

# \* Preparatory Audiation: Key processes in music learning Thinking and deliberations

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Music Learning Theory (MLT) by Edwin E. Gordon, an explanation of how humans “learn when learning music”, is entirely founded on the concept of audiation.

It is in fact fundamental, when trying to understand the whole MLT theoretical corpus, to continuously keep in mind that when Gordon talks about music learning processes he is always referring to the development of audiation.

As has been previously described elsewhere, we can generically consider audiation as a combination of mind-body processes generating specific skills. We can also say that the synergy between them creates the ability to inwardly hear (or feel) and understand music (or better yet, sounds which are recognised as music because of the relations connecting them) when not physically present, either no longer or not yet. Nevertheless we have to consider that this description, even though being didactically very efficient, does not allow those who want to get to know MLT extensively to clearly understand what is involved in the process of audiation. This is because it embraces a wide range of other processes, many of which are strictly related.

Edwin Gordon talks about preparatory audiation processes and audiation processes: the former, as suggested by the word itself, prepare the latter.

Through the preparatory audiation processes, an individual develops the relevant key set of abilities which enables him\her to instinctively and informally identify and comprehend in a musical system the tonal and rhythmical syntactic connections within patterns of

sounds in an objective way<sup>39</sup>. Those abilities are noticeably reflected in a collection of skills such as accurate intonation<sup>40</sup> a consistent sense of rhythm<sup>41</sup> and the ability to sing coordinating body, breathing and voice with a musical idea which exists in our own audiation. This idea, in turn, is coordinated with other sounds that are perceived in audiation, according to the rules and the musical customs related to the cultural context or the frameworks in question.

When referring , to the types and stages of preparatory audiation, as we will see below, we will call this set of abilities “preparatory assimilation-type audiation skills”.

Without those skills, or better yet faced with an incomplete development of the skills and the processes enabling them, an individual has no more than a subjective musical syntax without the ability to instinctively comprehend, in a clear way and coherently with what is shared by the people around him, the intrinsic sense of the musical syntax in question, and consequently without the aforementioned musical skills<sup>42</sup>.

Having access to the processes and developing the preparatory audiation skills enables one to pass to what Gordon describes as audiation processes.

In this description, Gordon identifies the types of audiation. They consist in 8 situations, each requiring specific processes and audiation skills to be activated.

The following list will allow us to some considerations:

- 1) Listening to familiar and unfamiliar music
- 2) Reading familiar and unfamiliar music
- 3) Writing familiar and unfamiliar music down from dictation
- 4) Recalling and performing familiar music by memory
- 5) Recalling and writing familiar music by memory
- 6) Creating and improvising unfamiliar music
- 7) Creating and improvising unfamiliar music while reading (music)
- 8) Creating and improvising unfamiliar music while writing (music).

Some of the audiation processes involved in each of these specific types may or may not be shared with one of the other eight; despite this, Gordon explains that these eight

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<sup>39</sup> By “objective” we mean, in MLT, that which can be agreed on. For this reason, as we will see below, it is necessary to listen to and analyze those symptoms that make preparatory audiation processes visible. This allows us to decide how much an individual is developing an informal and instinctive comprehension of musical syntax, and therefore preparatory audiation abilities, in accordance with other individuals sharing the same culture. It is certainly possible for an individual to develop preparatory audiation and audiation skills moving within an exclusively subjective syntax, even if this does not allow him/her to musically relate to other people in an understandable way, precisely because based on that subjective syntax there cannot be an agreement between people belonging to our own cultural context (as we will see below).

<sup>40</sup> Still once again, with regard to our own musical system’s syntax.

<sup>41</sup> Same as above note 40.

<sup>42</sup> This does not however mean that one cannot enjoy the musical experience.

types are not hierarchically structured: one does not necessarily have access to the processes enabling the audiation type 5 before having access to those that make type 6 possible.

On the contrary, the 6 stages of audiation are hierarchically organised. These stages describe how the audiation processes are sequentially activated in the 8 situations (types of audiation) mentioned above<sup>43</sup>.

These descriptions enable us to state two things, both important in our opinion: the first is that some of the 8 types of audiation, in order to be initialised (as in technological terminology), require specific formal skills from the person involved.

Music reading and writing, for example, are formal skills deriving from a musical education and therefore from an assimilated knowledge of how music is conventionally graphically represented.

According to MLT, it is fundamental for the audiation processes involving music symbolization to be preceded by an informal and formal comprehension of the syntactic functions that musical patterns express (along with their related organization). It is therefore highly probable that if among the 8 types of audiation processes there are some which are not related to musical symbolization, and instead are only activated by musical sounds that are physically present or existing in audiation, the individual,

according to his experience, has previously had access to these processes and develops the related abilities.

