SOME REMARKS ON THE EPISTEMOLOGICAL BASES FOR A MUSICOLOGY OF POPULAR MUSIC

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Before engaging in a discussion of the methodological and epistemological issues inherent in a musicology of popular music, I will illustrate a few problematic aspects that the taxonomic label "popular music" itself raises in the context of academic discourse and institutional pedagogical usage. In fact, it refers to the repertoires, practices, texts, forms, behaviours and conceptual domains pertaining to traditions as diverse as jazz, rock, contemporary world music, pop and other musical traditions that are habitually brought together under this nomothetic term.

The designation of the field

This is not the appropriate place to describe, from a historical standpoint, the complex dynamics that coagulated in European culture in the mid-nineteenth century, when a semantic field was identified and designated by the term "folk" (the Herderian Volkslied), referring to any music that could not be included within the modern aesthetic canon of an autonomous "art music", in turn regulated by the Werktreue ideal and the affirmation of the nomological status of the score [Van Der Merwe 1989]. Suffice it to note at present that the notion of "folk music" established itself mainly as an "aesthetic residue" – from an ethnocentric perspective – compared to art music, taking on, in opposition to the artistic originality, authorial status and aesthetic autonomy that came together to define learned and written composition and its theoretical tradition, an alternative set of criteria including collective anonymity, aesthetic and functional heteronomy and a replication of the traditional repertoire as the expression of an oral culture that was largely agrarian and pre-industrial [Brăiloiu 1978, 1982; Bartók 1977]. With respect to these parameters, an innovative and creative set of phenomena appeared in the last quarter of the nineteenth century in the wake of socio-technological changes, including the birth of the music industry and the earliest experiences of sound reproduction and recording. At the same time, there emerged a generation of composers who would become an organic part of the music industry - for example New York’s Tin Pan Alley composers, whose practices and ideologies reshaped schematic dichotomies, such as written/oral, authorial/anonymous, autonomous/functional. In the Anglophone world, these new phenomena - aesthetically impossible to describe according to the criteria of the art music tradition (concert music),
nor sociologically by way of an analogy with the practices, expressions, conceptions and activities of pre-industrial traditional cultures (folk) - began to be labelled with the term "popular", which qualified some of its production and reception features related in the first place to large-scale consumption [Middleton 1990; Tagg 1982, 2003, 2012, 2014].[1]

This taxonomic criterion was then replicated, and semantically and lexically pinned to the term "popular music", in accordance with the definition of «quell’insieme delle attività musicali del mondo contemporaneo che va dalle canzoni al rock, dalla musica cinematografica e televisiva al jazz» [Moore 2001, 701][2] and, ultimately, ingrained itself in the last quarter of the twentieth century into the epistemological and methodological outlooks of academic research and into the agenda of the institutions responsible for pedagogical and didactic formation. As can be observed in the factors described heretofore, the criteria that presided ab ovo over the denomination (and the epistemological qualification) of the field known as "popular" are essentially sociological and aesthetic. This fact, which genetically established itself as an ideological restriction within academic debate, seems to have been heavily conditioned the reasons for the resistance against the possibility of conceptualisation of the field in a different way, on the basis of different premises and, thus, with the prospect of a new denomination.

As we shall see, a reconfiguration of this conceptual model in light of factors coming from mediology, phenomenology, textual anthropology and the neurocognitive aspects of creative activity, and - above all - a revision of some of the cardinal concepts of music theory, will bring to light the problematic nature of this taxonomical foundation. But let us examine more closely, as a preliminary step, the main fault lines of the term "popular music".

From a nomothetic point of view, it does not enjoy the status of an endoethnonym, such as "rock", "jazz", "rebetiko", "son", - i.e. a designation in which the representatives of a given (ethno-)cultural tradition or identity recognise themselves. It is, on the contrary, to be understood as a taxonomic label that serves "generalising purposes" [Agamennone 2010], which is inherent in critical discourse and is aimed at defining invariant or universal features in diverse phenomena. As such, its claim to scientific status should be underpinned by the demonstration of its heuristic value on an epistemological level, or at least by the delineation of a model of "family resemblances", as defined by Wittgenstein, thereby succeeding in connecting, even indirectly, the minimum necessary elements of the field.

This is where the most significant problems come to light. Firstly, it is difficult to believe that many specific moments of the rock (or jazz) tradition involving experimental research can be grouped in hindsight under the label "popular"[Cecchi 2003, 325],
understood in the sense of both a widespread appreciation and a significant market presence of the "products" in question (even leaving aside the issue of the musicians’ class origins). A brief reference to the considerable amount of theoretical and analytical literature dedicated to jazz, moreover, is enough to bring out the intrinsic incoherence of such a position: any "popular" connotations applied, for example, to George Russell’s treatise *Lydian Chromatic Concept of Tonal Organisation* [1959] would be paradoxical, to say the least.

Another problematic factor is the term’s translinguistic usage (having been internationally adopted in its anglophone lexical form). Putting aside a few unquestionably relevant issues of cultural colonialism,[3] and even limiting ourselves to Italian usage, one must note that the translation of this specific term (*musica popolare*) would recall an entirely different field of research or another area of anthropology (as mentioned above, not rock or jazz, or *arabesk*, but the oral traditional music of preindustrial cultures); this appears to be a further indicator of the term’s inability to indicate a trustworthy class of reference.

These difficulties continue to echo within the epistemological and methodological orientations of the field of research in question. In outlining the methodological specificity of a "popular musicology", Derek Scott distinguishes it «from "popular music studies" in that its primary concern is with criticism and analysis of music itself» [Scott 2009, 2], drawing an explicit line with respect to the sociological approach that, from his point of view, characterises "popular music studies". The problem arises at the moment in which Scott defines the epistemological object of study, - i.e. «music associated with commerce, entertainment and leisure [...] [the area] of music industry» [ibid.]. These are decidedly sociological categories that tell us nothing about the «music itself» and do not add much to the distinctive criteria formulated by Middleton [1990] or Tagg [1982], so proving unable to account for the specific nature of this field of study by acting as invariant paradigms. Upon further reflection, this theoretical *vulnus* is created by inherently methodological reasons, noted in a different context by Roland Barthes as early as 1961: «l’emissione e la ricezione del messaggio dipendono entrambe da una sociologia [...] ma per quanto riguarda il messaggio in sé bisogna prevedere un metodo particolare, precedente la stessa analisi sociologica, e che deve consistere nell’analisi immanente» [2001, 5-6].[4] To this end, however, when analysing the musical traditions with which we are presently dealing, understood as an extremely heterogeneous *corpus*, alternative models and paradigms become necessary.

Nor can we avoid adding to our *cahier de doléances* the matter of the connotative semantic resonances created by the original aesthetic stamp associated with the label.
"popular", which identifies an ideological function that in turn pre-constitutes a quality of, and a judgement as to, the object (field, corpus) designated. This ideological process implies further axiological issues similar to those that in the mid-twentieth century led to the terminological shift from vergleichende Musikwissenschaft to "ethnomusicology". In addition to more specifically anthropological questions, those who promoted the new designation saw in the specialised branch of "comparative musicology" a severe reduction of their subject and their very status as a discipline, indicating a subdivision of musicology and an implicit hierarchical devaluation [Nettl 2005, 12]. In any case, above and beyond the political considerations by way of which "popular" can legitimately take on positive connotations with respect to, for example, "bourgeois", it is important for these connotations to be inferable a posteriori from one occurrence to the next on the basis of textual analysis, and not hastily attached to no less than the general traits of an immense corpus of music.

