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"How to sit at the piano:

SIT TALL! [capitalized in the text]

Lean slightly forward; Let arms hang loosely from shoulders; Elbows slightly higher than keys; Bench must face piano squarely; Knees slightly under keyboard; Feet flat on floor; Right foot may be slightly forward; You may place a book or stool under your feet if they do not reach the floor."

PALMER, Willard Á., MANUS Morton and VICK LETHCO Amanda (1981): *ALFRED'S BASIC PIANO LIBRARY*; Alfred Publishing Co. (Volume: Piano, Lesson Book, Level 1A; page 3)

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manifest and recurrent assumption consistently emphasizes that there is such a thing as *the correct universal position* which contains within itself fundamental principles that are absolutely necessary in order to act efficiently at the keyboard.

Current methodologies, whatever their pedagogy may be, seem to have reached a consensus as to what a child's postural set *should* be while sitting in front of the piano. The accepted model appears to be derived from notions about an ideal playing position for an adult — a dangerous working

assumption if one considers the potential consequences this may have on the player's future development. While it may be possible that an incompatible posture may be of little consequence given the easy repertoire, its limited choreographic space and emotional range, the effects of a reinforced *unnatural* position over a long period of time may generate problems that could become so ingrained that they may later be difficult to *identify* let alone surmount.

As an illustration, let's consider for a moment the following examples. Noona & Noona (1973) recommend to "sit tall"[13], Agay (1991) to "sit with a straight back"[14]. There is little question that these seemingly sensible and harmless suggestions may immediately encourage a feeling of discipline, concentration and focus. Beyond their simplicity, these instructions may however hide a latent source of interference which could be demonstrated through this simple experiment.

While going through this paragraph, the reader is invited to apply Noona's advice of sitting "tall" and to introspect on his or her inner physical sensations. As I do, he or she will most certainly notice a slight pulling upward and forward of the chest and by paying a closer attention, feel a slight inhibition of his or her breathing with an accompanying tension located both in the jaw and in the thumbs. While the threat described may not be experienced at the piano by every learner, let's keep in mind that we are

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[13] In *The Pianist*, volume 1, page 4.

[14] In Book 1, page 4.

dealing with children having their first formal exposure with the instrument: in most cases, they will *try hard* to do well.

What may be the serious inhibiting consequences of a cumulative reinforcement of the association of piano playing with holding one's breath, namely stiffness? In particular, how likely is it that the interference with one's flow of breathing may be experienced as messages of caution, doubts such as: *"I may miss"*, *"I may not do well"*, etc.? How much hindrance can it accumulate in terms of feedback or in terms of a successful artistic communication with all its colour and excitement subtleties? To what extent is it likely to inhibit a performer's sense of rhythm? — rhythm not to be mistaken here for *measure*: as Dalcroze (1981) distinguishes: "ne pas confondre le rythme qui est l'animateur du corps avec la mesure qui n'en est que le régulateur"[15].

We, thus, are faced here with a fundamental paradox. On the one hand we are dealing with a discipline that by its very nature involves **movement**. Neuhaus (1973) for that matter discusses: "... the nature of music, in which one is always conscious of latent movement, gesture (muscle work), a choreographic germ" (page 33). On the other hand, we have introductory piano methodologies that demand from the beginner a *passive* posture, *in front of* the instrument, *before* playing it.

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[15] "Let us not confuse rhythm with measure: rhythm animates the body processes, measure regulates them only." page 21.

It is important to note that virtually all method texts ignore any further consideration of the relationship of an individual physical organisation to their development as performers. We must ask how these very naive assumptions of correct posture can be expected to generate the necessary musical and sensory adjustments once the individual begins to move. We will therefore consider alternative postural dispositions perhaps more suitable to pacing the child's musical and pianistic development — in particular, dispositions that in the process may allow beginning children, or even for that matter, advanced performers to relate the various intuitions they may have about their body to the instrument.

Searching for a centre of balance

Physical activities such as dance, circus acrobatics, and figure skating are examples of disciplines in which movement is at the core of artistry. If one observes jugglers or artists on a trapeze — say from the eminent "Cirque du Soleil", one is immediately struck by the integration of musical components such as rhythm, swing and timing. As confirmed by a discussion with a former student of Montreal's "École Nationale de Cirque", all three aspects are fundamentally contingent upon balance — e.g., if one is balanced, one can time; if not, one cannot make decisions.

If the concept of balance constitutes a crucial feature for control in an

activity involving movement, speed, acrobatics, etc., it is also likely to be essential for a performance on a piano in which one ultimately needs (among others) to be able to (a) execute leaps across the length of the keyboard at great speed, occasionally with one hand crossing over the other, in contrary motions, with rapid alternation in texture, (b) play with varying dynamic levels of intensity over an extended period of time, (c) make rapid decisions involving small muscle changes, while attempting to communicate with an audience in the most creatively moving way. It follows that in the process of establishing a comfortable posture, it is essential to ensure that it will both contribute to the necessary energy and stability and allow the performer to move in any direction, at any speed, without losing control.

When an acrobat performing on a tight rope loses his or her balance, he or she appears to hesitate involuntarily, seems distracted or at worse experience a major interruption in the flow of his or her performance. On the other hand, if a pianist loses his or her sense of balance, *he or she does not normally fall off the bench* — unquestionably a different order of danger from that of the tight rope walker or a skier in trouble while speeding down a slope.

Given the fact that the choreographic danger in piano performance is not as clear (except perhaps to the pianist's ego), the degree of balance achieved by the pianist is certainly not obvious to the eye of the audience nor for that matter to the pianist. Should, therefore, the role of balance in piano playing

be a primary concern both to the teacher and the neophyte performer? Given the complexity of the issue, would it be better to delay the introduction of balance until more advanced stages? In other words, should we emphasize the cultivation of a beginner's sense of balance as essential to the formative stages of artistic development — and give it the kind of attention we would give it when learning how to ride a bicycle? *The key question here is whether a lack of attention to this crucial issue can be delayed without cumulatively, and possibly permanently, reinforcing inhibiting habits.*

Anyone who has experienced a loss of balance while walking, running or biking will probably recall the accompanying emotional tone that could range from anything like a simple doubt: "Am I going to hurt myself?" to feelings of helplessness, momentary panic or paralysis.

Despite the obvious comparison between piano performance and physical activity in general, the pedagogical literature does not adequately treat the interactive balancing of all the body parts in the process of maintaining equilibrium. This leads us to ask whether analogous feelings would albeit be experienced by a pianist losing balance in the act of playing:

(1) Is it possible that a pianist losing his or her balance experiences the same range of sensations and emotional responses that one would face when the *danger* is real? Or for that matter, is the threat of disorientation when the ego is at stake comparable to that of physical disequilibrium?

(2) Musically, we may ask the extent to which a state of physical disequilibrium — even momentarily — will interrupt the rhythmic flow or the expression of details (e.g., articulations), say in a passage being performed at great speed.

(3) To what extent will a player internalize these experiences while in the process developing and reinforcing them in the act of performing?

(4) This naturally leads to the question of the nature and quality of interference if we assume a pianist may be rehearsing a sense of loss of control, rather than an increase of a sense of ease, with every repetition. In other words, when a pedagogue encourages the pianist to keep repeating despite the evident lack of physical equilibrium, the consequence could be that what is really being learned is a conflict between a person's intentions and the precise and satisfying expression of these intentions — ultimately, it may lead to a misunderstanding, or for that matter a complete disregard for the pianist's physical feedback and the reality of performance which involves perpetual adjustment.

(5) To what extent could a lack of balance interfere with the bio-mechanics of postural set, gesture, breathing, accuracy of attack and release and the more aesthetic aspects of rhythmic flow, line, shape, emotive tone that are necessary to artistic communication?

(6) Finally, how fundamental is the sense of balance to that undefinable sense *of being on* that every artist seeks?

If a command of the keyboard is contingent upon a stable sense of balance, the pianist may need to first establish this stability in order to (a) reach any part of the keyboard without disturbing postural equilibrium, (b) move his or her body in any direction, at any speed, whatever the range of dynamic intensities or changes of texture involved in the work being performed.

While acknowledging that a stable sense of equilibrium is necessary, most *prescriptive methods* will generally attempt to have the body attain the appearance of sitting straight or tall without consideration whether the bio-mechanics for each individual are appropriate for the task.

Premises behind the introduction of "the correct position"

When we consider either the *prescriptive* or *intuitively oriented* approaches discussed earlier, it might visually appear that they each aim for the same postural goal. It will therefore be helpful here to clarify the distinction between the characteristic methodological principles employed by each approach.

Prescriptive Methods

To begin with, *prescriptive methods* generally proceed from specific precepts: the "do"s and "don't"s of correct posture. The authority for the correct posture is the teacher or theorist rather than the pianist's sense of comfort and balance. In effect, the message the beginner learns is that there is only one way to sit, move one's hands and fingers. The sub-text is: *"I, the teacher, know exactly what you need and my way is the best and indeed the only way!"*. While there is a lot of talk about feelings and finding one's self, there is normally very little encouragement towards mutual interaction.

This brings us to another paradox: by its very nature, a musical performance involves the carefully focused organisation of one's emotional resources and physical sensations. On the other hand, method texts tend to discourage the performer from relying upon feedback from within, but rather to accept as correct, information on physical and emotional deportment. On a more insidious level, the acceptance by pedagogues of specific criteria of universal correctness, may blunt the alertness that allows one to detect, let alone cultivate, the individual differences between budding artists.

Finally, in cognitive psychological terms, prescriptive piano methods communicate *declarative knowledge* with the implicit assumption that this will develop and reinforce *procedural knowledge*. Basically, declarative knowledge is the knowledge of facts that are describable (e.g., *one must play with the fingers in a curved position*). Procedural knowledge refers to the acquisition

of skills: a knowledge of *"how to do"* which is acquired through practice and whose processes cannot be thoroughly described (e.g., learning how to swing a tennis racket, or at a more fundamental level, learning how to walk).