We can therefore state that only those types of audiation corresponding to numbers 1,4 and 6 do not necessarily require from the person, when approaching them, to have formal musical abilities.

At the same time, we can therefore say that the processes and the abilities involved in those types of audiation largely correspond to preparatory audiation skills, especially assimilation-type preparatory audiation skills<sup>44</sup>. This brings us to our second consideration, also quite evident: all of the audiation types described above can occur only if preparatory audiation processes, which constitute the essential base enabling the access to the processes and types of audiation listed previously, have already been activated.

### **Preparatory Audiation: preparatory or fundamental processes and abilities? In childhood or during our entire lives?**

As we can see in Gordon's description, access to the types and stages of audiation is made possible by the development of the processes and by the achievement of preparatory audiation skills. Preparatory audiation is defined by Gordon as "listening to and comprehending music during the music babble stage as a preparation to

<sup>43</sup> The 6 audiation stages relating to audiation type No 1 are as follows:

- temporary retention (that is to say: a process by which mind and body temporarily hold the whole and the parts of the listened musical syntax heard);
- beginning an audiation organization of the known rhythmic and tonal patterns, and recognizing and identifying (informally and formally, as we will see) the tonal centers and macro-beat (i.e. pulse);
- establishing an objective or subjective sense of tonality and meter;
- consciously retaining in audiation tonal and rhythm patterns that have been inwardly organized;
- consciously recalling patterns organized and audiated in other pieces of music;
- consciously anticipating other patterns (that can correspond or not to the patterns of the song we are listening to).

<sup>44</sup> Cfr. Tab.1, p. 4.

get to the actual audiation”<sup>45</sup>. It then appears to be the fundamental basis, or the set of essential processes enabling every further audiation process<sup>46</sup>.

Gordon identifies 3 types and 7 stages of preparatory audiation.

Type	Type description	Stage	Stage description	Age group
Acculturation	The kid child engages with scarce consciousness of the environment.	Absorption	Hears and aurally collects the sounds of music in the environment.	Birth to age 2-4
		Random response	Moves and babbles in response to, but without relation to, the sounds of music in the environment.	
		Purposeful response	Tries to relate movement and babble to the sounds of music in the environment	
Imitation	The kid child engages with consciousness thought primarily focused on the environment	Shedding egocentricity	Recognizes that his movements and babble do not match the sounds of music in the environment.	Age 2-4 to age 3- 5
		Breaking the code	Imitates with some precision the sounds of music in the environment, specifically i.e. tonal patterns and rhythmic patterns.	
Assimilation	The kid child engages with consciousness thought primarily focused on himself.	Introspection	Recognizes the lack of coordination between singing and breathing and between what he/she is singing (tonally and rhythmically), breathing and movement.	Age 3-5 to age 4-6
		Coordination	Coordinates singing (tonally and rhythmically) with breathing and movement.	

Tab.1

<sup>45</sup> Cfr. E.E.GORDON: *A Music Learning Theory for Newborn and Young Children* – Italian version: *L'apprendimento musicale del bambino dalla nascita all'età prescolare*, Edizioni Curci, Milan 2003, p. 137.

<sup>46</sup> At the risk of repeating ourselves: this statement has sense because in MLT it is believed that the individual engages in the audiation types and stages moving through an informal and then possibly even formal comprehension of the syntax in an objective way (see note 39)

The word “type” (preparatory audiation type) had been improperly translated into the Italian language as “phase”<sup>47</sup>: this serious error in translation and interpretation, which is unfortunately still present in the published text<sup>48</sup>, has over the years and even now brought musicians and educators who engaged in studying MLT in Italy to an incomplete or distorted understanding of the preparatory audiation development process.

The three types of preparatory audiation (Acculturation, Imitation and Assimilation) are mind-body processes that are sequentially and cumulatively activated. This means that the Acculturation process is activated before the Imitation process but continues to exist during the activation of the latter; the same occurs between the processes of Imitation and Assimilation: these three processes continuously relate to one another due to the musical experiences constantly activating them at any age<sup>49</sup>.

To interpret these processes as “phases” can bring the teacher basing his\her teaching on MLT to make choices that do not optimally promote the pupil’s learning process. For example, they may to cease promoting complex and varied music listening processes beyond the school age or cease organizing activities that can promote an instinctive, yet guided, identification of differences in music.

One must read between the lines of the description of preparatory audiation types and stages made by Gordon in his volumes in order to put an end to the paradox which could bring us to think of these types as phases and to maintain that they occur in specific age groups.

In this case, the types would cease to exist.