If, lastly, it remains true that in recent decades the term "popular music" has established itself in non-Anglophone contexts as well, historical cases of substitutions in the denomination of a discipline (vergleichende Musikwissenschaft replaced by "ethnomusicology", or "folk music" by "traditional music", according to the International Council for Traditional Music) have taught us that as regards disciplinary debate and scientific and academic labels - which, like all linguistic and designating phenomena, are never neutral but carry with themselves the weight of social, political and ideological connotations - a change of orientation is not only entirely legitimate and possible, but also desirable.

In any event, it is increasingly clear that the crucial turning point for the foundation of a musicology of musical traditions problematically regrouped under the label "popular" must lie in an immanent musical analysis. If, within the latter, we were able to outline a common characteristic shared by a myriad of styles, genres and languages, the epistemological foundations would be laid on which to construct ad hoc methodologies. We must, therefore, turn to the field of music theory.

An immanent musical analysis

As regards an immanent study of the specifically musical aspects of the rock, jazz and contemporary world music traditions,[6] it seems to me that even the most advanced research in "popular music", in a musicological sense and especially as regards the realm of music analysis, remains - in an unconvincing way, as we shall see - within the
conventional limits of a theory specifically tailored to Western art music (curiously, one might say that these studies are conservative in this sense).[7]

As a case study, let us consider groove:[8] a basic phenomenon in rock, jazz and world music, equally central in the "ethno-theoretic" conceptualisation pertaining to, and the system of aesthetic values attributed by, insider musicians. A large number of highly interesting musicological studies have attempted to delineate its internal functional structure [Caporaletti 2014, 335-376] (with other research, even within reference works, not dealing with it in the least, which is certainly surprising).[9] Reading definitions such as «La prima di queste [funzioni della musica popular] è articolare una serie di pulsazioni, il cosiddetto groove» [Moore 2001, 705],[10] one cannot say that the question has been clearly set out. Obviously, pulsation and groove are two distinct things: pulsation (using this concept, for the moment, uncritically) refers to the articulated isochronous background against which, and in relation to which, the rhythmic groupings that define the macro-structural groove, along with the microstructural and phonic-sonic formation of these groupings, takes shape, which identify its supervening energetic quality (in turn modally characterised, in a distinctive/systemic sense, as propulsive or depulsive groove etc.) [Caporaletti 2014, 293 ff.].

Leaving these formal characteristics to one side however, I believe that the truly fundamental question, which is not often raised, should be: "why is there groove?". My impression is that, generally speaking, when this particular phenomenon is discussed, the means tends to be confused with the end. An indirect answer to the question, indeed, would seem to lie in the fact that «rendendo esplicita la pulsazione ritmica [sic], essa permette immediatamente di ballare» [Moore 2001, 705][11] (which corresponds, describing the question in a slightly more colourful way, with the goal indicated by McClary and Walser [2004, 277], borrowing a few words from Opus, the heavy metal guitarist of the comic strip Bloom County who - after having read an intellectualistic and aestheticising review of his latest recording - bewilderedly asks the drummer, the rabbit Hodge Podge: "Yeah, but do we kick the butt?").

In this kind of representation of groove there are, firstly, a few misunderstandings that must be cleared up. The concepts provided by standard music theory, through which the phenomenon is generally represented - in my opinion, not without a few problems - are at the very least pulsation and meter, in the context of a formal model ruled by repetition. In the first place, as regards pulsation, one must clarify that it may be explicit, but equally may be implicit in the creation/perception of a groove, the latter being understood in a general sense as meaningful sensory-motor energy; in this sense I consider Moore's conception reductionist, based on a rather mechanistic premise that in
turn derives from an "inappropriate" - I would say - use of music theory. Furthermore, one must recall that repetition taken in itself does not generate the least groove, as demonstrated by a good deal of baroque music (one might think of the harpsichord sonatas by Domenico Scarlatti),[12] or by the pathetic attempts to emulate groove with electronic sequencers. As a side note, in many metric-rhythmic characterisations of groove the function of sound in itself is not considered, in its existentive and relational dynamic-timbral-material components: even concepts such as *entrainment* [London 2012] do not explain ethnotheoretical jazz notions such as "drive" or "feeling" in the sense of a "feeling for sound" understood in its existential nature as articulating a groovemic flow.

As regards, instead, the aesthetic function of groove, the positions mentioned above seem to be tied to an idea that finds its ideal expression in the tradition of African-American funk or rhythm and blues. Groove is actually a more veiled and refined concept, not necessarily involving dancing practices, and essentially contributes to the function of representing and revealing, in an aesthetic sense, many stylistic tendencies in rock and the more transcendent elements of jazz.[13] It is as though the affective, suggestive and connotative messages that are part of the multiplicity of codes of emission and strategies of reception of rock (or pop) in the first instance passed through the codification of groove instead of tonal/modal syntax, with its linearization of rhythm and pitch. What Barthes asserts about the "filmic", where «the story somehow becomes parametric to the signifier», is also true for this phenomenon [Barthes 2001, 58]. In this way we have reached the broadest possible definition of groove, and not only a physicalistic-kinetic one with dancing/functional overtones. A groovemic process, for example, is also set off by the raw-boned touch of Hendrix’s plectrum in the three chords, I-VII-VI of the Aeolian mode, in "All Along the Watchtower".[14] But Hendrix’s voice as well, in all its syntagmatic linearity, contributes to generating the "stratiphony" typical of groove, instead of enjoying a right to take precedence in itself, which would give it the privilege of «“giocare” con la regolarità della pulsazione» [Moore 2001, 707][15] (attributing to it such a conceptual priority is one of the fruits of the music-theory conservatism referred to above, as an unconscious mediological effect induced by the linearity of notation, owing to which pulsation is seen solely as a regulating and subservient element of a higher linear-melodic expressive level).

As a corollary of this line of reasoning, it follows that it is incorrect to affirm that popular music gives us no way of «inferire la presenza della pulsazione ritmica negli indizi offerti da una serie di strumenti» [ibid.][16] and that «propende decisamente a fondere tali informazioni in un’unica linea, quella del batterista» [ibid.].[17] I repeat that the pulsation may be implicit, as is clear in the entire tradition of breaks or stop choruses in jazz and rock, or simply in a guitar arpeggio in finger-picking style, or again in a solo voice
performance by Bobby McFerrin: all of the instruments contribute to the sensory-motor 
significance (as Barthes, once again, would say [2001, 44]) inherent to groove. The 
problem, if anything, lies in the notion of pulsation itself.

