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The Legacy of Veda Reynolds' Violin Pedagogy: Myth or Reality?

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Abstract

This research project focuses on the legacy of Veda Reynold's violin pedagogy (1922-2000). She has been the teacher of many today virtuosos (e.g. Renaud Capuçon, Gilles Apap). Indeed, Veda Reynolds had a career as a soloist, chamber music and orchestra performer before teaching at the Curtis Institute of Music in Philadelphia and later (1979-1989) and CNSMD of Lyon. Our working hypothesis is that there are both generic gestures (i.e. all violin teachers have in common) and specific gestures (i.e. created by Veda Reynolds and passed to her students who are currently teaching at various levels and in various contexts). Our methodological approach follows the methodology of simple and crossed self-confrontation interviews as developed by Oddone [27] to question the genericity or the specificity of the gestures [18]. The first results would confirm the existence of a legacy of V. Reynolds' pedagogy among these students. In what form? This will be our discussion.

1. Introduction

Our research project was initiated at the request of the virtuoso violinist, Renaud Capuçon, Professor at the University of Music of Vaud Valais Fribourg. It seeks to establish the traces of the educational legacy of violinist Veda Reynolds (1922-2000) by looking not only at the written or audio-visual traces that she will have left, but also at the observations on and inquiries into the teaching practices of her former students.

We have reconstituted Veda Reynolds' teaching from the videos of her classes that we possess, from the testimonies collected from her former students who have become professional violinists and teachers, and from the video recordings of the classes they give to their students.

Our research method is based on a methodology tried and tested in social psychology [27]; this consists in conducting simple self-confrontational, crossed interviews with six violin teachers and referring to video excerpts drawn from their classes as well as

from the classes of V. Reynolds. Our working hypothesis is that the analysis of these interviews may allow us to cast some light both on the generic professional gestures of the violin teacher and also those belonging more specifically to what we may call the "V.Reynolds School". In other words, we may ask if it is possible to find any traces of the professional gestures of the violin teacher, V. Reynolds, in the teaching of her pupils who have in their own turn become teachers.

2. Theoretical framework

Early work was conducted in France in the didactics of mathematics [7, 13], together with work since the 1950s in occupational psychology [15, 22, 27, 29], and since the 1990s in the ergology and ergonomics of activity [32, 37]. Subsequently a group of education researchers has reinvested the above methodologies in the field of the ergonomics of the person teaching an activity [1, 2, 30] and more particularly an artistic activity [20] in order to understand the nature and functions of a professional teaching gesture.

This has led our team researching the teaching of V. Reynolds to investigate the notion of professional teaching gestures within an ergo-didactic perspective [8, 20]. This notion has been worked on and developed since the end of the 1990s by Jorro (1998), and also by Pastré, Mayen and Vergnaud (2006). More recently it has been modeled for the purpose of extracting typologies of professional gestures working from the variety of postures teachers adopt towards their students [12] This allows them to trace the foundations of the macro-representations of these gestures in the teaching activities [9] and in the teaching of music [34].

In order to describe the professional gesture of the teacher, we have taken from Jorro the idea of considering a praxis as an aim to account for the fact that "the professional gesture unfolds itself in the course of the action and this process will vary depending on whether it is posited as an outcome or as a process" [21, p.10]. In other words, "the

professional gesture arises in the process of thinking in action" [31] of the practitioner who thereby develops "an epistemology and an ethics of action by reflecting on their knowledge of action and on how to put this to use in a professional context" (*Ibid.*). This definition founds what we term in our research as the practical epistemology of the music teacher's know-how (*savoir-faire*) [35].

From the multi-agenda model described by Bucheton in 2007, taken up again in the article authored with Soulé [12], then modeled by Bruderermann and Péliissier [9, p.25], we borrow the terms of weaving (*tissage*), steering (*pilotage*), reinforcing (*étayage*), atmosphere (*atmosphère*) and also of knowledge and techniques (see Fig. 1). These terms are indicators that can help to analyze the words of the simple or self-confrontational, crossed interviews organized with the teachers, in our case violin teachers.