There can be little question that at a high level of performance, skill is unlikely to be acquired purely through declarative knowledge. Broadbent (1989) argues that procedural knowledge "seems to be favored by tasks in which much information is presented, and in which key factors are not obvious, so that selective encoding of some aspects of the task would be unlikely to pick the key ones".

The declarative/procedural paradox is fundamental to an understanding of a highly skilled activity. However, method texts tend to emphasize declarative knowledge almost to exclusion.

Intuitively Oriented Approach

An intuitively oriented approach would not, at first, devote itself to postural appearance. Rather, it would provide the student with opportunities to explore his or her resources in such a way as to achieve a satisfactory postural dynamic.

The shift from *prescriptively* directed learning to the active participation from the pianist would be achieved without concern about the student being obliged to meet ideal criteria — as defined by an adult, but rather with respect for a continually evolving physical and emotional maturity. (Let's keep in

mind that while the physical and intellectual attributes of the pre-adolescent are preparing for maturity, the rate of development is still very dependent upon individual differences.)

In the initial stages, the process may appear more laborious than that offered by a *prescriptive methodology*. In the long-term, it might however offer a realistically richer palette of artistic and virtuosic possibilities.

It would appear from the perspective of an intuitively oriented approach that the introduction of postural criteria is counter-indicated. The question is how the postural set may be developed in the long-term with the minimum of pedagogically related side effects. This remains relevant even when postural information is minimum or non-existent. For example, Kasschau[16] (1969), Pace (1979, 1983a), Waxman[17] (1958) introduce the student to the piano by presenting short, simple, single line melodies, in the centre of the keyboard. In these cases, the consequence in the long-term may be a restricted sense of the keyboard that in conjunction with a possible unbalanced postural set could inhibit the development of keyboard fluency.

The question then boils down to what principles we might expect to derive from an *intuitively oriented approach* — principles that would ideally prove enjoyable, creatively stimulating and realistic in preparing the student for the physical demands of advanced keyboard performance.

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[16] see *Teach me to play.*

[17] see *Introductory Pageant,* book 1.

As far as physical equilibrium is concerned, the literature on motor development (e.g., Barsch, 1968) indicates that a kindergartner's sense of balance has already been well developed by the time he or she may be introduced to the piano. Furthermore, there can be little question that it is more difficult — at least in terms of large muscle groups — to regain one's balance in activities engaged in an upright-position (e.g., skipping, running, jumping). An act such as eating, drawing or writing, performed in a sitting position may be uncomfortable but do not disturb the body's equilibrium to a significant degree. One might expect then, that one would get a better sense of what is involved in balance while in motion and in the upright mobile state.

Given the fact that the piano is normally played in a sitting position, the beginning pianist may perceive the activity as one premised on a fixed balance, particularly if the concept of a static postural set, independent of context, is reinforced by the teacher as "correct". Perhaps, in an *intuitively oriented approach*, one could begin instruction in a standing and moving position, in effect intuitively responding to the music being made in the process. This would appear consistent with Barsch's view (1968) that balance "is built by a dynamic being" (page 112). Through these activities, both the learner — in terms of physical and aural judgement — and the teacher could become sensitized to such crucial formative aspects of performance as:

(a) <u>the relationship of the body as a whole to the sounds being produced:</u>

e.g., *How the body in the act of organising itself is responding to the*

music.

(b) the relationship between all parts of the body in the act of playing:

Which parts of the body are active, which are naturally responding? What actions encourage a fluid choreography? What actions encourage erratic and impulsive results?

(c) the reactive relationship between both sides of the body:

How, for example, the left arm responds or remains passive when the right arm moves; and vice-versa.

(d) the efficiency of movement:

e.g., *Which movements are both comfortable and efficient? Which movements appear to associate with a precise, rhythmic focus? Which seem associated with out of focus results? Which are felt as stiffness?*

(e) introduction to acrobatics on the keyboard:

e.g., *Leaping from one end of the keyboard to the other while maintaining rhythmic flow.*

After this introductory phase, the next stage would be to add the presence of the seat. Through these activities, an instructor may in the process (a) study how the beginning student will respond to each activity, (b) observe his or her instinctive responses, (c) discern and cultivate the movements he or she seems to intuitively bring into operation and/or feel

comfortable with, (d) observe inefficient actions. From these observations, one could conceivably lay the groundwork for a program of studies that respect individual differences and individual needs.

I recently asked an eight-year-old beginning pianist to execute physical variations on the so-called *free-fall* (free-fall designates a natural fall of the entire arm with no resistance from the muscles or the joints). Each short activity involved the hands moving off each other, spontaneously generating movements in every possible direction, through various rhythmic sequences in which the entire keyboard was used. A first, most interesting surprise was to see the transformation from the shy little girl to one eager to enter into a musical exchange with me. The only instruction given as a next step was to try again with the thumb supporting the middle fingers. The effect was again surprising. She spontaneously, without instructions, executed a "lively staccato" with an astonishing sense of rhythm and swing. I am now continuing to work through the implications of our first session — in a sense, taking off from a keyboard approach that she revealed to me through her spontaneous responses.

Summary

Most piano methodologies introduce the beginning student to the keyboard with categorical, yet loosely defined instructions on correct physical

disposition. Posture is invariably defined in terms of sitting with a fixed body and hand position *in front of the piano.* The student is rarely made aware of his or her choreographic relationship to the instrument, or for that matter to the range of postural adjustments necessary to effectively manage variation in tempo, dynamics, physical balance, movement at a distance from the keyboard centre.

Perhaps the most insidious aspect of the *one and only correct postural approach* is the underlying assumption that it is universally correct, independent of individual differences. Little or no consideration is given to the student's prior knowledge or intuitive capacity to understand his or her body as a performing instrument. By the same token, "the correct postural set" is explained in visual terms which by definition ignore the possibility of the pianist being capable of making appropriate sensory adjustments. The assumption of a universally correct posture perpetuates the notion that the student is a blank slate without a history or an ability to make accurate judgements — in effect with little or no native sense of the instrument or the music.

The above considerations regarding the beginning pianist (our first actor) do not of course address all the longer-term developmental implications for a beginning performer of a *prescriptive approach.* For example, to what extent could an approach which is locked into criteria of a prescribed postural set encourage insecurity about the authenticity of one's own resources and

abilities? By the same token, a pedagogical imperative introduced in the early stages, may "work" initially but may prove counter productive at a later stage. Indeed, one must face the distinct possibility that a procedure introduced as "correct" and reinforced as an imperative after it no longer serves its intended purpose, may actually harden into a potentially irreversible performing problem.

The following questions will perhaps best conclude this chapter: Can piano performance be taught as a natural expansion of the naturally programmed abilities developed in the early years of life (e.g., ability to balance one's body, ability to walk, ability to make accurate sensed judgements of one's movements in specific situations — for example, in moving rhythmically in response to music, or balancing one's body on the edge of a side-walk while pretending to be on top of a dangerous precipice)? Could such a conception of piano instruction produce more effective results than approaches — such as those typically advocated in North American piano methodologies — that tend to formalise, and in effect, freeze or even inhibit these natural abilities?

In chapter 4, we will focus on the relationship pianist/instrument (our second actor) and examine how it is typically introduced to the beginning pianist in *prescriptive* method texts.

Chapter 4: Relationship pianist/instrument

> *"Although norms are available on a number of motor skills, they merely tell us what the average child can do, not what he/she might be capable of doing if given the opportunity, guidance and encouragement."* (Corbin, 1980, page 37)

Roberton and Halverson define learning as "the change resulting from a circle of interaction between the child and the environment" (1984, page 3). Environments to interact with and to explore may include, for instance, physical environments (e.g., home, daycare, school yard, street), people (e.g., child's self, parents, friends, teachers) and objects (e.g., a teaspoon, toys, musical instruments). Common observation shows that in the act of exploring his or her environment, a child, without instruction, will manipulate a toy in highly imaginative ways and, similarly, will develop in the process a sensitivity to the interaction he or she is creating. A pre-schooler will, for example, learn to differentiate on his or her *jeu d'éveil* the button that plays Old McDonald from the one that imitates a dog barking. By then, he or she will have developed a highly sophisticated — and effective — repertoire of actions for generating specific emotional responses from Mummy, Daddy, siblings, and just about anyone else.

This chapter will focus on the initial formal encounter that takes place

between the beginning student and the piano — a topic that has received only the most cursory treatment in the pedagogical literature on piano performance. Representative introductory steps will first be described then critically discussed in terms of the *tasks* that are intended to establish a positive relationship between the aspiring pianist and the instrument. The analysis will include a brief discussion of the expressive potential of the piano, then continue on to a critical examination of representative methods for facilitating this relationship and their implications for the development of performance creativity. This will be followed by a discussion of the "method as authority" in North American texts.

Representative Introductory Steps

I have, so far, questioned the premise — and the implications — of methodologies that introduced, with little explanations or follow-up, fixed postural and limb positions, and no sense of relationship to the keyboard as a whole functioning entity. The instrument, itself, is normally introduced to the student in terms of its *keyboard geography*, that is, as an entity quite apart from the player or its musical functioning.

Individual method texts and work books may vary in format, but the premises, principles and pedagogical strategies employed to develop and reinforce materials are remarkably uniform. Typically, a beginning student's

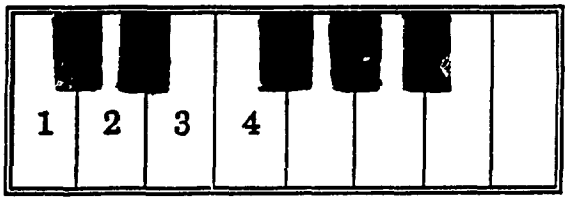
attention is first directed towards the division of the keyboard into repeated sets of 2 and 3 black keys (e.g., Agay, 1972; 1991; Kasschau, 1969; Pace, 1983a; Palmer *et al.*, 1981). In the process of exploring the extremes of the keyboard, some methods proceed by asking the student to identify and play these patterns within each octave level, either with the fingers (e.g., Bastien, 1985; Glover & Stewart, 1989; Palmer *et al.*, 1981) or with the fist (e.g., Agay, 1991; Noona & Noona, 1973). Most also provide written "fill-in" assignments in order to reinforce the student's understanding of the distribution of black note patterns (e.g., Clark & Goss, 1955; Noona & Noona, 1973; Olson *et al.*, 1983, Pace, 1983b).