Ethnomusicological studies have always been well aware of the fault lines inherent in 
the formalisation of any such set of problems within the "objective" vision of Western 
music theory. Not by chance, Richard Waterman used to speak of an «off-beat phrasing of 
melodic accents» to distinguish rhythmic and micro-rhythmic articulations in music of 
African origin, from syncopations in conventional music theory, in its various forms, and A. 
M. Dauer has stigmatised the «Mißdeutung des Jazz als "synkopierte" Musik».[18]

This latter consideration leads us to examine the conditions in which current 
paradigms in music theory can be adapted to rock and jazz. Metric-rhythmic 
conceptualisation, as it has been historically defined in various speculative, regulatory and 
descriptive traditions of Western music theory [Christensen 2007], and in particular in 
those branches pertaining to the creation of art music from the eighteenth to the mid-
twentieth centuries,[19] owes a great deal to a line of thought that can be traced to 
Descartes and Leibniz and has shaped, cognitively speaking, musical creation itself (above 
and beyond the differentiation of styles and languages) [Caporaletti 2015]. The structure 
itself of this theoretical model has been gradually moulded within a historical context in 
which the code of music textualisation, based on the system of notation, permeated with 
its own segmenting and sequential criteria, and its combinatorial matrix, the 
representation of sonorous phenomena, and therefore the nature of the modalities of 
creation (recalling that this correlation is the product of an epistemological perspective 
according to which the operating system of the medium or of the code - i.e. its internal 
logic - induces an isomorphic model of knowledge and cultural representation).[20]

From this point of view one can state that such a codification, along with the theory 
that expresses it, is ill-suited to represent a model of musical communication and creation 
such as that of rock or jazz,[21] which unfolds, in the very conception of its text (in an 
anthropological sense), by way of comprehensive units, and therefore through analogical 
criteria (that even permeate the field of pedagogy, didactics and learning, which often 
takes place via imitation, with mimetic experience). The need arises to elaborate or 
inegrate, for these kinds of music, a music theory that takes into account an extension of 
the field of musical communication and creativity; furthermore this would represent a 
fundamental contribution to music theory tout court.[22]

The objective is to elaborate the epistemological bases on which to establish a 
thetical representation of the ideational-creative processes of rock (or jazz, or rebetiko, 
arabesk, highlife, jùjú, and all other musical repertoires that are frequently assimilated)
on a structural, not a stylistic level - the latter representing a subordinated level on which one could possibly raise questions regarding aesthetic value.

But the crucial issue arises when one step further is taken. After highlighting the functional invariants found within these diverse frameworks of stylistic expectations, they will have to be given a name. This is where the conditions for a common nomothetic understanding may finally take shape. The treacherous terrain of ideological designations and their pre-constituted value judgements can thus be avoided, reaching instead a classification that is justified by the functioning, in terms of cognitive anthropology, of the creation, the intrinsic and distinctive "deep" structural configuration, and the reception of these practices, expressions and texts.

In the first place, the example of groove tells us that it is necessary to identify, within the realm of music theory, an existential nucleus situated on the same level as the concepts of its representation. It is in fact impossible to generate poietically or to represent theoretically the phenomenon of groove without taking into consideration how time elapses both in the music and in the specific and concrete subject that synthesises it in the moment of both production and reception with an intrinsic corporeal inclination of its own (cognitively speaking, this implies the activation of *schèmes d’ordre*,[23] as defined by Imberty). Groove cannot be assimilated by the structures of Western theory, without giving it a "post-mortem", aseptic and mathematised description, for the simple reason that, cognitively, it does not call into play only *schèmes de relation d’ordre*,[24] which are responsible for the cognition of structures (for example, in the representation of the concept of a scale, a chord or a harmonic false relation). Groovemic flow, in both its macrostructural (the level of rhythmic groupings) and microstructural components [Caporaletti 2014], occurs as an emotive resonance, as a feeling for sound: this is the natural outcome of a theory that embraces the prerogatives of the performer. The notion of groove belongs to that genre of concepts in which the temporality of the subject, and its living experience, becomes an unavoidable factor for any comprehension of the phenomenon.

Cognitively speaking, while temporal factors are not pertinent to the concept of a "musical scale", which can be represented independently of time - and thus, in a reversible temporality - groove occurs during the course of time, is irreversible, and one cannot have any cognition of it without sensory-motor involvement with regards to both the production and reception of the phenomena. It goes without saying that the subject’s corporeality is a necessary part of the nature of groove, which originates precisely by establishing a relation between the realm of sound and corporeality: without a special psycho-corporeal disposition, the phenomenon does not occur (for the phenomenon of
swing, analogous to groove, André Hodeir spoke of a state of "relaxation" [1980, 231]). The functionality of mirror neurons, furthermore - with their kinetic-perceptive syncretism - has provided a neuro-cognitive basis for this phenomenological case. At any rate, metalinguistic description is one thing and the feeling of the the "grain of the voice"[Barthes 2001, 257 ff.] is another (to name one model of cognition, proposed by Barthes, quite close to the one we are discussing), which can only be felt beyond language and within a synaesthetic experience.

What historical reason can there be, however, for Western theory and the musical practice it defines not to have experienced these groovemic peculiarities? This is a question whose basic terms, at least, must be set out following historical-philosophical criteria.[25] We must recall that the theoretical process that led to the system of Western music theory - a double-headed cognitive medium matched by a semiographic code - took place within the modern historical period that saw scientific method take shape and be positioned at the centre of Western thought. Within this vision, as both Jaspers and, in particular, Heidegger have noted [Jaspers 1950 and 2000; Heidegger 1968 and 1991], a particular way of conceiving and structuring reality based on "calculative thinking", on the pre-constitution of that which is given in the anticipating provisionality of being, then takes shape with experimental proof. To this end, a split had to be inserted between Subject and Object, so that the latter could appear in its objectivity, not "perturbed" by an acting subject, and be broken down by mathematical concepts that constitute a simple "invisible" started from the complicated and differentiated "visible". This particular pre-constitution, in the case of music theory, is highly significant: if the medium of language conditions thought, as has been shown by Wittgenstein and Heidegger (and Saussure) among others, then the immanent principles of the music-theoretical code have bound creative practices to themselves, making the latter an emanation of the former.[26]

Now, this objective or "opposing" position (in Latin: ob-jectum; in German: Gegenstand) of the Object is well-suited to a process in which the efflorescence of lived experience is drained away, in which the irreducible inflections and variations of creative singularity are disintegrated, and is profoundly inherent in the theoretical systematisation of the various schools and tendencies of Western music theory.[27] It has furthermore activated a structural homology, even in the strictly allographic nature that art music has gradually taken on, in the separation between composer and performer that is inherent in the technology of musical writing itself. That this condition was particularly appropriate to the ethos of modern music is an elementary assertion made by musical anthropology.

Harmonic structures and rules for voice leading in tonal music are self-inclusive objectifications, and precisely as "structures" they are a natural implementation of a
rationality stemming from Descartes and Leibniz; all the more so, in that music notation carries within its own structural functionality this particular modality with which the "rational" is organised with Kant's *a priori* forms of space and time that formalise solidly, and respectively, pitches and durations. These are the "strong", measurable and objective foundations on which the code itself of notation is constituted as a cognitive model through which what can be musically thought is structured and adapted, and from whence it gleaned its aesthetic axiological criteria over the course of its historical implementation in the classic-Romantic-modernist historical period.[28] This has left, instead, to the erratic processes of history the task of performatively qualifying the "secondary qualities" given by parameters such as timbre, dynamics and agogics, all suprasegmental in general (and identifying interpretational/performative styles, if and when brought back to a linguistic system). Not to mention, lastly, the historical disappearance, during this process, of improvisational formativity, which brings together this entire set of problems by bringing into play the concept itself of objectification from the point of view of both the creative aspects and of the macro-form.