Gordon himself does not offer much help. This is because, due to his the extremely concise and pragmatic style of his volume *A Music Learning Theory for Newborn and Young Children*, he aligns the different types and stages of preparatory audiation to specific age groups of an individual<sup>50</sup> and he states in some passages that the types of audiation have come to an end<sup>51</sup>.

After working with MLT for many years, we feel that the connection proposed by Gordon between the types of preparatory audiation and age groups is quite refined, so much so that some further considerations are needed.

When Gordon describes the preparatory audiation types and stages, he identifies some specific behavioural symptoms clearly showing which learning processes a child is going through. We therefore read behavioural signs exist such as the “audiation stare”, which is characteristic of the absorption stage; “random” or “purposeful” responses; the “Shedding Egocentricity” gaze; the “introspective” look, etc.

We can then thus say that Gordon puts the preparatory audiation types in relation with specific age groups, well

<sup>47</sup> Cfr. E.E.GORDON: *A Music Learning Theory for Newborn and Young Children* – Italian version: *L'apprendimento musicale del bambino dalla nascita all'età prescolare* Edizioni Curci, Milan 2003. The whole volume.

<sup>48</sup> Ibidem

<sup>49</sup> In the observing children from the birth it is possible to observe see more evidently how one sequentially has access to the preparatory audiation processes and then to the types and stages. It can however occur, that the preparatory audiation symptoms and skills, relating to some stages and useful, in order to be able as an adult to observe and understand the process, are not signaled.

<sup>50</sup> Cfr. Tab. 1 pg.32

<sup>51</sup> Cfr. E.E.GORDON: *A Music Learning Theory for Newborn and Young Children* – Italian version: *L'apprendimento musicale del bambino dalla nascita all'età prescolare* Edizioni Curci, Milan 2003, pp. 71, 87.

knowing that precise moments in the child's development exist in which behaviours and symptoms linked to different types and stages of preparatory audiation are particularly evident. In order to describe those moments it could be possible to use the word "phase", being careful not to make it coincide it with to the actual concept of "type", contrarily to what we have mentioned above: those "phases" would then correspond to that described in the last column in Tab.1.

The types of preparatory audiation, namely the mind-body learning processes, continue to exist and to be the way in which one learns in the following age groups as well.

Moreover, visible evidence of external expressions<sup>52</sup> of the various types of preparatory audiation in specific age groups is put in relation by Gordon with his research findings. These findings show that it is fundamental to take care of the different types of preparatory audiation, "especially and with particular attention" towards those moments of the child's development in which the learning ability is at its utmost (the audiation types and stages symptoms provide evidence of this).

One must not think that "especially and with particular attention" means "exclusively".

A newborn child engaged in an Acculturation process shows the respective symptoms very evidently up until a certain age; after that, when ready to engage in an Imitation process, its external demonstrations tend to prevail over the Acculturation ones, according to adult observation. Acculturation process symptoms are partly internalized and partly modify their visible signs, but this does not cause the Acculturation process to cease: it continues to exist and to nourish first Imitation and then Assimilation processes, especially during the experience of listening to new music containing elements that are

different from familiar music, or any other new music that, even though based on previously known syntactic elements, it presents them in a different way from the previously known listening repertoire.

In general one could then expect that all children around 6 years old, when suitable environmental and relational conditions are found, should have developed the abilities derived from the preparatory audiation processes.

In common experience this is not however always the case: we can observe a great majority of adults who do not have those abilities, as an unequivocal symptom of the interruption or an incomplete development of the preparatory audiation processes.

Those adults operate using a subjective rhythmic or tonal syntax, with a different level of awareness or showing intermediate abilities that are ascribable to different intermediate stages of the preparatory audiation development process, as we will see below.

Observation demonstrates how adults who are exposed to new musical contexts (non-familiar music, belonging to musical systems that are different from those of our own culture or simply unfamiliar songs, etc.), if there are the conditions allowing to listen and not to simply hear, are engaged in Acculturation, Imitation and Assimilation processes. These processes can be approached in a more or less evident way, but their presence is shown by the results of an instinctive and informal learning process. The symptoms related to preparatory audiation skills constitute the only measurable and significant fact allowing us to understand that an individual is engaging in the preparatory audiation processes; so the appearance, in adults as well, of those symptoms clearly demonstrates how taken as a whole those processes are a group of

<sup>52</sup> From now on we will use in the text, alternately and with the same meaning, the words "external evidence", "sign" and "symptom" to indicate the evident behaviors, musical or not otherwise, allowing the observer to understand which types of preparatory audiation processes and which types of related skills are present in an individual.

mind-body activities, connected to the comprehension of music, which are fundamental during our whole existence. The parents of children attending MLT-based music courses in which the teacher tries to efficiently promote Acculturation and then Imitation and Assimilation processes, are themselves evidence of the continuous and constant (and often invisible) presence of the preparatory audiation processes\stages. It frequently happens that, by the end of a full year of lessons, their ability to identify differences, to accurately imitate in tonal and rhythmic contexts, as well as their introspection and coordination, turn out to be considerably increased.