Once black key patterns have been identified, methods proceed immediately to naming the white key patterns at every octave level. The student is then provided with the first pieces to be studied (e.g., Agay, 1972; 1991; Noona & Noona, 1973). Other methods avoid identifying white key patterns in the early stages and instead introduce unstaffed notational systems as an introduction to pitch reading (e.g., Bastien, 1985; Clark & Goss, 1973; Glover & Stewart, 1989; Pace, 1983a,b; Palmer *et al.*, 1981).

Whichever a method advocates depends, for the most part, on the particular approach it favours for developing pitch reading proficiency. Marienne Uszler (1984) distinguishes three commonly used systems in North America: "middle C", "multiple-key" and "intervallic" approaches. Each in its own way is considered as a definitive alternative to rote learning of skill in

pitch reading. The first provides reading material organised around the middle C on the grand staff. Both thumbs are typically placed on C: a position that will at first remain unchanged in the first few pieces learned — the only changes of position on the keyboard may involve a shift from a "five-finger-pattern" in C to "five-finger-patterns" in G and F. A "multiple-key" approach attempts to explore a wider range of tonalities and hand-placing. Each revolves around a graphic system that allows the student to play pieces before he or she learns standard notation. A drawing or other representation of the keyboard helps to identify the location of the notes on the instrument (see example below). An "intervallic" programme emphasizes the recognition of intervals from a limited number of notes.

<u>example of a graphic system:</u>



As an example: the numbers[18] indicate where to place each finger of the right hand. The beginning of a song such as Old MacDonald may then be written as follow:

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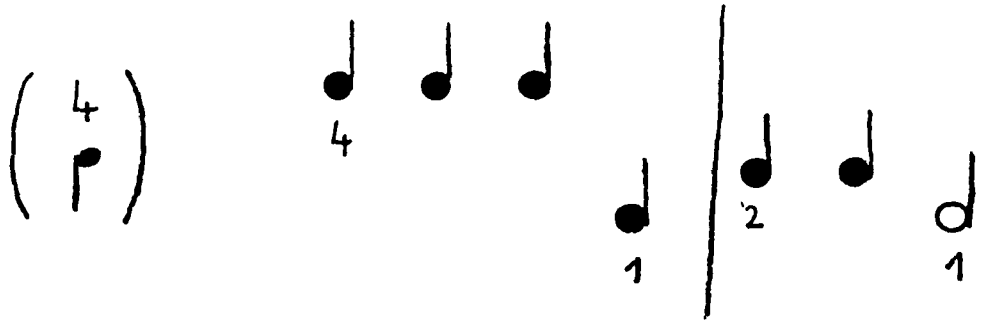
[18] *1* designates the thumb, *2* the index and so on. This convention applies to both hands.



Task presented to the beginning pianist

Whichever of these strategies a particular method may favour, it will introduce the instrument to the budding pianist by identifying various keys by their pitch names or a location indicated on a figure such as the one on page 58. Technique and performance musicianship, however, are confined to *pressing the correct key*. How it is pressed, and what, if anything musical it may be communicating is of little consequence.

The underlying rationale of pressing the right key, within a constrained sitting posture (see Chapter 3), presumably establishes a fail-safe learning situation — a situation in which one aims at minimizing the risk of mechanical error at all costs. Yet, when one considers the realities of even moderately skilled performance, where "mistakes" are expected to be incorporated with the flow of music expressively and uninterruptedly, the paradox is even more evident the higher one climbs up the skill ladder. Increasingly, the skilled pianist must learn to adjust to performing contingencies "on the run" and turn

these to creative advantage. This assumes an ability to anticipate succeeding steps in the performing sequence rapidly and unequivocally, and in the process to simultaneously interpret and respond to aural and physical feedback from the instrument.

Clearly, the pianist/piano relationship involves an order of mind-ear-body organization quite distinct from considerations of note names and their location. One must then wonder whether ignoring the realities of more advanced performance at fundamental levels, may actually inhibit the development of these essential skills.

It would appear useful then, at this point, to explore the possible implications of introductory methodologies that are both physically and artistically reductive.

In the course of nearly three centuries, since its invention by Bartolomeo Cristofori, the piano has developed into an instrument capable of a seemingly infinite range and variety of expressive possibilities. This is even more remarkable when one considers that the instrument has survived, adapted to, and flourished through virtually every change in style and aesthetic criteria from the late Baroque through the twentieth century (Gerig, 1974; Schonberg, 1987). While the imprint of its distinctive signature is most evident in the great virtuoso works of the nineteenth century, its inherent expressive versatility gives it an almost universal voice.

Given the expressive potential of the piano, it would then seem that it

offers unlimited creative opportunities to the performing artist — opportunities limited only by one's imagination and skill. There can be little doubt that most beginning pianists — of any age — are attracted to the instrument because they instinctively sense its expressive potential. One must then ask whether pedagogies supported by methodological criteria that downplay or discourage precisely these qualities of exchange between developing performer and instrument are useful or a hindrance in the long term. It is for this reason that I will examine performance creativity as an alternative approach that proceeds in a disciplined way, from the expectations of the beginning student.

Performance creativity aims at introducing the relationship between the student and the piano, in terms of his or her role as a performer: a role in which understanding, musical imagination and choreographic organization are focused on making music from the first contact with the instrument.

Performance creativity[19]

Often associated with problem solving, creativity is typically defined as a process through which one brings out something new (Logan & Logan, 1971). The novelty may not necessarily be understood in terms of a new product but

[19] The term performance creativity — with the meaning with which it is used in this work — was introduced by Philip Cohen (e.g., P. Cohen, 1992).

rather in terms of an imaginative manner of using an object, piece of information, etc. (Weisberg, 1986). Gestalt psychologists defined the process as an action rooted in imagination rather than reason or logic (in Taylor, 1975). Freud (in Taylor, 1975), for that matter, conceived the process as originating from within a person rather than from the outside. More specifically, Hickok and Smith (1974) defined creativity as a search into one's past experience toward the creation of a new product, either new to the world or simply new to the individual.

From the perspective of creativity as a process through which an individual comes forth with something new by "rearranging existing knowledge" (Logan & Logan, 1971), a pianist bringing fresh insights to a given text, through an imaginative exploration of the resources of the instrument, is performing creatively. This view contrasts sharply with the prevailing North American emphasis on the rudiments of theory — i.e., identification of notes, time values, intervals, etc. — and their assumed creative application in brief compositions.

If we assume that performance creativity is contingent upon an intimately interwoven triadic relationship between performer, piano and text, we can immediately see how, even the slightest modification of the choreographic aspect, will affect the interpretation of the text, and the "interpreter's" perception of the direction it is going in. The creatively oriented performer develops the ability to respond positively to any contingency during

the act of performing. As the jazz pianist Miles Davis said: "Do not fear mistakes. There are none" (quoted in Nachmanovitch, 1990, page 88). To the creative performer, there are indeed *no mistakes*, whether in pitch, rhythm, tone control, phrasing, articulation, or any other dimension of musical communication. Ideally, the creative pianist turns all unpredicted variables into creative advantage.

Performance creativity begins with an awareness of one's own body as a creative entity — an instrument — in an active exchange with the piano. On this issue, an anecdotal example from the pianist Harold Bauer's short autobiographical article (1943) may be cited. In it, Bauer summarizes the process through which he raised his pianistic skills. The process was circumstantially inspired by witnessing a dancer "using gestures that seemed to illustrate all the dynamic variations of the musical phrase... Every sound seemed to be translated into terms of motion". Reversing the process, Bauer "started by making angular and ridiculous gestures at the piano in a way no human being had ever done before. Any other pianist seeing me practice might have doubted my sanity. This way of practising, first dictated by necessity, later on became a habit of both mind and muscle from which I never subsequently departed".

An attitude of creative alertness is particularly important in the cultivation of effective habits of practice. Practice strategies that are

somatically based and musically imaginative have indeed the three fold advantage of avoiding the constraints of "the correct approach", while preparing the student for the realities of musical performance through a satisfying self-regulated discipline.

From the perspective of performance creativity as a self-regulating discipline, I will now critically examine the guiding criteria employed by North American pedagogical theorists in defining and systematizing the creative, technical and repertoire activities of the beginning student.

Creative activities: I have noted previously that North American method theorists and designers tend to confine "creative activities" for the beginning pianist to the "invention" of simple formula pieces. Typically, Bastien[20] (1985) suggests one "make-up some pieces using sets of black keys. (a) Make up a piece using the sets of 2 black keys. (b) Make up a piece using the sets of 3 black keys. Your pieces could be about growling lions, a cat high in a tree, or whatever you like". Clark & Goss's (see "Time to begin", 1973): to "Make some pieces of your own ... using thirds. Your pieces could be about whatever you like..."[21]. Olson *et al.*, (1983): to "Play SHORT SHORT LONG [sounds] with each hand, quietly (***p***). Now play SHORT SHORT LONG again, this time

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[20] In *Theory, Primer Level* (1985), page 3.

[21] In *The Music Tree; Time to begin* (1955), page 39.

loudly (*f*). Keep a good hand position. Let your arms and wrists feel free."[22]

Almost without exception, then, the primary goal of these "creative activities" is to reinforce the rudiments of music theory. While, in itself this can be a valuable exercise in terms of its intentions, the fact that it does not adequately address the relationship of the pianist to the keyboard could, in the long term, inhibit performance as a creative experience.

The repertoire: The repertoire selected for the first months (sometimes over one year) further conceals the piano expressive possibilities through the limited portion of the keyboard it requires (two or three octave range at the most during the first years), as well as through a widely used single line material it usually divides between the two hands.

Historically, the first great poet and creative master of piano touch was Chopin (in Schonberg, 1987). Pedagogical thoughts on the elusive production of touch was not then what it were to become with theorists such as Matthay (1926) or Ching (1946). Attempts were made in the early XXth century to analyze the processes involved in the "act of touch" (Matthay, 1926). Detailed descriptions of what muscles, joints or organs were to operate were accumulated.