But how to reconvert this originary dichotomy and theoretically recover the dramatic and existential dimension of the Subject, so relevant in the rock and jazz repertoires currently in question? The way has been indicated by Karl Jaspers, when speaking of "originary presence". Transposing this prospective to music, the latter would no longer assume the form, *in its own theoretical representation*, of an Object, of a reified thing, quantified and mathematised by Western music theory, but would draw its own sense from a disposition thanks to which «for observation, the object is no longer the thing, but the Subject-Object-Relation (*Subjekt-Objekt-Verhältnis*) as a whole» [Jaspers 1950, 33]. This confers reality, therefore, upon a form of phenomenal knowledge/experience with a predominantly psycho-corporeal mediation of musical processes - for example, in consideration of a concrete formative and aesthetic affirmation of morphological inductors related to sensory-motor-emotive energies, which cannot be controlled by an intentional/rational attitude. These sensory-motor phenomena are made possible only by liberating one's sense of time and of the pulsation that governs it from exosomatic and objectifying bonds,[29] as the outcome of the quantitative and mechanical reification of time carried out by the modern geometricisation of sensation, but connecting the factor of pulsation, in its metric substrate itself,[30] to the phenomenological living experience of the body, placing it within the vital and energetic order of natural rhythms.

From this alternative perspective, everything changes: the concept of meter along with those of pulsation and rhythmic grouping now have an existentive, acoustic and embodied resonance. One of the most striking consequences, technically speaking, is that meter as an abstract, mathematised and univalent concept disappears in favour of a
metric "polysemy" (a widely accepted case in pop, rock, jazz, world music consists in two overlapping 4/4 bars displaced by one quarter note to produce the so-called backbeat, in which the harmonic rhythm creates one meter and the snare drum marks the strong beats of the other, shifted meter, according to a primordial way of somatically identifying the pulsation through the complementary articulatory trajectories of the upper and lower limbs or bodily bilateralism) [Caporaletti 2002].

Epistemologically speaking, the cornerstone of this entire reasoning consists in aligning, above all in a poietic sense, the pre-eminent value of musical creation and conception not with extrinsic and structural properties, as given by the implementation of schèmes de relation d'ordre, according to the model followed by Western music theory, but with the concrete expressions of the existential subject and its living experience, understood as being at one with the phenomenon it is attempting to objectify, in the language itself of the body in its temporal unfolding. This is where the sensory-motor factor comes into play, along with the African-American notion of "feeling", understood as the interior resonance of a formal sentiment, the personalisation of the parameters of sound, the idiosyncratic inflexion that locates and subjectively forms phonic, rhythmic and timbral substance. All of these qualities are essentially based on a rejection of any nuclear/discrete conception of the note-sound, conceived as a geometric point within a Cartesian (tonal) field whose classic, polished sonority represents the corresponding eidetic essence in a purely abstract sphere.

But let us dwell further, now, on the sensory-motor factor. We have seen that the code/cognitive model that emanates from notation and from the music theory of which it is an expression - I define it as a visual matrix [Caporaletti 2005; 2014] - reduces the pitch and duration of sound within a mathematical framework (and this condition remains even in multi-parametric serialism, in its proposition of isomorphism between pitch and duration).[31] Following this path, one is led to give up on a formalisation and legalisation of those expressive qualities of the existential subject which currently interest us, including the aesthetic values that derive from them, setting them epistemologically to one side as contingent and "secondary" qualities (in the same way, as Kant used to say, as wine from the Canaries, of which no scientific knowledge can be had).

From this new perspective, instead, pulsation can no longer be represented[32] as a simple succession objectified by the scientific-mathematic perspective, and subservient, de facto, to melodic-harmonic unfolding. Within a framework in which "secondary qualities" have finally been recovered - thanks, as we shall see shortly, to the technology of sound fixation - thus becoming, in the phenomenological arena, epistemological objects with a non-derived, intrinsic status, pulsation appears as an energetic quid with a value of
its own, intrinsically "motivated", as a direct analogon (or a sort of fractal, by way of self-similarity) of the temporality of existential living experience. It therefore transcends any single moment of the sequence and projects it onto another plane, no longer definable as rhythmic or metric (and therefore no longer under the sole jurisdiction of music theory) but, rather, indicating a continuous sensory-motor flow that therefore acquires an aesthetic (but also, I would say, truth-bearing) value in itself.

Every musician has her/his own way of expressing this energetic fervour, an idiosyncratic way of "keeping time" even with a simple series of beats, or even only foreshadowing it, inspiring it with skillful allusions that are an intrinsic quality of a sonic realisation that is directly dependent on their individual corporeal habitus. This is the theoretical prerequisite of a pulsational construct that carries within itself a mark of existential verification, of the Dasein of the Subject that becomes Object, inseparable from it on the theoretical level itself, in a representation that fuses together the Subject-Object-Relation: I define this existentive series of pulses as a continuous pulse.[33] And from the background of this new conceptual nucleus of the continuous pulse (which, nominalistically, is never "the" continuous pulse, but always "a" continuous pulse: the one created by Elvin Jones, or by the various Elvin Joneses at different times of the day, or by John Bonham, but also by Bob Dylan, or again implicit in the rhythmic guitar strokes of Keith Richards etc.), what emerge during performance are the sensory-motor phenomena processed by mirror neurons as regards their grouping - i.e. the rhythmic figurations that appear on the surface, according to the structural crevices in which the play of participatory discrepancies is explicated [Keil 1987]. Obviously, all of these considerations can be extended to other aspects of sound - timbre, dynamics etc. - including as well those expressions in which there is no isochronous or inter-regulative intention.

If the continuous pulse, whether explicit or implicit, is not present - and nor is its (even tacit) psychological and cultural representation, and therefore the poietic knowledgeability that derives from it, but simply the "pulsation" of conventional music theory - these sensory-motor phenomena either do not appear or take on entirely different meanings. And these groovemic specificities are pertinent to the most impalpable level, which lies in the particular internal "movement" of a simple guitar arpeggio, as well as to the daring polyrhythmic stratifications in music by James Brown, Sly and the Family Stone or Herbie Hancock's mid-Seventies recordings for Columbia.[34] These latter examples unquestionably provoke a bodily response - even according to the criteria set out by the penguin Opus quoted by McClary and Walser - establishing such a sensory-motor factor, centred within itself, as the primary vehicle of the message. On the other hand, this does not prevent groovemic kinetics from appearing in other contexts: for example, in Martin Barre's solo in Aqualung[35] it effectively contributes to tearing apart
the dark and ominous atmosphere of the piece (highlighting the idea that the filthy and slobbering old man Aqualung is, in the end, nothing but the other side of the reactionary bourgeoisie). And, to mention another piece of music recorded in the same period as the previous one (and in an adjacent recording studio), let us consider the universally known figure with which John Bonham’s drumming enter at 4'18'' in Stairway to Heaven,[36] where the slightly de-pulsive attitude [Caporaletti 2014], the lag that is, at the same time, hesitant and assertive with respect to the particular line of continuous pulse (brought into being until that moment without the use of any percussion instruments) almost gives us a tangible sense of titanic fatigue and disenchantment, imbued nonetheless with a categorical imperative, in the arduous ascent to the peaks of transcendence.[37]