Finally, we note that, while the testimonies of the pupils of Veda Reynolds do found a constituent discourse [26, p.112], the analysis of simple self-confrontational interviews suggests rather the characteristics of a discursive community as drawn attention to by Maingueneau in 1985. The nature of the constituent discourse "is to found and not to be founded" [26, p.112], and to establish the function of the *archeion*; the latter represents "the task of *founding* in and through discourse, together with the determining of a *place*, associated with a body of specifically dedicated enunciators, and lastly the elaboration of *memory*" [26, p. 113]. The notion of discursive community "refers to the context in which the elaboration of an ethos makes sense both of the material practices that constitute their foundation and of the discursive genres that give them their substance" [6, p.78]. It makes it possible to distinguish between different discursive genres [4, 24], often related to professional genres as well as observe the process of "fictionalisation" [5, p.171-180], which consists in "an operation by the subject to reconstitute the parameters of social interaction (enunciator, destinator end and social place)" [6, p.19]. We use the notion of discursive community for the notion of "fictionalisation", namely for what the teacher intends for "a real or fictional public (the reader-type), which is carefully chosen for the support it lends to the construction of the facts, by virtue of the interest which the literary construction confers on it." [24, p.16]. We will come back to these two notions in our discussion of the results obtained to date, because they shed light on the relationship between generic professional gestures and the specific professional gestures linked to the V. Reynolds school, and this especially makes it easier to define that school.

3. Methodology: Simple self-confrontation and the organizers of professional gestures

Seven French-speaking violin teachers, former pupils of V. Reynolds, agreed to participate in the research. All are professional violinists and have careers as performers besides teaching. Gilles Apap, Julien Shield, Josiane Brachet, Renaud Capuçon, Raphael Chenot, Francis Duroy and Héléne Friberg-Chenot teach in conservatories or their equivalent in France and abroad (Switzerland and U.S.A). They were filmed during a series of classes of varying levels.

The methodology of the simple self-confrontational, crossed interview originated in an analysis of work *in situ* [27]. It is based on the postulate that only groups of workers who co-analyze their activity can carry out enduring transformations of their work environment [17]. This methodology has been used in the field of ergonomics and clinical activity to try to understand the dynamics of the subjects' actions [15, 19, 22, 33]. A work environment consists in a repertoire of professional gestures which establishes a genre, in this case then the genre of the violin teacher. It is the subject's adaptation of these professional gestures to his or her personality and environment that establishes their style [18]. The methodology of simple and crossed self-confrontational interviews allows us to develop this repertoire of professional gestures deriving firstly from the violin teacher and secondly from the "Veda Reynolds" approach. This involves working out from the teacher's words what they consider as belonging to violin teaching in general and what they attribute specifically to the teaching of V. Reynolds.

The video recordings of classes were filmed systematically from a fixed position allowing the teacher, their pupil and their movements to be captured in a quite wide frame (see Figure 2); as for the simple self-confrontational interviews these were filmed in a fixed shot that showed the researcher, the teacher watching the video clip under discussion on the screen of a laptop, and at the same time the projection of the same video clip on a screen placed behind the two people being filmed (see Figure 3).

The coding of the interviews was conducted in a semi-inductive way using HyperRESEARCH software. The organizing themes (*organisateurs*) of the teaching activity [12] constituted a starting point from which to set up the coding grid. The codes were subsequently refined on the basis of the themes that had emerged from the transcription of the discussions (*verbatim* records). For, whatever the factor involved, whether atmosphere, steering, reinforcing, weaving or objects of knowledge and techniques, the explanations given by the violin teachers should allow researchers to identify which gestures belonged to the

professional gestures of the violin teacher and which gestures referred specifically to the "Veda Reynolds school".

For the purpose of this research, we have selected two main categories of actions: those related to the body or posture of the violinist, and those related to the right hand. Indeed, V. Reynolds returns over and over again to these two categories of gestures which not only appear crucial for the production of sound, but furthermore remain at the heart of her concerns when she is working with her students. In the first place we may go back to the characteristics of the activity of the teacher in the classroom and define them as "dominant pragmatic organizers" [28]: which themes are to: 1) steer and organize the progression of the lesson; 2) maintain a space of work and of speech and cognitive collaboration; 3) weave together the meaning of what is taking place; 4) reinforce the work in progress; 5) and do so with the aim of training a pupil, in any way whatsoever;" [12, p.32]; and these represent the constants of the activity and the substrata of professional gestures. We may besides consider that the notion of teachers' professional gestures and the notion of instrumental gestures and musical gestures, such as we have described above meet together. It may thus be possible to pick out from the words of the violin teachers what they borrowed from the discourse of Veda Reynolds; this requires not merely reference to their testimony as former students but furthermore to their actual teaching practice. Besides, we should be able to note that, though they are systemic, modular, hierarchical and dynamic (*Ibid.*, p.33), the five concerns will in the context of the teaching of an instrument always be more at the service of a musical idea rather than merely provide knowledge or instrumental technique. For here teaching has no purpose other than to enable the pupil to acquire gestures that will make them able to give meaning to the task that they must realize from the musical expression.