These, for the most part, weighty tomes devoted a great deal of space to detailed anatomical descriptions of muscles and joints involved in playing the

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[22] In *Music Pathways: Piano Discoveries,* volume A, page 10.

piano. Each had a more or less elaborated theory on how touch was naturally accomplished — generally a variation on the weight, relaxation principles sketched by Deppe and articulated in exhaustive detail by Matthay and Breithaupt. The more rigorously scientific experiments of Fielden, Ortmann and Ching signalled a partial return to disciplined finger and arm action (see Gerig, 1974).

In most cases, a theory on touch was presented with illustrations on one note only or possibly on a short single-line melodic sequence. The paradox lies in the fact that colouring an apparently simple monodic line can be extremely difficult. While Matthay (1926) believed tone quality and quantity to be separable dimensions of touch, among others, Ching (1946), Ortman and Schultz (in Gerig, 1974) argued that they were inseparable — a view generally held today.

Pianistic colouring, for the most part involves an imaginative handling of the relationship between several voices (e.g., a melody with a supporting harmony, or the underlying harmonic structure of a contrapuntal passage).

While a beginner can hardly be said to come equipped with the skills necessary to achieve subtle colouring or "shadings" (to borrow Josef Hoffman's terminology, 1920 / 1976), the ensemble repertoire can help sensitize the students' hearing to these qualities.

Most methods include duets to be played with the teacher or another student. One of the more interesting for our purposes is "*Méthode créative*"

(Royer & Bussières-Lessard, no date) which is based on rhythmically varied and harmonically rich accompaniments that make for stimulating ensemble music. This is not, unfortunately, the case with methods designed around principles that relate more to orderly sequencing than to musical inspiration.

The technique: Whatever the technical principles espoused in a particular method — e.g., the *weight* approach (e.g., Pace, 1983a; Palmer *et al.*, 1981), finger articulation of various European methods (e.g., Bartók & Reschofsky, 1913; Descaves, 1953; Hervé & Pouillard, 1993; Raynaud-Zurfluh, 1960; Vinck, 1964), once a basic mechanical action has been defined, it will be reinforced with little or no elaboration apart from legato and staccato. The basic technique remains the primary reference point and criterion for all postural and mechanical action.

At this point, the question that arises is whether a developing student may so equate sound quality and variety with pre-ordained physical actions. Rather than free him or her for unhindered music making, the un-reflected physical action may actually inhibit the exercise of musical judgement and imagination. This point is not trivial and has been made, in one form or another by thinking musicians since the advent of the earliest systems of technical training (e.g., "C'est l'âme qui doit jouer, non pas un oiseau bien

dressé"[23] — C.P.E. Bach; 1753, 1762 / 1979; page 189). One might argue, for example, that an automated action, by definition dictates the rhythm, quality of sound, and phrase shape, rather than being guided by spontaneous musical intention — or, at the very least, be in sympathetic relationship with these intentions.

Giorgy Sandor (1981), in his book: "*On Piano Playing: motion, sound and expression*" illustrates the extreme application of pre-ordained technique. He categorizes piano technique into five basic movements: (1) "free fall"; (2) "five fingers, scales and arpeggios"; (3) "rotation"; (4) "Staccato"; (5) "Thrust". He elaborates on how a musical score dictates one of the 5 basic motions to be used: "All of these basic technical patterns are recognizable and indicated within the written score. The patterns of musical notation indicate unequivocally the basic formula or formulas to be applied. Indeed, any sequence of notes, phrasing indication, or touch forms (legato, staccato, portato, and tenuto) can and must be matched with its own technical equivalent. Once we have identified the type of motions to be used (after the indications in the score), our only concern is its proper execution" (1981, page 115). This illustrates a process in which, neither individual differences nor imaginative and artistic resources are called in making physical decisions. An unyielding, categorized and systematic translation of the visual aspect of a score into

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[23] "One must play with the soul, not like a trained bird" — from *Essai sur la Vraie Manière de Jouer des Instruments à Clavier*, Carl Philip Emmanuel Bach; (work first published in 1753 and 1762) published by J.C. Lattès in 1979.

specific movements could conceivably place a pianist in a technical *strait-jacket* that would effectively insulate the fingers from "hearing", let alone creating fresh ideas.

Again, the distinction between a priori decision making and aurally sensitive attention to the flow of music must always be made. This does not preclude — indeed it demands — a knowledge of how mind, ear and muscle interact in the making of music.

The method text as the authority

The use of mechanical aids to improve performing skills are generally avoided by contemporary method designers — unless we include the recent proliferation of computer-assisted methods. However, we may ask whether the lack of trust for the individual's native judgement implicit in current methodologies identifies these as intellectual successors to the chiroplast[24] and similar devices. Future studies might examine the possible consequences

[24] The Chiroplast, a mechanical device invented by Johann Bernhard Logier in 1814, consisted of two parallel rails attached to the instrument. The pianist's hands were inserted through the rails and thereby prevented from perpendicular movements. The device also included "Finger-Guides": two mobile plates through which each finger could be inserted and obliged to meet the correct position and action. "By an early and frequent use of this apparatus, it is evident that the learner must become habituated to a proper position of the body, and a graceful movement of the arms; and the fingers must acquire an independent motion and equality of power rarely accomplished by other means" (Logier, quotation and sources from Gerig, 1974, page 128).

of restricted involvement on the part of students — whether physical or intellectual — on stage confidence and anxiety, particularly when the restriction discourages active hearing, sense judgement and creative play[25] — precisely those factors essential to a sense of ease in performance.

It is important to emphasize here that many method designers believe they are encouraging the participation of the student in the developmental process. Even the well-meaning Suzuki, perhaps the most celebrated method designer for children of our century, falls into the trap. In his "*Piano Method*", Suzuki (1978) asks young players to listen daily to recordings by professional artists playing the repertoire they are practising. While the suggestion seems innocent enough, Suzuki continues: "the children will try their best to play as well as the performer on the recording. By this method the child will grow into a person with fine musical sense". Apart from excluding all possibilities, other than the "musical sense" assumed in the recording, the dictum ignores the fact that recordings are, for the most part, artifacts, produced, edited and manufactured in a studio. The implicit message here is that one's own trials, errors, and judgements are valid only insofar as they meet the criteria of correctness defined by one (or at most a few) performers in the repertoire that has hitherto flourished precisely because of the creative ingenuity of

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[25] On the accompanying text of "*Play*", a Compact Disk featuring Bobby McFerrin and Chick Corea, the former notes that "most musicians today have forgotten that and disregard "play" as the essential element in all honest music playing". Recording distributed by Blue Note, CDP 7.95477.2, 1992.

generations of artists.

Add to this the forcing of technique that is inevitable with the motivated student, and the frustration that will predictably follow, and we get the classic scenario of the dysfunctional performer.

In this regard, it is interesting to note how little is left to the teacher's imagination by several North American methods proud of their comprehensiveness. One may note, for instance, the following guide suggested in a telegraphic manner for the *Piano Quarterly* reviews (1982-1985): "How much help/ background/ experience does teacher need to use method?"[26]

Nothing considered important is left to chance — even the most rudimentary details of notation are explained to the teacher as to a beginner making it clear that: (a) anyone — even a non-musician can teach the piano with *this method*, therefore, (b) the ultimate authority is the method, and therefore, (c) the teacher's responsibility is confined to presenting the instructional sequence as given, and making sure that it is followed precisely. This is clearly illustrated in the following examples (capital letters and bold print are reproduced as in the original).

(a) Glover and Stewart's series provide easy assignments in the "theory" book at the end of which solutions are appended, even for such assignments as "Trace these TREBLE CLEF signs, then draw three

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[26] In "The American Beginning Piano Method, Part 3: Forword, Checklist", *The Piano Quarterly*, **122**, Summer 1983, 15-33.

more"[27].

(b) In his teaching guide, Bastien (1988) includes a basic theory outline in which he provides definitions that are ready to be restated to the student: e.g., "An interval is the pitch relation or distance between two notes. The various types of intervals are: Major, minor, perfect, augmented, diminished" (page 376). Agay's guide (1981) contains a similar section.

(c) At the top of each page of the "Solo book", Palmer *et al.*, for instance, indicates: "Use after HAND-BELLS. PREP COURSE Lesson Book A (pages 14-15)"[28].

(d) Richter adds instructions or advice such as "Use rhythm indicated in the duets. Give the KEY location and have the child play by Rote, using any finger of R.H.[29]".

(e) Through the language used in several cases, a method writer defines, in an adult language, a concept to be transmitted to a child. For instance, Kasschau writes: "What is a **PHRASE?** It is a group of MEASURES that express a complete musical thought".

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[27] In *Theory Book, Primer* (1988), page 7.

[28] In *Prep-Course for the Young Beginner, Solo Book,* Level A" (1989), Page 4.

[29] In *Pre-school* and *Kindergarten* Book (1954), page 7.

(f) Glover & Stewart write: "ALWAYS practice SLOWLY to play the correct fingering, notes, rhythm and expression as you begin learning the piece. The speed may then be gradually increased. FOLLOW THESE DIRECTIONS FOR EACH PIECE IN THIS BOOK![30]

(g) Noona & Noona instruct: "Technic: (1) Drop the starting fingers gently into the keys (2) keep a natural, rounded shape to the hands (3) Don't let the first joint of your fingers "cave-in" (4) Notice that the thumbs play on the side edges of the thumbnails (5) The wrist lifts the fingers from the keys."[31]

It is difficult, then, to avoid the conclusion that the methodological premise gives comfort to uninformed, uninspired teachers who in turn, communicate an uninformed, uninspired vision of music to beginning students. The creative, imaginative and empathetic teacher must either capitulate to mediocrity or "cheat" on the method.

One can, of course, excuse the interminable emphasis on self-evident rudiments on the grounds that everyone needs to be reminded of essential first steps — however, these may be interpreted. Where the issue becomes ethically suspect is in the reduction of equally fundamental performance issues such as posture, fingering, pedalling and phrasing to *recipes* that seem to have no other

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[30] In *Lessons*, Level 1, page 9.