Ultimately, what in the collective imagination and in much academic literature has been known under the name of groove is no more than an epiphenomenon, the most eye-catching case of an endemic and substantial structural sensory-motor factor of the entire rock and jazz tradition (obviously also present in world music), and that has different degrees and modalities of perceptive intensification and a broad range of aesthetic finalities. If, on the contrary, the phenomenon of groove, as regards reception, is reduced to the mere goal indicated by Opus, only a part of the problem risks being grasped while overlooking an entire series of revealing cases that characterise the symbolist nature of a large amount of music from the rock tradition grounded on the continuous pulse (implicitly promoting, incidentally, the cause of "non-art" music’s detractors, who reserve sole jurisdiction over these spiritual areas to the great Western tradition; in any case, in the present context I will not deal with the strategies and dynamics of cultural politics).[38]

The notions of continuous pulse and groove are only examples, but prove to be particularly useful in introducing us to the central point of our discussion: the possibility, mentioned above, of an integration of music theory. How one can name the existential dimension that fully enters within theory, instead of remaining outside of it? How one can label the specific poietic and receptive psycho-physical modality on which we have dwelt until now, and above all the way in which it acts as a cognitive medium that induces a very precise conception/perception of music and life, and so deeply characterises the languages of rock, jazz, world music, and pop itself?

I have named it the audiotactile principle (ATP), in the symbolic sense of both aural and tactile perception as distinct from the "visual" archetype, and as factors that identify two specific and related modalities in which the subject’s cognitive musical experience unfolds, regardless of normocentric criteria (active for example in Saussure’s conception of the Langue or in Western music theory)[39] and exosomatic systems of textual codification (such as notation), bringing them under its own "experience-forming"
jurisdiction. But I have also used this neologism for another reason. In its semantic constitution, indeed, in addition to the mark of "tactility" it also includes that of "audio (technology)". Now these two categories, under the respective "mediological" forms of the audiotactile principle (ATP) and neo-auratic encoding (NAE), are called on to act as the pillars of the Theory of Audiotactile Formativity, a taxonomic model that defines the specific features of audiotactile music - distinguishing it phenomenologically from other musical systems and experiences, such as the tradition of written Western art music[40] and traditional music[41] - present in the languages of jazz, rock, pop and contemporary world music in all its manifold expressions. In what follows I will outline the concepts of the ATP and NAE, and how they can set out the criteria for a taxonomy of musical experiences, providing the reader with the appropriate references for a more refined understanding.

**The audiotactile principle (ATP)**

Limiting the notion of an audiotactile principle to its mere nature as a psychosomatic carrier of a specific way of conceiving and understanding music may not initially seem to be entirely correct, in that phenomena related to it are extremely widespread in cultures across the world, and can thus be defined as an *environment*, a cognitive/experiential framework that as such - as McLuhan would say - is anthropologically invisible.[42] The fact is that the ATP, from a diachronic point of view, takes on its distinctive conceptual sense, noetically establishing itself as a cultural unit, at the precise historical moment when Western music established a process of exosomatic externalisation of its own experiential and formative prerogatives, through the dual system of musical notation/theory,[43] considered according to the specific abstractive and Cartesian internal logic that shapes it. Therefore, to be precise, it is this latter system that "appeared" as a new element, a factor that introduced a separation within the integrated experience of music across the world, in the same way that, with the appearance of the notion of composition, the idea of improvisation was formed, which is unthinkable and does not emerge in traditional oral cultures [Caporaletti 2005, 92 ff.].

From a synchronic point of view, the ATP can therefore be understood as an agent interface and a psycho-corporeal cognitive medium that, within a mediological interpretative framework, implies a mode of knowing and representing music that is coherent with its own organic conditions, and therefore identifies a noetic model intrinsically connected to a specific embodied rationality [Merleau-Ponty 1967; 1976]. This audiotactile cognitivity takes shape independently from representations that are exosomatic, normative and indebted to formalised theoretical systems (or, it implements...
itself by reducing their operative and aesthetic scope, or again by functionally including them within its own cognitive space, as is clear from its functionality in musical traditions that originated in the twentieth century, such as jazz or rock). In particular, I am referring to those theoretical frameworks (such as Western music theory) that use systems of rules based on combinations of discrete units to produce texts and model their own axiomatic criteria, their own operative system and their own specific internal logic, drawing on epistemological categories such as linearity, the segmentation of experience, the homogenisation of categories, uniform repeatability and quantitative reductionism. These are abstractive principles that justify the technology of Western musical notation (and not, for example, the Indian notation of carnatic music) and the theoretical system that accompanies it, both of which I define, inasmuch as they are a result of the symbolic form of the sense of sight, as belonging to a visual cognitive matrix.

For example, the Western system of musical notation/theory can be understood as a media-steered subsystem, to use a term coined by Jürgen Habermas [1988], that neglects endosomatic cognitive traits in favour of exosomatic ones - i.e. rational, classificatory, abstractive, logical-combinational and efficiency-oriented. It thus gives way to the allographic nature of music, establishing a primacy of text over gesture and resulting in a specialisation and functional separation between composer and interpreter. The latter defines his/her own identity by adhering to a system, and to the way it is explicated in the concrete production of music, whose primary creative foundations he/she does not master, even while authentically and legitimately aspiring to a degree of freedom: foundations that, on the contrary, are indebted to normative functions and superordinate power dynamics [Foucault 1994]. Though in the living artistic practices of the previous century, these dynamics and functions suffered a strong attack by artistic movements originating within the learned Western tradition, one must not forget that today this ideology still imprints the pedagogical and didactic aspects of Western music.

The audiotactile principle, on the contrary, with its bottom-up approach, brings to life the Utopia of a system whose rules are induced by the individual within an artistic and communicative action via his own endosomatic mediation and a contextualised and interactive negotiation. What is set into action is thus a corporeally mediated phenomenal form of knowledge/experience of musical processes - for example, with a concrete formative and aesthetic affirmation of morphological inducers of sensory-motor energy that cannot be controlled in their temporal microstructure by an intentional/rational disposition (involving factors that cannot be noetically apprehended by Western music theory, and which receive various names in the ethnic theories of many kinds of world music: referred to in jazz as "groove", "swing", "drive", "participatory discrepancies", "playing behind (or ahead) of the beat, but also as lay in Hindustānī music, balanço in
Afro-Brazilian music, répriz and lokans in the music of Guadeloupe, ombak in the Indonesian gamelan tradition, flow in rap etc.).[44] Furthermore, with the vital mediation of the ATP, when projected to the level of macro-form, the existential truth-bearing essence becomes relevant, assigning primary value to creativity in the immediacy of the present moment, as offered by processes of musical extemporisation and improvisation. The creative, holistic and endosomatic nature of the ATP furthermore rejects the ontological distinction between interpreter and composer, or takes it up in a new regime of authorial sharing.