Thus, our study should enable us to understand how and in what fashion the teaching of Veda Reynolds serves a single purpose: music, relying as it does on technical and musical references related to the score and/or to instrumental performance. Or more precisely to understand how it may be possible to trace in her former students that constant concern to relate the professional gestures of the teacher to a musical finality

4. Presentation of early results

At the current stage of our study all the simple self-confrontational interviews have been completed but only four out of the seven interviews (*verbatim records*) have to date been transcribed and coded. We have the interviews of R. Capuçon, J.Brachet, H.Friberg-Chenot, R.Chenot, F.Duroy and J. Shield.

All were carried out under the conditions described above.

Working from the analytical grid that we have established and using the five indicators of the multi-agenda provided by Bucheton and Soulé, we have confined ourselves to studying two objects of knowledge and technique: namely body and posture, and the right hand. We observed in the interviews (*verbatim records*) that all the violin teachers spoke of these two objects of knowledge and technique as seen from two aspects of the dominant organizers [28]: that is to say the concepts of reinforcing and atmosphere.

We sought to identify how a first 'organizer' in the teaching of V. Reynolds, namely the concept of reinforcing, had appeared. We worked from the statements made in the preliminary interviews that we conducted with her former students who are now violin teachers. Then, we found traces of the legacy of this reinforcing in the simple self-confrontational interviews we carried out with them.

According to the transcribed testimonies of Veda Reynolds' former students, she had stated: "We do not hold the instrument, rather we play around it" (Cf. J. Brachet interview). This significant idea made an impression on her students; it varies according to how they imagined the process of learning the instrument. Thus J. Brachet imagined "the violin attached by strings to the ceiling, and then [she came to play around] it "whereas J. Bouclier recalled that V. Reynolds" was trying to find a [balanced] position without the violin ... / ... that was the way she made us practise... ". This idea of a search for balance, fluidity, the free movement of the body within the posture is also to be found among the other violinists; thus H. Friberg-Chenot: "what actually comes from Veda is this business of ... gestures that must keep on, that are basically continuous, fluid and that produce a sound that flows ... and is resonant."; or R. Capuçon "Her teaching was based on doing everything to allow the body to be as free as possible"; or again, as F. Duroy puts it humorously "Yes being self-aware ... you should keep an eye on this, taking a proper posture, being entirely free, relaxed. I remember I was with Gilles Apap, we kept laughing the whole of the time, we used to say 'playing the violin is really so easy, there's nothing to it' (left and right arms moving at the same time). With Mrs. Reynolds that was all there was to playing the violin ... ". We find this constant preoccupation with balance, fluidity, the avoidance of tensions "not to hinder the sound of violin" reinforced (*etayage*) in the teaching of J. Brachet and J. Bouclier, H. Friberg-Chenot, R. Capuçon, and F. Duroy. In simple self-confrontational interviews, as he comments on his classes, R. Capuçon explains how this search for balance in the posture goes through a conscious learning process "... in order at the end of the process for the sound to be the freest possible, [...] for the instrument to be able to sound" and he uses a very personal metaphor to explain this to his students. He

takes the example of a thoroughbred horse which senses its rider's every move and he explains that "with the violin it's just the same. The slightest tension, just the tiniest bit of tension, will close up the violin. Will close the doors of the violin." J. Brachet develops her approach to posture by inclining more to the idea of a quest. Taking up the idea of V. Reynolds that there is no such thing as a universal stance, and that the position of the body, the manner in which the instrument is held, and the posture of the violinist are quite specific to each individual, she accompanies her students in this quest. All attribute to V. Reynolds the awareness of the body-violin unity and the manner in which each element relates to another: feet, legs, knees, pelvis, back, shoulders, arms, hands, bow, violin. This process of awareness (*'conscientisation'*) serves the purpose of producing sound, and thus music.