[31] In *The Pianist*, volume 1, page 19.

purpose than to relieve the teacher of musical responsibility, and the student of the responsibility of testing waters.

When one examines student manuals (see examples cited page 71-72), the role of the teacher as monitor, rather than wise councillor, becomes even more apparent. These representative North American method texts, workbooks and teacher's manuals establish through their focus, sequencing of materials, choice of instructional language and methodological premises a learning climate where the teacher-student relationship is reduced to deference to higher authority. The method designer, aiming at the lowest common denominator, provides all the answers. The casualty is the vital interplay, that is: the very spirit of music making.

Since, as we will see in the following chapter, most North American method texts are structured around the introduction of rudimentary notational concepts, we will now turn to the third actor of our triad — that is, the score — and study how it is presented by the authority (i.e., the method) to the beginning pianist.

Chapter 5: The Score — Reading of Musical Symbols

> *"In traditional ways of teaching kids to play the piano, the focus in the beginning is usually on what's in the score. So there's a lot of emphasis on learning to count and to play "in time", naming pitches, and getting them off the score on to the keyboard. But then we despair as beginning students play rigidly, almost doggedly - with every beat marked, every downbeat doubly marked. At this point we tell the student that he or she needs to play "more musically", to "put in phrasing", or even to "play with feeling"...* (Bamberger, 1991, page 262)

Bamberger's comment that performance does not follow naturally out of counting and naming pitches leads us to the third fundamental element in a musical performance: the score. Essentially introduced in terms of standard notation and basic theoretical rudiments, it is treated as the core aspect around which most North American piano methodologies are organised. A close examination of currently popular curricula (e.g., Agay, 1991; Bastien, 1985-1987; Clark & Goss, 1973; Glover & Stewart, 1988-1990; Palmer *et al.*, 1981-1990) indeed reveals the commitment these method texts have to emphasizing the primacy of reading basic musical symbols and rudiments over performing applications.

In this chapter, the following issues will be discussed in the process of critically analyzing current methodological introductions to the reading of the

musical score:

(1) What is the function of musical notation? What does it refer to?

(2) What may be the possible limits of standard notation? How may we prepare a student to read and perform a score beyond these limits?

(3) How do pedagogical strategies relate notation and theory to the individual needs of a student?

(4) Are musical concepts totally new to the beginning pianist?

The Nature and Function of Musical Notation

By definition, a written system is a code shared by a group of individuals to symbolically represent actions, perceptions, feelings, and so on. A given code symbolises a language thus allowing to remember or transmit to others some events, whether experienced mentally, aurally or otherwise.

The purpose of a notational system appears therefore to be two-fold: (a) to provide a means for transcribing as much information as possible through commonly accepted symbols, (b) to allow a reader to access as many characteristics as possible of a codified event. The major complexity — but also the wealth — of any notational code inheres in the fact that beyond being a symbolic system, it refers to a language, that in turn (as Piaget reminds us — in D. Cohen, 1992), is a symbolic translation of experienced and internalized actions or events.

Two levels must therefore be kept in mind:

(1) from notation to language (refers to convergent decisions):

What does each symbol stand for? For instance, the symbol  *alludes to the division of a quarter-note into two equal events.*

(2) from language to meaning (may involve divergent decisions):

What does the decrypted symbol refer to? For instance, the same symbol  *will be treated quite differently in the opening lassan of Franz Liszt's Second Hungarian Rhapsody than in the friska of the same piece. It may also be understood and performed distinctively (while presumably still retaining a relative time distinction with a quarter-note) whether interpreted by Cortot*[32] *or by Cherkassky*[33].

In addition to being an unspoken way of communicating, the musical language can be approached as sharing the same symbolic properties as any cultural system. Thus, musical notation does not only refer to a pitch name, its location, its length, its volume, and so on, but also, to an action executed on an instrument or a concept in one's head. For example, the expressive, singing and warm opening section of the previously mentioned Liszt's rhapsody requires a physical organisation that would not be appropriate for performing

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[32] Reference: *Alfred Cortot plays Liszt;* Pearl, GEMM CD 9396.

[33] Reference: *Liszt, Stravinsky by Shura Cherkassky;* Nimbus Records, NI 5045.

the subsequent brilliant and exciting bravura passages. Furthermore, every pianist may need to make specific choreographic decisions — not only according to his or her physiological differences but also with respect to his or her past performance history, practice habits, etc. — for transforming each and every symbol from the score into an artistically organised mass of sounds.

North American methodologies tend however to confine the interpretation of the musical code to the "convergent" level of reading. In the process, the creative and active aspects underlying the notation suffers from a literal, intellectual and redundant application (as I will illustrate later in this chapter) which is presented and reinforced throughout most pedagogical programmes.

The emphasis on convergent understanding of the score can further be seen in the conventional pedagogical division between *technique* and *interpretation*. By its nature, this division involves a chronological attention to music symbols according to some prescribed priorities. Technique, by this definition, means playing the correct notes in correct time (viz. Bamberger, 1991). Some physical adjustments may be suggested (mostly in terms of hand position or fingering) on the assumption that these assure a clean rendition of the score. If, as Bamberger says, the "students play rigidly" and if the teacher must resort to ammunition to "play more musically, to put in phrasing", or "to play with feeling", then we must conclude that what ever "technique" may mean, it does not apply to an expressive and fluid performance of the music.

On this issue, Neuhaus (1973) points out that "the main error made by the majority of pedagogues, 'methodologists in art' is that they understand only the intellectual aspect of artistic activity, or rather the process of reasoning which is part of it, and their reasoning and intellectual advice is aimed at influencing that side alone, while completely forgetting the other side, this inconvenient X, which they simply disregard, not knowing what to do with it" (page 24).

One could infer that a performer/pedagogue's relationship to the notated score can be so integrated that he or she may automatically translate the symbols into a keyboard event without being fully cognizant of what the symbol really implies. Citing the example of rhythm, Bamberger (1991) describes how "as adults influenced by the conventions of musical notation and other external descriptions of events in time and motion, we have become entirely inattentive to our continuous body motions in making the rhythm [...] We thus represent to ourselves as "the rhythm" only the separate sounds that result from our continuous actions, no longer noticing the continuousness of our performance" (page 48).

Now, if we step back a moment and compare the performance of two individuals singing back a song previously heard — say on radio — we immediately notice that both performances differ from the original. One may emphasize some lyrics, the other slows down here or there and perhaps slightly modifies the melody and the rhythm. In other words, each singer may have

perceived a specific characteristic of the song which he or she interprets in his or her own way. Similarly, when a young child attempts to reproduce bits of lyrics from a given song or manages to follow a certain amount of rhythmic and melodic consistency (depending upon his or her developmental stage — Gardner, 1982), one may expect the perception — therefore the performance of the song to vary across individuals (see summary of Bamberger's study on "multiple hearing" later in this chapter). If we also notice the spontaneous response of children (dancing or skipping) to music, we can see how music, as an aural tradition (though only minimally transmitted as such in instrumental instruction) can provide a unique source of individual fulfilment.

The question we must therefore ask is whether a heavy reliance on the convergent understanding of notation may not, in the process, inhibit the nurturing of a young musician's unique perceptions and in effect, interfere with the possibility of individual fulfilment in and through the performing activity.

The translation of the score into an artistic instrumental performance will of course be contingent upon (1) guiding a student to immediately establish a living relationship between the notation and his or her emerging understanding of the music, (2) laying the groundwork for making musically relevant decisions, (3) encouraging a learning process that — from the first contact with the instrument — emphasizes aural judgements or, in other words, an aural and active experience with the score.

This implies to define the nature and function of a notational system (see the above) which basically is to introduce one to the music and act as reminder, then, to study the misunderstanding that is inherent in unrealistic pedagogical strategies that ignore the fundamental purpose of notation. This latter point will now be discussed by first acknowledging some possible limits or interferences that are built in the musical score as a result of notational conventions then, by analyzing the limited understanding of notation — understanding which is likely to be derived from inappropriate pedagogical approaches.

Intrinsic limitations of musical notation

A notational system, by its nature, can only suggest a sound event — hence the generally accepted view that no matter how precise the performance, it is still an interpretation. This is compounded by the fact that the notation of music is not intended to supply information in the usual sense but to suggest an experience.

At a more rudimentary level, sources of interference may be built in the visual guide provided by the score. Conventions in writing music are indeed confined within a two-dimensional code. One fundamental dimension is however omitted, that is the pianist's organisation in the performing space. For example, while the notational symbols evolve from left to right on the staff,

the performance normally involves movements in any direction. Similarly, a melody accompanied by chords has a vertical look while the performance ideally aims at a beautiful horizontal line.

Pedagogical strategies and the interpretation of musical notation

In the following paragraphs, we will look at representative introductions to basic musical symbols and concepts and discuss how these primarily present the score as a source of visual and verbal information rather than a pathway toward an aural, aesthetic and sensed experience of the music. In other words, we will see how contemporary North American method texts emphasize the reading of the musical score at the convergent level of understanding outlined earlier. In the process, we will also examine how information — as presented to the beginning musician — may limit one's apprehension of the notational system by confining the reading to a reliance on the visual information provided by the musical text.

Theoretical concepts are normally introduced in the core volume of a keyboard methodology while written assignments are confined to an accompanying workbook (e.g., Bastien, 1985-87; Glover & Stewart, 1988-90; Noona & Noona, 1973; Pace, 1983b; Palmer *et al.*, 1981-90). Typically, the introductory materials will include rudimentary notational symbols and

"interval[34] designation". These are often illustrated through original compositions or through simplified arrangements of familiar tunes.

For purposes of further discussion, I will, at this stage, quote several definitions and performing implications advocated for basic musical symbols and concepts. I have selected from various representative methodologies, analogous concepts which I divided into admittedly simplified categories normally defined as legato, staccato, rhythm, and the physiological experience of an accompanying movement generally described as the *lifting of the wrist at the end of a phrase slur.* In compiling these examples, I have attended to (a) the consistency of patterning from one text to the next (i.e., the uniformity of materials), (b) the prevalence of redundant description within a given methodology, (c) the relevance of description to the context and (d) the relevance of the descriptive language to the performing act (for example: is the language literal and theoretical, or is it active?).