In addition to physical-gestural mediation, however, psychic mediation is highly important in improvised creation; alongside its de facto connections with the former, its constitutive and pre-eminent values involve empathy (feeling) and interaction as a way of discovering the other (interplay), reaching a telepathic/contextual intuition that is able to foresee the way in which the performance, and more generally the becoming of the event, will unfold. It is important to remember that only in a situation in which corporeality becomes an active part of cognitive activity - primarily responsible for this entirely unique way of understanding and representing music (but not only music) - does it become audiotactile: otherwise, a similarly physical approach would inevitably be subsumed under a visual and normocentric cognitive order, exosomatically codified, as is the case with historicised attestations of written and learned Western musical cultures.

**Neo-auratic encoding (NAE)**

The production of different types of music based on the audiotactile formative medium is highly dependent on the "processing" of texts carried out by recordings ("texts" being understood in the widest possible anthropological sense, referring to both single expressions[45] of kinds of music that depend on a notation whose codes are more or less "open", and a dimension that involves performative creativity). The results of such processing acquire a definitive textual status, a phono-fixation that induces mediological effects on an aesthetic level, acting in many ways similarly (retaining, all the while, firm roots in an evenemential/audiotactile performative milieu) to the crystallisation of notation projected over long spans of time that is typical of "written" composition with individualised authorship as found in the learned Western art music tradition. The possibility of using the medium of sound recording as a creative instrument generates, within audiotactile music, consequences on a cognitive level (which are also active in relation to performances not subject to recording): these effects are reflected on its aesthetic image as distinctive traits when compared to music from traditional/oral cultures.
Oral tradition repertoires, that are equally based on the ATP, did not take shape over the course of their historical evolution across the formative medium of sound recording; rather, they came in contact with it only after the fact, as an ethnomusicological and documentary factor (with the exception of the contemporary developments of these traditions, as will be discussed below). Audiotactile music - which includes the repertoires of jazz, rock, pop and contemporary world music as well as their intersections with other semiotic systems - has, on the contrary, been permeated by the influence of the medium of phonographic recording in its musical conception and formal developments themselves. The theoretical structure and cognitive modality that derive from these dynamics have been described by the author of the present text with the notion of neo-auratic encoding (NAE) [Caporaletti 2002, 34; 2005, 121 ff.], in direct contrast with the idea of the loss of the aura in the work of art in the age of mechanical reproduction, as theorised by Walter Benjamin [1936].

While there is no doubt that with technological reproducibility one must relinquish the work’s *hic et nunc*, it is equally true that aspects that can be attributed to the audiotactile principle find in sound recording the means to capture a number of significant indices of the processual/phenomenal qualities that re-establish, for these musical artefacts, a new model of "auraticity" by way of the technological support. This objective textualisation, which distances musical form from the evanescence typical of oral cultures, gives audiotactile music access to the categories of modern Western aesthetics - authorial identity, creative originality and mobility of aesthetic norms, autonomy of the work, non-functional reception - and overcomes, to all intents and purposes, the distinction between popular and art music.

The "transcription"/technological inscription of the ATP, and its phonographic fixation in correlation with processes of NAE - or the awareness of the "inherent" possibility of this crystallisation, in terms of symbolic interactionism, as a potentiality of phono-fixation even when an intentional phonographic processing is not present[46] - delineates the phenomenological terrain where the quintessential conditions of audiotactile music, properly speaking, appear. The problem that contemporary ethnomusicology must tackle is that in a technological globalisation based on information and electronics, oral traditions - turned into a heritage and "frozen" at the moment in which oralism was phono-fixed for the first time, during the initial development of the discipline - are definitively disappearing, thus acquiring the traits of audiotactile music themselves, under the form of world music or world beat, establishing neo-auratic cognitive models, and thus sparking off intensive processes of transformation that are entirely new with respect to those seen in the past.
A taxonomic model

At this point, we have all we need to identify - in terms of cognitive and textual anthropology, and following the broad lines of a few ideal-types - the position of audiotactile music with respect to the tradition of Western art music[47] and traditional oral cultures.[48] The resulting taxonomy divides the Western experience of art music into two anthropological subsections based on the notion of the "work" within late-modern aesthetics, and the tension between the score as a written text and its performative enactment.

From a cognitive point of view, the distinctive pertinent trait lies in whether the *creative synthesis* primarily comes about, with the related aesthetic values derived from it, via a psychosomatic mediation (as in the extemporisation of a ritual song or in an improvisation: endosomatically [ENDO]), or via an abstraction induced by the strong influence of Western music theory, and is therefore highly dependent on abstract systemic norms (for example, in composing a fugue or a dodecaphonic piece: exosomatically [EXO]). Furthermore, from our methodological perspective the culturally prevailing and anthropologically characterising *form of textualisation* owes its importance to its role as the form from which mediological inherence is developed - i.e. the particular cognitive criterion of the subject in its cultural frame. Here as well, the pertinent trait is whether this aspect can be traced, as regards its anthropological characterisation, exclusively to the corporeal frame, thus marking the text as transitory and evanescent [ENDO], or primarily represented (or, possibly, phonofixated) in a material support, such as a score or a phonographic support [EXO].

<table>
<thead>
<tr>
<th>ANTHROPOLOGICAL STATUS</th>
<th>CREATIVE SYNTHESIS</th>
<th>TEXTUAL UNIT</th>
<th>WORK CONCEPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Art Music (composed)</td>
<td>EXO (visual)</td>
<td>EXO (score)</td>
<td>+</td>
</tr>
<tr>
<td>Western Art Music (performed)</td>
<td>EXO (visual)</td>
<td>ENDO (performance)</td>
<td>+</td>
</tr>
<tr>
<td>Oral Traditional Musics</td>
<td>ENDO (APT)</td>
<td>ENDO (performance)</td>
<td>-</td>
</tr>
<tr>
<td>Audiotactile Musics</td>
<td>ENDO (APT)</td>
<td>EXO (recording)</td>
<td>+</td>
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*Figure 1. Taxonomic outline*
Drawing some conclusions from this discussion, a few clear indications emerge. Obviously, I have no intention of demonising the term "popular music": no one could hope to impede a linguistic usage that has by now become deeply rooted. This does not, however, prevent us from condemning its nomothetic impracticability. I myself will continue to use, within certain linguistic registers, the formulation "popular music" in the same way one would use "classical music" when speaking of J. S. Bach, even though in some institutional and academic contexts the question obviously takes on different nuances. In this sense, from the point of view of the topic of research, Rory Gallagher, Ernesto Dabó, Zuhura Swaleh, Sunny Adé and George Vitale would come together within the area of audiotactile music and would be studied with the methods and concepts that audiotactile theory proposes. The subordinate category would therefore not be that of popular music, but would arise at the level of the endo-ethnonyms that tradition, musicians and critics continue to use: Irish rock-blues, gumbe from Guinea-Bissau, Kenyan taarab, Nigerian juju or New Orleans jazz.

The first to welcome this re-definition of the field should be precisely those scholars who recognise their work as being part of popular music studies. The latter have carried out an important historical task, but I believe the time has now come for a genetic mutation. When all is said and done, a dynamic tendency towards change is in this discipline’s DNA, providing the only option to avoid the risk of becoming ideological, or otherwise, sclerotic. If I think about my own past as a progressive rock and then jazz musician, leading up to my current commitment as a musicologist, I realise that a constant engagement in change is the driving force behind artistic and academic research. And this attitude is also well suited to the "antagonistic gene" that marks popular music studies, recalling that the primary target of our antagonism must be anything that tends to shut us up inside prearranged schemes.