The same applies when mastering the link between the right hand and the bow which is simply the end of the process of the conscious awareness of the body. According to her students she attached more or less importance to this aspect and in the course of his simple self-confrontational interview R. Capuçon explains to us why he comes back to this aspect of training with his students: "every great violinist inscribes their DNA with their right hand and with their vibrato [the left hand], and this produces the quality of the sound." He explains this to us by showing why in a class he asks his students to hold his index finger between the fingers of their right hand "How can you know how the other person holds their bow, you have no way of finding out [... they must take your finger]. He [the student] transcribes onto your finger how he takes the bow. [...] It's slight in the utmost. If you have a student who does that [he takes my finger and squeezes it], clearly, he squeezes it too hard. And I tell him "do it like that, hold tightly, but if you hold it this way [he loosens his grip around my finger], it's slack", thus demonstrating that the hand is always the extension of a set of gestures inscribed in the body. Again on the subject of the control of the right hand, R. Chenot recalls that V. Reynolds had been a leading quartet player and that this experience was present in her teaching: "I mean, grasping the bow this way [with the right hand] which was undoubtedly more horizontal than vertical [...] it came from her being a professional quartet player, and in a quartet we will in fact use a longer bow. Because you have to weigh, produce sound."

The second organizing theme (*'organisateur'*) selected for the on-going presentation of our results is the atmosphere or "intersubjective space that organizes the intellectual, relational, emotional and social encounter between individuals having to deal with problems that must be managed in common [12, p.34].

J. Brachet reminds us that V. Reynolds used to work together with her to find solutions to her problems: "...

I did not have the same hand, I did not have the same velocity, but she liked to take an interest in our personal problems and thus in my case she used to say: "Well, so there it is, Josiane, you have a small hand, so let's go and find solutions", and so she strongly encouraged me to seek, always in movement, to make use of my thumb, my wrist, my shoulder, finally my shoulder blade, and my back.". During her self-confrontational interview J. Bouclier returns to an extract from a class that reminds her of the hours spent working with V. Reynolds without a violin, just to "try to feel the position, to find different positions virtually, to know where we are. [Then] she would put the violin back to see if I could sense [a change]".

The final case that we will refer to is drawn from the interview with Renaud Capuçon when he recalled the work he used to do with his teacher on anchoring himself in the ground: "She would push me, and tell me, that if you are firmly anchored in the ground and your pelvis leans a little forward, you should be able to do that without falling over [that is rocking]." During the self-confrontational interview, R. Capuçon recalls that a class with V. Reynolds could last between 2 or 3 hours, but his overwhelming feeling is that she did truly accompany her students down the learning path. She was an authentic teacher.

We find the atmosphere is one of accompaniment in the video we have of her classes, especially about Debussy's G Minor Quartet. She allows the students time, she questions them, gives them explanations, gives examples on her instrument, and above all takes the time to work on each passage for its own sake.

5. Discussion and Conclusion

At this early stage in our work, which covers only one part of the data collected to date and which is based on two aspects of the organizing themes (*organisateurs*) of the teaching profession, we can only provisionally conclude that it is not possible to affirm that there truly exists a Veda Reynolds style. For our sample of violinist/teachers who have worked with her is quantitatively insufficient. But these choices are due to constraints of time and space for research and need not prevent us from proposing some results and ideas for our further work.

Regarding the question of professional genre, we clearly focus our research on violin teachers who share a set of generic gestures in their posture-related practice that concerns the violinist, the sound produced by the instrument, indeed the link between body and the instrument. Regarding the question of style, it appears from the interviews and the simple confrontational conversations, that there does exist a specific pedagogical approach to the violinist's relationship to their instrument, particularly Veda Reynolds' idea that «We do not hold the instrument, we play around it." This is a powerful idea from which

follow a number of precepts that contribute to the teaching gestures of these teachers. In the light of this study, we have retained only two: the search for a balanced position to meet the strict requirements of a posture adapted to the physiology of each violinist with the aim of producing sound; and the right hand considered as an extension of a body-violin which enables the transmission of an intention to produce musical expression.

Secondly, the notions of genre and professional style, when crossed with the indicators of the organizing themes (*organisateurs*) of the professional teacher, create a discursive space where we observe the birth of a discursive community [25]. As we indicated in the presentation of our theoretical framework, on the assumption that any discursive community is attached to a constituent discourse (whose peculiarity it is to "found without being founded"), we can see the presence of its peculiar characteristics when analyzing the words of the interviews; this should allow us to define the nature of the constituent discourse around the teaching of Veda Reynolds. Indeed, the legacy of Veda Reynolds's teaching, with which some of the violin teachers identify, is certainly anchored quite deeply in the characteristics of a twentieth century practice of violin teaching, which itself belongs to part of a historical-social dimension of virtuoso violin practice and pedagogy.