Legato Playing:

(a) *"Legato means to play smoothly, connecting the tones. To play legato, one finger lifts when another finger plays the next note".* (Bastien, 1985, *Piano, Primer Level*, page 16)

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[34] An interval indicates the relative distance between two tones. Intervals are later combined to form chords.

(b) *"Legato means to play smoothly. Connect the tones [...] A slur is a curved line over or under a group of notes. It means to play legato".* (Glover & Stewart, 1988, *Lessons, Primer*, page 22)

(c) *"A slur is a curved line over or under a group of notes. The slur tells us to play Legato, which means to play smooth and connected."* (Glover & Stewart, 1988, *Theory, Primer*, page 26)

(d) *"Slur: it means to play legato [...] Legato = smooth and connected."* (Glover & Stewart, 1988, *Technic, Primer*, page 12)

(e) *"A slur is a curved line placed over or under a group of notes. The slur shows that these notes belong together. Notes within a slur should be played legato. Legato playing is smooth and connected".* (Noona & Noona, 1973, *The Pianist*, volume 1, page 17)

(f) *"Legato: smooth and connected".* (Noona & Noona, 1973, *The Performer*, volume 1, page 4)

(g) *"Legato means smoothly connected. To play legato correctly, one finger must come up as another goes down, like the ends of a see-saw".* (Palmer *et al.*, 1981, *Piano, Lesson Book 1A*, page 35)

Staccato Playing:

(h) *"Staccato means to play short, separating the tones [...] To play staccato, let the key immediately after playing."* (Bastien, 1985, in both *Piano, Primer Level*,

page 56; and *Theory, Level 1*, page 8)

(i) *"Staccato notes have a dot over or under them. Play staccato notes short and separated."* (Bastien, 1985, in both *Piano, Level 1*, page 12 and *Theory, Primer Level*, page 37)

(j) *"Staccato accompaniment: Play the melody clearly. Play the staccato notes lightly for the correct balance. Say "up-up" for the staccato notes".* (Bastien, 1985, *Piano, Level 1*, page 15)

(k) *"Staccato: a dot placed over or under a note means to play it in a short, detached manner. Staccato is the opposite of legato".* (Noona & Noona, 1973, *The Pianist*, volume 1, page 26)

(l) *"Staccato: play in a short, detached manner".* (Noona & Noona, 1973, *The Performer*, volume 1, page 11)

(m) *"Dots over or under notes shorten their sound. When you shorten sounds this way, you play staccato".* (Olson *et al.*, 1983, *Piano Discoveries*, volume A, page 59)

(n) *"Staccato means separated or detached. Staccato is the opposite of legato. To play staccato, release the key the instant you play it".* (Palmer *et al.*, 1981, *Piano, Lesson Book*, Level 1A, page 58)

Rhythm:

(p) *"Music has a pattern of short and long tones. The combination of these tones written in notes is called rhythm".* (Bastien, 1985, *Piano, Primer Level*, page 8)

(q) *"Rhythm is created when you play long and short tones with a steady beat. All music has rhythm. Different kinds of notes are used to show which tones are long and which tones are short. The length of a tone is measured by counting even, steady beats."* (Glover & Stewart, 1989, *Pre-reading*, page 9; and 1988, *Lessons, Primer*, page 7)

Lifting of the wrist at the end of a slur sign:

(r) *" Lift your hand at the end of each slur with an "up wrist" motion. Lift on count 3."* (Bastien, 1986, *Technic, Primer Level*, page 10)

(s) *"Observe the ties. Lift your hand at the end of each slur on count 4".* (Bastien, 1986, *Technic, Primer Level*, page 11)

(t) *"A phrase is a musical thought or sentence usually played legato. Lift the hand gently at the end of a phrase, making a small break in the sound without interrupting the rhythm."* (Glover & Stewart, 1988, *Lessons, Primer*, page 22)

(u) *"When you begin a piece, raise the wrist slightly over the beginning note and gently drop the finger into the key [...] When leaving the keys let the wrist roll*

forward to lift fingers out". (Noona & Noona, 1973, *The Pianist*, volume 1, page 15)

(v) *"Drop the finger into the slur so that the first note is slightly stressed. The last note of the slur is slightly softened and the wrist lifts the finger out of the key".* (Noona & Noona, 1973, *The Pianist*, Volume 1, page 17)

From the perspective of a developmental process in which the first imprints are unquestionably fundamental — especially in the case of prescriptive introductions (see examples a-g-h-j-n-r-s-t-u-v), it is necessary to analyze and question these definitions and their performing implications in an attempt to establishing a living relationship between the beginning musician and the music.

First of all, in a discipline which by its nature is aural, tactile and metaphorical, and in which all the information — from the first contact with the instrument and over several years — has been verbal, visual and redundantly repeated, one can expect that as a matter of course, conflicts may be reinforced between one's musical/instinctual sense and one's training (for example: choreographic reflexes reinforced as a response to staccato or slur signs[35]).

As an illustration, physical directions such as the systematic lifting of

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[35] See the discussion of "encoding specificity" (1971) in Chapter 2.

the wrist at the end of each phrase slur (examples r-s-v) may send a misleading message. It communicates the assumption that every single phrase in every single piece of music involves the lifting of the wrist which, while convenient, will communicate to the performer and to the audience a sameness comparable to a metrically blunt reading of a poem. As a consequence, the pianist's imagination — let alone, the question of context (speed, character, need of variations, tone, etc.) are not considered or at best relegated to secondary importance.

This may further be illustrated with the connection between legato and phrase slur (examples b-c-d-e-t). As opposed to these simplified and reductive descriptions, a phrase slur indicates a meaningful unit comparable to a sentence in which a wide variety of articulations (from very detached to highly sustained) are possible. Determining factors in a phrase may, for that matter, have to do with its tonal organisation, its rhythmic structure, its tempo, its character, and so on. As a result, the redundant equation of slur with legato appears misleading and, in effect, could be compared with the reading of a text in which articulations (i.e., the relief resulting from consonances, vowels and rhythmic accents) would be removed.

Besides that, the reinforcement of one (and only one) mechanical means to achieve a legato effect (examples a to g) is reductive in that it ignores the various degrees of connection a pianist can achieve. A legato may, as a matter of fact, be perceived by the audience even when the performer is not physically

connecting the keys. The illusion of a legato can, for instance, result from a subtle use of the damper pedal, a careful timing of the relationship between the melody and its supporting harmonies, or, at fast speed, from ingenious combinations of articulations. In other words, the artist can toy with the aural senses of the audience as the painter can "manipulate" the viewer's visual perception.

As an example, I recall observing Renoir's painting "*Girls at the Piano*" at the Art Institute of Chicago. In this work, two girls are facing a piano with a score on its stand. By getting closer to the painting, I realised that what I first thought to be an amazing reproduction of a hand-written musical score, was only a series of black lines of varied thickness and intensities. My amazement was further excited when I saw a postcard of the masterpiece. The adjustment my eyes were performing in front of the original work was no longer working with the postcard, even when stepping back. I could only notice, then, the means through which the visual illusion had been performed.

The presentation of staccato is another example of reductive and misleading principles that are presented outside of musical and performing context (examples h to n). Staccato does not, indeed, only refer to a succession of detached tones. Each sound, in effect, moves toward the next ones or toward a rest, thus forming a unit. The common association of staccato playing with vertical movement is therefore, by its simplified nature, fundamentally in conflict with the concept which may include any effect

ranging from portato to staccatissimo.

Finally, if we consider the two representative definitions of *rhythm* (examples p-q), we must note the fundamental difference (whatever the phrasing chosen for defining the concept) between a definition — essentially presenting rhythm as mechanical and as involving calling out numbers — and the etymological roots of the word "rhythm" which comes from a Greek word that means 'stream'[36]. Ayto (1990) wrote, rhythm "goes back ultimately to Greek *rhutmós*. This originally meant 'recurring motion', and was related to the verb *rhein* 'flow'". In other words, rhythm refers to a living flow, that is to say, a continuous movement which by nature, cannot be sectioned into mechanical segments — hence the conflict between steady beat, counting, mechanical performance and the idea of the rhythm of a living organism.

Glover and Stewart (example q), in effect, do not only provide misleading information on the nature of the concept, but also seem confused with the terminology — in this case with *rhythm* as opposed to *meter*. Meter has to do with measurement and with regularity within the system. Glover and Stewart, as many do, explicitly confuse the measurement of time values with the experience which is rhythm (or again movement). A similar confusion may be noted (this time between *sound* and *pitch*) in Clark and Goss teaching guide (1973) in which they emphasize that "from the very first lesson", the student should "discover that [...] music exists in *sound* and for every sound there is

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[36] *Etymological Dictionary of the English Language;* Oxford University Press.

a sign" (page 4). A pitch refers to the relative frequency of a tone and indeed can be symbolically represented on a score. However, a sound not only refers to a pitch but also to all its acoustic and expressive properties: a microcosm that notation may only suggest and that may considerably vary across individuals and performing contexts.

In summary, through the provision of verbal and visual information rather than a sensed experience, the presentation of notational rudiments reinforce the assumption that the beginning student is a blank slate, devoid of any musical germ worth to be identified and cultivated. The question we must ask, however, is whether such a germ does exist for an intuitively-oriented approach to be conceivable.

The individual child's musical understanding prior to formal training

When we consider that we live in an environment literally infused by a perpetual mix of pitches, timbres, rhythmic and dynamic variations (some organised, some not), it is interesting that North American music educators have opted for pedagogical tools that are essentially visual and conceptual rather than draw upon the rich fund of available aural and sensory references.

There can be little doubt that during the first years of their lives, children become aware of, and internalize, in varying degrees, the building blocks of musical organisation — i.e., the association between aural and

emotive experiences with meaning: "*Mummy's voice is different than Daddy's; Mummy's voice gets louder and sharper when she's angry; when I run, my feet move quicker and my heart beats faster than when I walk; when I sing, you can clap in your hands; I can always tell my cat's meow from my bird's song*".