A centripetal tendency towards reinforcing the compactness of given disciplinary fields is a natural direction in which research proceeds. For example, in physics, the quantum field theory brought together, in the twentieth century, quantum mechanics and general relativity, which had previously been two separate branches. The audiotactile model bears within itself a special versatility, in that it foresees a general infrastructure that can later be adapted to the specific cultural, social, anthropological, economic and political features of the diverse systems. One of the most interesting implications of this discourse is that the process of deconstruction set into motion by the Theory of Audiotactile Music could pervade the entire field of musicology, involving ethnomusicology and historical musicology as well. In the first case, specific indications are provided for overcoming the ethnic bias, tied to obsolete models with an insistence on territorial and biological criteria, and moving towards groups based on identitarian criteria that are
fluctuating, non-localised and orientated by socioeconomic, cognitive, ethical, political and aesthetic factors. One signal of this is that the term "ethnomusicology", as a designation for a university course, is currently being overcome (in Italy, for example, it has been replaced by "transcultural musicology" by both Francesco Giannattasio and myself). As regards historical musicology and the written Western tradition, suffice it to say that studying music of the twentieth century, or so-called Baroque music (not to mention music dating to even earlier centuries), the traditions of medieval liturgical song or even the eighteenth-century Neapolitan partimento without the theoretical contribution of the ATP and the conceptual tool of extemporisation seems to me today to be an uphill battle. The audiotactile model includes, therefore, among its objects of study, not only kinds of music commonly associated with the label "popular music", but also, under the banner of the ATP, music coming from traditional cultures, pre-classical and post-modernist music in the Western written tradition, and, under the auspices of the visual cognitive matrix, the entire classical-romantic-modernist period.

And yet, as we have seen, this centripetal epistemological tendency appears in the area of music with one important mutation. The materialisation of the Subject in music theory, as discussed above, implies, as follows from the conceptualisation of the ATP, a Copernican change of perspective. It encourages an assimilation within Western music theory and music analysis themselves, even priorly to historical musicology, of many criteria that are inherent, for example, in the «methodological reading of Foucault and Bourdieu, combined with anthropological and social theory, popular music, postcolonial and cultural studies» invoked by Georgina Born [2010, 211]; or again, contributes to overcoming the socio-anthropological text-centred neo-Adornian-inspired formalistic homologies with which Tia DeNora [2004] describes the - by now, dated - experiences of New Musicology. It also offers an antidote to the crucial point of reification, pointed out by Philip Bohlman: «There is no single way in which music becomes essentialized into the object of musicology’s study. Indeed, each of the sub-disciplines of musicology privileges different forms of essentializing, all of them, however, rallied with the intent of understanding something uncritically called "music." Music exists "out there"» [1993, 219].

Some signs of this desire for a more compact definition of the field are however slowly but surely coming to light. I would like to conclude this contribution with the words of one of the most respected representatives of jazz studies, Laurent Cugny, who when speaking of an audiotactile musicology wrote:
As regards the discipline of musicology as a whole (and not only, therefore, the study of audiotactile music), one must scarcely recall the trench that was dug between music theory on the one hand and, on the other, that which for a certain period of time was called new musicology, whose approaches were aimed at anchoring musical phenomena to cultural reality. It is precisely from the monodirectionality of these rigid historical-cultural oppositions that the Theory of Audiotactile Musics allows us, in my opinion, to escape. Indeed, introducing a third term with respect to the dichotomies written/oral and art music/traditional music does not simply represent a terminological enrichment, but also a refoundation of our perspective. That which is even more important for me, however, is that this new vision, rather than fragmenting the situation even more, introduces a relativity which allows the various models to be compared: it rediscovers audiotactility in art and traditional music and writing in traditional and audiotactile music, and phonography in each of them. Specialists of micro-rhythms are no longer locked up, wearing a white coat, in ascetic laboratories, and advocates of a culturalist approach are no longer eternally condemned to decry the turpitude of graphic transcription. All can come together once again, in a sort of Gay Science [Cugny 2016, 30]. [49]

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[1] The literature of popular music studies is immense, and in this article I cannot offer a critical outline of it. I will therefore refer only to a few texts that are fundamental or that I believe to be emblematic. For a specific discussion of mine of analytical approaches to rock or pop (by Everett, Forte, Bowman, Middleton, Comer, Lacasse), see Caporaletti [2003].

[2] « [...] the group of musical activities in the contemporary world ranging from songs to rock, from film and television music to jazz». I refer in particular to Moore [2001] (rather than the more recent Moore [2012]) not only for the specific discussion of groove, but also for the fact that this essay provides definitions and acts as a reference in the context of a prestigious encyclopaedia; among other things, the article has been republished in an identical version in the French 2005 edition (Musiques. Une encyclopédie pour le XXIe siècle) and is therefore particularly representative in its field.

[3] Baroni [2003, 328], in referring to the formula “popular music”, stigmatises its anglophone usage and proposes that it be substituted by “musica di massa” «which translated better the adjective popular (understood as “widely known” music) which, frankly, there is no reason to continue obstinately to use in English while speaking Italian».  

[4] «The emission and the reception of the message both lie within the field of a sociology [...] For the message itself however, it is necessary to provide for a specific method prior to sociological analysis and which can only be [an] immanent analysis».

[5] Then again, the entire twentieth century saw continuous reformulations of the field of studies of traditional musics, and re-definitions by academic organisations and research councils: to only mention one case, the discussion on the category of “folk” that led, in 1947, to the International Folk Music Council to be transformed into the International Council for Traditional Music.

[6] I will not discuss in this article, for reasons involving space, the set of problems raised by the trans-semiotic relation of the musical code with verbal texts (in songs) or with visual codes (in videos).

[7] Or better, of the various music theories that articulate this field, as combinations of a specific outlook and a set of techniques. Obviously, this clarification implies the possibility of a “different” music theory or an integration of current paradigms.

[8] On the phenomenon and the concept of groove, see Caporaletti 2014.

[9] In Middleton [1990] the term “groove” does not appear even once, which is curious to say the least for a study in which highly important analytic questions are introduced. The concept is present in Middleton [1993], referring
moreover to Chapter 6 of the previous text for further details [Middleton 1993, 181]. For a comparison of the conceptions of groove set out by Tagg, Moore and Everett 2009, and a critical evaluation of them, see a my forthcoming study.

[10] «The first of these [functions of popular music] is to articulate a series of pulsations, the so-called groove».

[11] «[...] by making the rhythmic pulsation [sic] explicit, it allows one immediately to dance».

[12] See for example the Sonata K. 27. For the notion of "vamp" in D. Scarlatti’s music see Sutcliffe [2003, 196 ff]. It is interesting to note that Giorgio Pestelli, in reviewing this volume, rightly notes that «the verb to vamp, which appears as early as the eighteenth century, indicates “improvise, perform extemporaneous preludes” and has no relation to the derogatory vamp used to describe the "vampire woman”» [Pestelli 2006, 405]. What one might add is that jazz jargon uses the verb vamp, not so much to indicate creation in real time, as for the iteration or ad lib repetition of a brief harmonic formula. I believe that it was precisely this connotation, tied to repetition, that inspired Joel Sheveloff’s critical definition, later taken up by Sutcliffe.