Translated by P. O'Prey

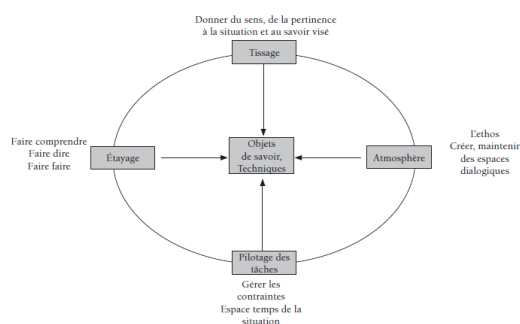


Figure 1. Multi-agenda of interconnected concerns

[12]

Tissage: Weaving: Giving meaning and pertinence to the situation and knowledge aimed at

Étayage: Reinforcing: To help understand, to help speak, to help act

Objet de savoir: Objects of knowledge, techniques

Atmosphère: Atmosphere. Ethos, to set up and preserve dialogic spaces

Pilotage de tâches: Steering tasks. Dealing with constraints. Space time of the situation

6. References

[1] R. Amigues, "Pour une approche ergonomique de l'activité enseignante", *Skholé, hors-série 1*, 2003, p.5-16.

[2] R. Amigues, "Le travail enseignant : prescriptions et dimensions collectives de l'activité", *Sciences de l'éducation – Pour l'Ere nouvelle*, 42(2), 2009, p. 11-26.

[3] R. Amigues, R., Félix, C., & Saujat, F., "Les connaissances sur les situations d'enseignement-apprentissage à l'épreuve des prescriptions", *Les dossiers des sciences de l'éducation*, 19, 2008, p. 27-39.

[4] M. M. Bakhtine, *Esthétique de la création verbale*, Paris, Gallimard, 1984 [1920-1974].

[5] J.-P. Bernié, "Formation de la citoyenneté et communauté discursive", *Tréma*, [en ligne], 15-16, 1999.

[6] J.-P. Bernié, "L'approche des pratiques langagières scolaires à travers la notion de « communauté discursive » : un apport à la didactique comparée ?", *Revue française de pédagogie*, n° 141, octobre-novembre-décembre 2002, p. 77-88.

[7] G. Brousseau, G., *Théorie des situations didactiques*, textes rassemblés et préparés par N. Balacheff, M. Cooper, R. Sutherland, R., & V. Warfield. Grenoble : La Pensée sauvage, 1998.

[8] F. Brière, *Instruire les gestes didactiques de métier. Quelles perspectives pour la formation des enseignants ?* Collection Paideia, Rennes, Presse Universitaires de Rennes, 2017.

[9] C. Bruderemann, C. Pelissier, "Les gestes professionnels de l'enseignant : une analyse pédagogique et une représentation informatisée pour la formation : L'exemple des langues étrangères", *International Journal of Technologies in Higher Education*, 5(2), 2008, p. 21-33.

[10] D. Bucheton, "Didactique Professionnelle, didactique disciplinaire, le rôle intégrateur du langage", *Didactique disciplinaire, didactique professionnelle*, in Lenoir, Y., Pastré, P. (eds), Toulouse, Octares 2007

[11] D. Bucheton, (dir.), *L'agir enseignant : des gestes professionnels ajustés*, Toulouse, Octarès, 2009.

[12] D. Bucheton, & Y. Soulé, "Les gestes professionnels et le jeu des postures de l'enseignant dans la classe : un multi-agenda de préoccupations enchâssées", *Éducation et didactique*, 3(3), 2009, p. 29-48. <http://educationdidactique.revues.org/543>, consulté le 30 septembre 2016.

[13] Y. Chevallard, *La transposition didactique - Du savoir savant au savoir enseigné*, Grenoble, La Pensée sauvage, 1985, 2^e édition augmentée 1991.