This remark permits us to introduce another equally important consideration. The mistake is often made of considering preparatory audiation processes as “developed or non-developed” and, consequently, the abilities linked to them as “acquired or non-acquired”.

All different types of preparatory audiation are instead processes through which body and mind are engaged in getting to know something: it is normal for an individual to be at one or another audiation stage with regard to specific syntactic contents, in turn related to specific syntactic, rhythmic or tonal contexts.

Some examples: with regards to the Acculturation type of preparatory audiation processes, even though it has been extensively demonstrated by Gordon that they are particularly active in early childhood, in later years as well an individual can have access to them and use them to improve their knowledge of music. For example, when familiarizing with a musical system different from the one found in our own culture and that we have never experienced before, or when we listen to a song with tonal (whether melodic or harmonic) or rhythmic contents that are not clear to us, we are involved in acculturation processes. These processes bring us to absorb the contents and instinctively recognize their identity based

on the differences that we just as instinctively perceive to exist between them and what is familiar to us.

This process activates in our body and mind an ongoing communication between the 6 stages of audiation, which helps us understand what is new in light of the abilities acquired through what is already known, and the preparatory audiation stages of random and intentional responses.

We then rapidly gain access to the imitation processes, through which, in a constant communication with the audiation stages, as described above, we try to interpret the new code. This happens when we have been able, through our internal elaboration of the active random and intentional responses, to know whether our musical ideas (related to the new context and initially imitative), objectively correspond to what we are listening to.

At this point we are potentially able to access the assimilation type of processes and skills.

It is actually possible, for example, to have developed abilities linked to the assimilation type of preparatory audiation as regards the tonal syntactical contents corresponding to the harmonic tonic, dominant and subdominant functions, and instead still be in the imitation type of preparatory audiation as regards a supertonic function. One may also be in one of the acculturation stages when listening for the first time to different harmonic progressions, even though these may belong to a tonal context in regard to which we have already had access to assimilation skills.

Again, we can have widely developed assimilation skills in the main tonal and rhythmic contexts of Western traditional music, but still have to retrace some preparatory audiation processes and stages and consequently develop the related skills when faced with a musical system that is very different from our own, such as some Asian ones.

The difference between children and adults consists in the fact that adults have already had access to the preparatory audiation stages. They are therefore familiar to their bodies and minds, which are able to rapidly retrace and reactivate them, while for children, as mentioned above, the organization of these processes occurs slowly and in a more evidently "sequential" way.

In other words, when body and mind instinctively and in a generically unintentional way are aware of the steps along the path leading to assimilation skills, they are able to reproduce them and, by doing so, find strategies that can ease the transition from one stage to another.

This path within the types of audiation creates a continuous set of circular or spiral-shaped movements connecting the different stages: once the assimilation type of preparatory audiation processes is activated, the related skills are simultaneously developed, connected to specific contents and musical contexts. One can however also access the previous types and stages, in terms of processes and abilities, depending on the context and the musical contents experienced from time to time; this access, moving towards previous processes, happens, we repeat, faster (sometimes instantaneously) than the first time they were activated or we had passed through them.

These considerations enable us to state that:

- 1) The types of preparatory audiation are mind-body processes and are not development phases: to consider them as phases is to implicitly deny that they are coexistent and cumulative;
- 2) Preparatory audiation processes are, at any age, the fundamental means through which one learns music. They allow access to the types of audiation described by Gordon and in some cases overlap with some of their parts or are an inseparable part of them.
- 3) Access to preparatory audiation processes allows body and mind to know how to learn in order to develop musical skills. These skills are related to specific musical

contents; the processes, instead, concern music in general. Informal knowledge of these processes allows us to continuously retrace the stages of preparatory audiation with regard to new musical contexts and contents, even after early childhood and youth. Even though this is identified by Gordon as the optimal age for developing preparatory audiation processes, and even though in this age group there are specific moments where access to types and stages of preparatory audiation should ideally happen in a particularly successful way, the processes themselves remain as tools for knowledge for the rest of our lives.

Preparatory audiation processes and skills, as the foundation of all that we can consider in MLT to be part of the music learning experience, therefore need constant attention and reflection.

The theoretical consideration on those processes and skills, which is the result of an ongoing observation and research on what had been previously examined by Gordon and others, is needed in order to elaborate educational and teaching methods aimed at promoting preparatory audiation skills in individuals of any age.

We hope that this contribution, along with others that our periodical will share in the future in order to promote MLT, can help our fellow musicians and music teachers to head in that direction.