[13] Incidentally, this is essentially the reading and interpretation that musicians have always given to the term, as I can also testify to if, introspectively, I turn to my own experience as a progressive rock and, later, jazz musician. It goes without saying that the same sensory-motor level creates formal and value-related systems, to be considered aesthetically and not merely functionally.


[15] «playing” with the regularity of the pulsation».

[16] «inf[ering] the presence of rhythmic pulsation in the clues offered by a series of instruments».

[17] «decidedly leans towards blending this information into a single line, the one played by the drummer».

[18] For a more in-depth discussion, see Caporaletti 2013.

[19] In this article, reasoning along the broad lines of ideal-typical characterisations, for "Western art music" or "written tradition" I refer to the instrumental music of the German tradition, especially during the period in which the idea of Werktreue or Texttreue was formulated [Goehr 1992], with a full affirmation of the nomologic status of the score.

[20] One must clarify that this condition is not a vulnus that is unique to notation: it characterises all semiotic systems based on a code made up of discrete units and rules for their combination [see Barthes 1974; Eco 1975] (and there is no need to recall that, with this criterion, eternal and transcendent artistic monuments have been created). Axiological questions regarding different creative worlds ("classical" and rock, for example) are not the issue here, but structural and phenomenological features that can set out the bases of a taxonomy.

[21] This is also true of "written" jazz: in jazz or pop-rock compositions or arrangements, the gesture always prevails over the annotated text.

[22] This is also true of the most advanced research in this field. London [2012], in which post-tonal conceptions of rhythm and meter are also set out, does not go beyond the rhythmic conceptualisation of the second phase of serialism, without raising the methodological problem of the "theoretical burden" inherent in the very structuring of rhythm. In post-tonal rhythmic theory, the instrument of notation continues to read itself, and define phenomena on the basis of its own pure internal logic and its own operational system.

[23] «Les schèmes d’ordre constituent l’ensemble des intuitions que le sujet a des successions temporelles sans qu’il ait conscience des éléments constitutifs de ces successions. Il s’agit donc d’intuitions de nature sensorimotrice ou représentationnelle dont les contenus sont indissociables des séquences ordonnées elles-mêmes)» [Imberty 2003, 103].


[25] For an in-depth discussion on these topics see Caporaletti [2014].

[26] As regards the musical dynamics between theory and practice, while it is true that practice has always preceded theory, one must also admit that once a theoretical phase has become solidified it in turn influences subsequent creative practices. Concerning the linguistic conditioning of thought, it is worthwhile recalling that recent directions in
cognitive science tend to reveal "free zones" of cognition, independent from linguistic processes (for example, in specific aspects of categorisation).

Borio [in print] outlines the effort made by music theory, and the German school in particular, in attempting to reconcile subjectivity, and the values it emanates in improvisational processes, with an outlook anchored in the objectivity of compositional textualisation, searching (in vain, given the type of cognition and its "visual matrix", we would say) a syntagmatic-linear Zusammenhang (instead of locating its ratio in the suprasegmental and "autographic", in the sense of Goodman 1968, 102, values, as I believe is the case with groove).

Once again, reasoning in terms of ideal-types or broad categorisations. The most pertinent aspect, in the present context, above and beyond the obvious and macroscopic linguistic differentiations, is the cognitive model underlying musical experience identified by this historiographic definition, in terms of cognitive anthropology.

This process is valid for both theoretical representation and the performance practice that ensues from it, due to our methodological premise according to which the internal logic of representation and its code conditions and permeates the messages generated.

Obviously, the particular dynamics of this process (which, as we shall see, I will link to the notion of the audiotactile principle) is active in non-metric structures, as can be seen in numerous examples from musical traditions (avaz in Iranian music, ālāp in the Hindustānī tradition, taqsim in the Arab world; or again, in European contemporary free music and in aleatory music). In these cases, the existential prerogative is still at work, under the form of an idiosyncratic production of sound, of gestural markers, in the projection of its intentionality, which acts in the macro-form of real-time creation.

This premise formalises the complete spatialisation of time, the final result of a tendency inaugurated with the Cartesian structuring of the Western system of notation and its symbolic reference [Ellingson 1992], along the two axes of space/time, corresponding to pitch and duration.

And thus we could say "no longer perceptible and implementable as a simple succession", if it is true that the system of representation guides and directs perception: as Gombrich [1960, 91] says, «the artist tend to see what he paints rather than painting what he sees».

In this case the anglophone formulation is motivated by a homage to David Epstein, who used this term in Epstein [1979], albeit in a different sense that I do here.

See, for example, Herbie Hancock, Headhunters, LP, Columbia, KC32731, 1973.


Led Zeppelin, w.t. (but IV), LP, Atlantic, 2401012, 1971.

Today we can no doubt provide evidence of this deviation, or micro-temporal shift [see. Caporaletti 2014, 249 ff.] and the dynamic and timbral characteristics which accompany it, as found in the pure sonorous manifestations of groove: without however inserting them within the framework of the present reflections, it would be like having no more than the detailed images of a radiography without knowing their anatomical-pathological sense.

Furthermore, as regards the concrete technical and functional modalities with which groovemic processes take place, this is not the place for even an introductory discussion. See my other contributions [Caporaletti 2014, Bibliografia].

It is superfluous to insist that this distinction is to be understood as an ideal-type, setting out large and opposing categories. Among the examples of systems that I define "normo-centric" one can count, for example, even the system of rules that constitutes "bourgeois" etiquette. These systems are opposed to a mode of regulation with a "contextual negotiation" of the interaction with the environment, in which the sense and the communicational practice itself are regulated by the way in which the interaction plays out and by indications gleaned from one moment to the next from the context itself, and not from the prescriptive features of a prior theory. For an application of this principle - which, note well, is overriding in improvisational practices - in terms of the philosophy of language, see for example Davidson [2001].

See supra, note 19.

"Traditional musics" understood in their historicised development, as crystallised and turned into heritage at the moment of their first phonographic documentation in the twentieth century. We will see further on how the audiotactile conceptual scheme, which implicates an awareness of the possibility of removing these experiences from the textual
transience in which they had remained for centuries as oral cultures - in order to project them thus into a technological fixation of the text - dramatically changed their cultural genetics, bringing them within the phenomenology of audiotactile musics, in the form of contemporary world music or world beat.

[42] «Environments are invisible» [McLuhan-Fiore 1967, 84-85]. To discover the essence of the ATP, as of any other environment, after all, including musical notation for those who have been educated to read it, it is necessary to engage in the "estrangement" theorised by Šklovskij [1917], or else carry out a phenomenological reduction [Husserl 1965].

[43] From an ontogenetic point of view, instead, it takes shape as a phenomenon related to individual processes of musical literacy, as a repressed bodily factor ensuing from the psychosomatic rationalisation carried out by the didactics of instrumental techniques.

[44] For a deeper, comparative analysis of these psychomotor effects, see Caporaletti [2014].

[45] Bruno Nettl defines them as objectifications of "units of musical conceptualization" [2005, 113].

[46] For example, in music played live, the possibility of a phono-fixation done by the audience with commonly used digital devices.

[47] Understood within the limits specified in note 19.

[48] According to the criteria set out in note 41.

[49] See also Fabiano Araujo Costa 2015.