[15] Y. Clot, "Le geste est-il transmissible ?" *Apprendre autrement aujourd'hui*, 10^e entretiens de la Villette, 24 au 26 novembre 1999. http://www.gfen.asso.fr/images/Documents/textes_seminaire/clot_le_geste_transmissible.pdf

- [16] Y. Clot, *Travail et pouvoir d'agir*, Paris, PUF, 2008.
- [17] Y. Clot, D. Fäïta, G. Fernandez & L. Scheller, "Entretiens en autoconfrontation croisée : une méthode en clinique de l'activité", *Perspectives interdisciplinaires sur le travail et la santé. Pistes*, 2000, p. 2-9.
- [18] Y. Clot & D. Fäïta, "Genre et style en analyse du travail. Concepts et méthodes", *Travailler*, n°4, 2000, p. 7-42.
- [19] F. Daniellou, "Questions épistémologiques soulevées par l'ergonomie de conception", in F. Daniellou (Ed.), *L'ergonomie en quête de ses principes*. Toulouse, Octarès Éditions, 1996, p. 183-200.
- [20] L. Espinassy & P. Terrien, P., "Professeur débutant dans les disciplines artistiques : de l'expérience artistique du professeur à celles des élèves", in Boudinet, G. et Sanchez-Iborra C. (Ed.), *Expérience esthétique et savoirs artistiques*, Collection : Arts, transversalité, éducation, Paris, L'Harmattan, 2017 pp. 107-118.
- [21] A. Jorro, "L'inscription des gestes professionnels dans l'action", *Revue En question*, 19. 1998. <halshs-00112344>.
- [22] J. Leplat, X. Cuny, *Introduction à la psychologie du travail*, Paris, PUF, 1977.
- [23] J. Leplat, *Regards sur l'activité en situation de travail*, Paris. PUF, 1997.
- [24] C. Liccope, *La formation de la pratique scientifique*, Collection *Anthropologie des sciences et des techniques*, Paris, La Découverte, 1996.
- [25] D. Maingueneau, "Du mythique au problématique : la clarté du français" (en collab. avec C. Haroche), in S. Auroux et al. (éds.), *La linguistique fantastique*, Paris, J.Clims-Denoël, 1985, pp.345-357.
- [26] D. Maingueneau & F. Cossutta, "L'analyse des discours constituants", *Langages*, 29^e année, n° 117, *Les analyses du discours en France*, 1995, p. 112-125.
- [27] I. Oddone, A. Re & G. Briante, *Redécouvrir l'expérience ouvrière*, Paris, Messidor-Éditions Sociales, 1981.
- [28] P. Pastré, P. Mayen, G. Vergnaud, "La didactique professionnelle", *Revue française de pédagogie*, 154, janvier-mars, *La construction des politiques d'éducation : de nouveaux rapports entre sciences et politique*, 2006, p. 145-198.
- [29] M. Reuchlin, "La Psychologie du travail au vingtième siècle", *Journal de psychologie normale et pathologique*, 50(1), 1954, p. 209-232.
- [30] F. Saujat, "L'activité enseignante", in Maggi, B., *Interpréter l'agir : un défi théorique*, Paris, PUF, 2011, p. 241-257.
- [31] D.A. Schön, *Le tournant réflexif. Pratiques éducatives et études de cas*, Montréal, Les éditions logiques, 1996.
- [32] Y. Schwartz, *Le paradigme ergologique, ou un métier de Philosophe*, Toulouse, Octarès Éditions, 2000.
- [33] C. Teiger & A. Laville, "L'apprentissage du travail ergonomique au travail, outil d'une formation pour l'action", *Travail et Emploi*, n° 47, 1/1991, p. 53-62.
- [34] P. Terrien, "Formation des maîtres et de musiciens pédagogues : le musicien-enseignant", *Les Cahiers de la Société québécoise de recherche en musique*, 151, 2014, p. 45-54. doi: 10.7202/1033794ar, <https://www.erudit.org/fr/revues/sqrm/2014-v15-n1-sqrm02151/1033794ar.pdf>
- [35] P. Terrien, *Réflexions didactiques sur l'enseignement musical*, Sampzon, Delatour France, 2015.
- [36] G. Vergnaud, G. (Ed), "Didactique et Acquisition du Concept de Volume", N° spécial de *Recherches en Didactique des Mathématiques*, 4, 1983.
- [37] A. Wisner, "La cognition et l'action située : conséquences pour l'analyse ergonomique du travail et l'anthropotechnologie", *Actes de l'IEA*, Vol 1, 1994, pp. 80-96.