The almost exclusive reliance on visually and verbally presented concepts suggests that music involves the organisation of building blocks of sounds independent of any encountered prior to instruction. In effect, rather than encourage the child to experience music directly and spontaneously — by drawing upon available responses — most method texts fall back on definitions and prescriptions that are associated with presumably correct physical deportment.

This brings me to a pivotal question in my thesis: Is a child able to make relevant connections between his or her everyday aural experiences and the necessary first steps toward meaningful and joyful music making? If so, and by extension, can we assume that musical and performing concepts for further study can be derived from an introduction that bears directly upon such an ability? Conversely, is it more realistic to assume that a child needs first to have a prescriptive introduction to the fundamentals of musical theory?

Of studies in this area, the most relevant to the issues I just raised, are those conducted by Jeanne Bamberger (1991) at M.I.T. Bamberger begins by asking a group of children (ranging in age from 4 to 12) to notate in their own

way a short and simple rhythmic pattern they had clapped previously during the session. The purpose of the exercise was presented as organizing the pattern so that it could be deciphered and accurately clapped out by someone other than the notater. The results were instructive. Bamberger found that each child, in attempting to meaningfully notate the sequence, came up with an individual system. Rarely would any child focus on an identical aspect of the pattern.

Three main categories were regularly found:

(1) Children (mostly the youngest) who perceived and notated the sequence as an action:

— some would clap (i.e., perform) the rhythm with a pencil on the sheet of paper they were given, generating a series of random dots: one dot for each clap.

— some would attempt to indicate the continuity of the choreographic act, thus generating an apparent scribbling.

— others would draw their hands to indicate the *instrument* through which they had performed the rhythmic pattern.

(2) Children who focused on the structural organisation of the pattern:

These children correctly perceived and separated the pattern into two distinct sections: the second an exact repetition of the first.

(3) Children who indicated the relative metrical relationship between sounds:

These children recognized that beats of identical lengths should be represented by identical symbols. While this *system* accounted for an agogic property missed by children in category #2, it did not however show a perception of the structural divisions of the rhythmic pattern.

On the basis of inferences drawn from this initial stage of the investigation, Bamberger continued on to a lengthy (six month) study of one child's re-creation of two well-known tunes: *Hot Cross Buns* and *Twinkle, Twinkle Little Star*. The child was provided with a set of randomly arranged Montessori bells[37] and asked to re-arrange them so that he could perform the tunes.

After performing the pieces, the child was asked to notate each in his own way. Through a detailed analysis of his *notated score* and responses to specific questions on his intentions, Bamberger deduced that the child was thinking on several levels simultaneously (what Bamberger calls "multiple hearings"). However, in attempting to notate his understanding of the music, he showed evidence of what could be called a conflict of hearings. For example, when Bamberger suggested that he employ numbers to clarify certain aspects

[37] Montessori bells are small instruments distinguished by the fact that their shape and size remain constant even though each is tuned to a different pitch.

of his notations, he would shift from referring to the number of events on a specific bell, to the structural location of a particular sound, to the location of a bell (first bell on the display, bell #2), etc. Bamberger concluded that while he could hear the relationship between the various aspects of a song, he was not able to mentally separate specific aspects from each others.

The perception of internal relationships in a piece of music is fundamental in the cultivation of high-level performance where the artist, by definition, wishes the piece to be heard *as a whole*. This implies that the isolation of any one aspect of a piece (for example: the rhythmic aspect apart from those other factors that make its meaningful continuity — melody, harmony, etc.) can profoundly disturb the communication of the music.

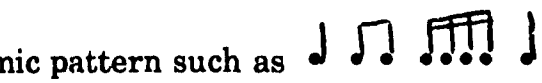
By the same token, a simple rhythmic pattern such as  contains within itself the potential to be perceived differently depending upon the performing context — whether it is tapped on a table with a pen, or against a glass of water with a spoon, or, if we wish, obsessively repeated as an abstract *motif* in one's head. Here, each of these hypothetical *performances* will be distinguished by their unique pitches, intensities, durations, resonances, character, etc. In order to qualify as meaningful, a rhythmic sequence needs at least all these. Otherwise, it exists only as an unstated abstraction on a sheet of paper.

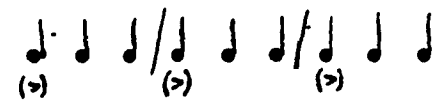
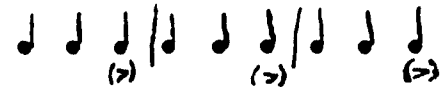
Table 5.1 should further clarify the significance of context in understanding the expressive potential of even the simplest symbolic

representation. In Example 1, the series of quarter-notes basically suggest a static character. If one starts, however, to agogically emphasize the first quarter-note of each bar, one immediately achieve the sense of a waltz (example 2). If one slightly shifts the stress to the third beat, the result now suggests a Mazurka (example 3).

If we combine rhythmic symbols, we can generate a dynamic sense of direction whose character may now vary according to the speed of the pattern.

Compare the symbols in examples 4 and 5: they are almost perfectly identical. If I tell you that example 4 is the rhythm of bars 3 and 4 in Chopin's

TABLE 5.1

example 1:	
example 2:	
example 3:	
example 4:	
example 5:	

Funeral March (usually performed in a slow tempo) and example 5, the section of *Mickey Mouse's Club March*[38] (normally performed at a faster speed) that goes with the lyrics: "M-I-C-K-E-Y M-O-U-S-E", you will probably understand the infinite emotional potential which is inherent to each and every musical representation — a potential that may inconceivably be suggested (in particular, if the performer has not been made aware of his or her choreographic relationship to the character of the music being performed) by merely counting a rhythm or knowing that (***p***) means to play soft.

All these examples clearly show that the emotive potential of a notated pattern primarily relies on its agogic interpretation. This is, of course, fundamental to the biological reality of movement as one can notice when a child walks or skips in the street, producing regular steps (say quarter-notes), yet, generating a rhythmic dynamic that depends on the accentuation pattern, the speed of the action, and the mood that accompanies it (whether skipping with joy or dragging oneself along).

In summary, Bamberger's findings suggest that children seem to come to music study with a greater understanding of fundamentals than is traditionally assumed. Most interesting is that this understanding does not seem to be confined to a variety of isolated concepts but also include a grasp of the relationship between these concepts.

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[38] Words and music by Jimmie Dodd; © 1955 Walt Disney Company.

Discussion:

The prescriptive approaches to the score in North American methodologies begin by establishing familiarity with the standard notation at the first level of a notation (see opening of this chapter, page 77). Musical concepts are explained in terms of only one possible use of a given symbol reinforced redundantly independent of the performing context. At no time is the student's prior knowledge incorporated into the learning process. Neither is the student given any indication of what the next stages are about.

While prescriptive teaching, with its definition of stages, may provide the teacher — and presumably the parents — with convenient markers of the student's apparent progress, it is questionable whether it is an effective strategy in the long-run.

Conversely, an admittedly more demanding approach that draws on the relationship between the student's inner resources, and the individual and developmental realities of music as a performing discipline, can not only enrich the experience of the neophyte but provide a qualitative measure of the beginning pianist's progress. In other words, whereas a prescriptive methodology ensures that Johnny can define intervals, an intuitively-oriented approach can demonstrate that his internal rhythm is becoming increasingly secure.

How could one acquaint a child with a musical concept without intruding upon his or her direct relationship with musical experience? Can

one be reasonably certain that the beginning pianist's perception of his or her relationship to the instrument is not incompatible to his or her intuitive sensitivity?

It is clear that considerable research will have to be conducted before one can speak about principles of methodological organisation that clearly define the issues at stake. I have, however, a few suggestions consequent upon my own critical evaluation of current methodological premises. I have examined these in the light of my own teaching, as well as observations made in music festivals, master classes, seminars and other relevant pedagogical situations (in both Europe and North America) where the implications of my argument were evident. In no way, however, are these suggestions intended as alternative prescriptions but rather as observations understood as suggestions for further research.

(1) One might first rethink the assumption that information presented to a student solely through verbal instruction — on say postural and positional awareness or on the *meaning* of a notated musical symbol — will effectively cue in to the choreographic and aesthetic realities that are intrinsic to piano performance. There is some evidence from cognitive psychological research that the value of purely verbal instruction in a skill as complex as musical performance is debatable.

For example, when we view memory within the framework of "levels of processing" (Craik & Lockhart, 1972), it appears that the deeper we analyze

a piece of information in terms of its semantic properties, the better we are likely to remember and access the information. Hashtroudi (1983) provides a particularly interesting demonstration of this phenomenon. In her study, she contrasted the effects on memory of processing the *core meaning* of items versus the amount of *elaboration* (processing not directly related to the core meaning) engaged in during the study period. The results showed that the more an individual analyzed the core meaning of an item — rather than the quantity of its elaboration, the stronger the memory storage and retrieval were likely to be.

Depth of processing and encoding specificity (discussed earlier on page 23-24) are cornerstone concepts in our understanding of the psychological mechanisms of memory. It is important to note that these two factors always co-occur, in the sense that one can always ask to what degree has the learned information been encoded in terms of meaning and to what degree does the retrieval context resemble the learning context. The reason it is important to consider how these factors operate conjointly is this. We can expect that under normal circumstances an individual — left to his or her own devices — will process information in terms of its meaning and will attempt to retrieve that information using a meaning based retrieval strategy. Thus, encoding specificity (the facilitation of retrieval when learning and test contexts are similar) helps to explain the depth of processing effect; since the retrieval context will normally be meaning based, then learning will appear to be most

successful when encoding is also meaning based. Put another way, learning something in terms of its meaning or semantic properties is a "transfer appropriate" way of learning (see Tulving, 1979).

The evidence, then, would suggest that in teaching the piano, one should first ask what the core of a particular activity is and how it could best be stored in memory so that its retrieval could be maximally effective and least subject to interference. It follows that in communicating certain mechanical principles of performance, one may ask whether verbal information could possibly serve the core meaning of the principle more effectively than the sensed experience itself.

(2) When, however, verbal communication is clearly called for, when for example clarifying a concept or as accompaniment to tactile suggestion, it is important that it not be passively accepted and interpreted by the student as an all-purpose, fixed principle. This, of course, requires empathy and sensitivity tuned to the level of understanding of the learner — qualities that are indispensable in any communication that presumes to awaken intuitive awareness.

While these initial steps may appear to be less tangible and therefore, presumably less focused than a prescriptive approach, they have the advantage of immediately cuing the student into the nature of the creative process. Whatever else, they aim at establishing a creatively inspired rapport between the teacher, the student and the musical experience.

(3) It follows that this quality of rapport should be extended to the three-way relationship between a given notated symbol, its context and the performer's physical action. For example, the symbol  may, in one context, call for a vertical bouncing movement of the arm, in another a lateral motion, still, in another, an almost imperceptible motion of the finger, etc.

These suggestions primary involve stimulating the beginning pianist's direct awareness of both his or her resources and the intrinsic possibilities of the instrument. In the process, the student may immediately recognize that reading the score is a very active, living experience. This, of course, assumes an emotional immediacy in the reciprocal feedback between the student and the teacher — an immediacy that cues the latter into the inner world of the former. In other words, this learning process would maximize the possibility of freeing the teacher to enter directly into the process of music making. The student could, by the same token, become aware of his or her musical resources and ways of accessing these resources directly.

The ultimate challenge would then be to maintain and cultivate this interplay between all the actors involved, through all stages of the learning and performing experience.

Chapter 6: Finale

> *"We often make the mistake of confusing education with training, when in fact they are very different activities. Training is for the purpose of passing on specific information necessary to perform a specialized activity. Education is the building of the person. To educe means to draw or evoke that which is latent; education then means drawing out the person's latent capacities for understanding and living, not stuffing a (passive) person full of preconceived knowledge. Education must tap into the close relationship between play and exploration; there must be permission to explore and express."*
> (Nachmanovitch, 1990, page 118)

The main section of this study consisted of an analytical investigation of each of the three actors — pianist, piano and score — that are generally separated in the early stages of piano instruction. As we saw, each is basically introduced to the beginning student according to very similar principles: (a) prescribed systematic criteria of correctness (e.g., correct posture, correct reading of a symbol on the score), (b) criteria that are defined independently of a student's individual knowledge or/and intuitions, (c) simplification of each actor in a reductive manner. By way of summary, these were:

(1) the pianist:
- — reductive principles of postural correctness.
- — choreographic constraints (e.g., *a slur sign over two or more notes should be performed by dropping the wrist at the beginning of the slur*

and raising it at the end).

(2) the piano:
- reductive principles in terms of the expressive possibilities of the instrument.
- focus on locations on the keyboard (e.g., high versus low pitch, key names).

(3) the score:
- reductive principles in terms of redundant intellectual, literal understanding and performance of symbols.

In contrast with the view that piano performance — by its very nature, is an active relationship, that is an exchange between each of the three actors, North American methodologies tend to confine the active role to the pianist only — a role that is defined and guided almost exclusively by intellectual criteria. The student, indeed, is instructed to accept these criteria arbitrarily defined as correct and to execute every action accordingly. While he or she is presented with an approach which aims at minimizing the risks of failure (wrong notes, metrical inconsistency, etc.), he or she is rarely encouraged to interpret feedback (whether physical, aural, tactile, or otherwise) from the score or/and the instrument and adjust the performance accordingly.

Yet, the reality of a musical performance begins and ends with sound — sound that is hopefully in tune with the performer's intentions. This demands instantaneous and continuous sensed judgements in "real time". When errors

in judgement are made, the pianist must instantaneously make an appropriate "correcting" judgement without losing the continuity, shape and character of the piece. Ideally, the "error" should be turned to creative advantage, bringing a fresh perspective to the music. It is of little consequence whether the error and subsequent creative adjustment has to deal with a wrong note, harsh tone, feelings of stiffness, uncertainty, uncomfortable contact with the keyboard, etc.

The question that must be asked is what the long-term consequences may be before advocating any particular method. If we agree that a developing pianist is not an information machine but rather a complex performing system, then we must ask whether simplistic prescriptions that remain unchanged through out the formative years can realistically be expected to develop into a freely creative and fulfilling aesthetic, and choreographic experience with the discipline.

The next question is whether, in listening to a piano performance, we are hearing a freely creative individual or one who is a *victim* of the methodological constraints that have been imposed and reinforced during his or her formative stages.

The reductive principles applied to each of the three actors strongly suggest, for instance, that North American method texts basically prepare the beginning pianist for the ability to *correctly restate a definition or a concept at the piano*. In other words, the student is trained to play the piano (viz. Nachmanovitch's quotation at the beginning of this Finale), rather than guided

towards experiencing a genuinely living relationship with the instrument and the music being performed. The budding artist is, in effect, drawn into an environment in which variables such as emotional, physical involvement and responses (e.g., joy and excitement experienced by the body, desire to experiment or play) as well as performing contingencies (such as the need to adjust to one's feedback, to adapt to the performance environment) are minimized if not discouraged from the task. In this environment, the student is required only to identify a pitch sign, locate the key on the piano, press the key according to other performing indicators (such as metric and dynamic signs) either written in the piece or defined by the method text.

While this environment of textual correctness may indeed facilitate a clean and "correct" rendition of the notated score, while it may indeed encourage immediate, easily attained results, it also fails to introduce the pianist to the living relationship that exists between the pianist, the piano and the score.

For example, music derives its very spirit from rhythmic structuring and stimulation in one form or another. Yet, most (if not all) the repertoire provided to the beginning pianist essentially involves long note values which are expected to be counted out — with no evident pulse, very little variations, and virtually no connection with the child's biological rhythm — and rationalized around a premise of a static and unresponding posture.

More often than not, the lack of rhythmic stimulation — both musical

and physical — is compensated for by a colourful and attractive packaging which, in addition to the predominance of words and pictures, essentially premise the interest and the nature of the discipline upon visual stimulation and judgements — as opposed to aural stimulation and sensed judgement: i.e., the very spirit of music performance.

In this regard, we must ask how a prescriptive methodology can be expected to prepare for the aesthetic experience of even the simplest piece of music (say, a Clementi Sonatina) once it comes notated without any visual enticing (i.e., colour, drawings) and for which simple verbal and visual references may not serve the purpose of going beyond a mechanically clean restatement of the notated score.

As the information received from the musical text becomes increasingly more complex, it is, indeed, self-evident that the demands that are made on the pianist's physical and emotional organisations become more and more sophisticated. Yet, if the basic relationship between each three actors is not rethought (as it is the case in most North American methodologies), one must question the underlying assumption that a simplistic verbal message is going to develop into a complex choreographic and aesthetic experience — or in other words that there's a *magical* process through which, one way or another, "art will out". One must also consider the possible consequence that piano performance might be perceived by the student as an activity involving a textually dominated rote routine, with artistic, creative, physical and

intellectual involvement left to chance.

In the process, the *seeds* of interference that are likely to be sown by creative impoverishment cannot, of course, be overemphasized. In this work, we noted, on several issues, the possible conflict that may ensue between the stated principle and the individual differences between beginning pianists — for example, their listening background, their intrinsic motivation, the comfort they feel with their body, how intuitively they are capable of interacting with the instrument, their ability to translate signs into living musical language, etc.

The innovative nature of this interdisciplinary study has been essential to the process of clarifying the issues that have been raised. This has been particularly so for the references to important concepts drawn from cognitive psychology — concepts that question some of the most fundamental assumptions currently in vogue about the introduction of the beginning student to a highly complex skill-centred discipline. In a larger perspective, I hope this interdisciplinary approach to pedagogical issues will not only serve as a contribution to music education but will also challenge scientific thinking and theories beyond their traditional areas of application. In this thesis, a number of connections or performing illustrations were, for that matter, suggested with concepts such as consistent mapping, automaticity, encoding specificity, and levels-of-processing.

There can be little question that both cognitive psychology and music pedagogy would benefit from experimental research on these various suggestions. In the context of the theories summarized in the previous chapters, one could probably gain a richer understanding about issues such as the reinforcement of performing habits — for example, the systematic lifting of the wrist at the end of a phrase slur sign on the score (suggested as an example of consistent mapping), the inhibiting consequences of a static and constrained postural set on the efficiency of cognitive processes (perhaps, in the context of the levels-of-processing theory), or the nature of the memory trace built and reinforced by the method or the teacher (for instance, within the perspective of Hashtroudi's (1983) distinction between core versus peripheral meaning).

More than just an exploratory critique of the premises behind existing North American piano methodologies, this study also examined a possible alternative that cues more directly into the individual's resources and experiences. A number of principles were, for that matter, discussed in terms of an *intuitively oriented approach* — an approach whose most fundamental feature primarily involves the identification of a beginning student's knowledge and intuitions through a number of activities. The intuitive responses to these are then used as a starting point for taking off toward the formation of an "artistically involved" musician.

It became clear through this analysis that in presenting anyone of the three actors (whether the pianist, the piano or the score), current North American methodologies mostly consist of an *organised package of prescriptions*: that is a set of directions, definitions, concepts which are defined by the method/authority and transmitted through the teacher. These prescriptions are usually structured with the assumption that they will lay the foundations for *success* (what ever one may mean by success), regardless of the intuitions and emerging knowledge of a given individual — for instance, his or her sense of balance, knowledge about various building blocks of sound, intuitions about the relationship between these building blocks and the instrument, intuitions about the relationship between musical features and movement, etc.

Music, however, is by definition a language of direct experience without the intrusion of words, concepts, definitions or axioms. It therefore appears curious not to begin piano instruction in the very spirit of the experience itself. A pedagogical programme that would suggest materials (to my knowledge, no such material is presently available) presented in such a way that a given individual would respond directly to it, would more likely succeed in establishing direct connections with the individual's intuitions — without relying on visual and verbal messages of "correctness" which may be both reductive and inhibiting.

As an alternative to current prescriptive methodologies, the idea of an intuitively-oriented approach to the introductory stages of piano instruction is still, of course, in an embryonic state. It should, in my opinion, be studied more extensively.

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