

The Combination of the Physical Ostension to the Verbal Ostension in Swimming Revealing of Professorial Action

Donia Sghaier^{1,2}, Hejer Ben Jomaa^{3,4}, Mohamed Mami^{1,2}, Anissa Bouassida^{1,2}

¹Higher Institute of Sports and Physical Education, University of Jendouba, Kef, Tunisia

²Research Unit of Sportive Performance and Physical Rehabilitation: Higher Institute of Sports and Physical Education, Kef, Tunisia

³Higher Institute of Sports and Physical Education, University of Manouba, Ksar Said, Tunisia

⁴EDic, UMR EFTS, Toulouse University, Jean-Jaures, France

Email: doniasghaier@ymail.com

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Abstract

This article is interesting in the used ostensive forms by two Physical Education (PE) teachers. "Swimming" is the concerned activity. Its objective is to analyse combination moments of physical ostension to verbal ostension, and to reveal that this combination is a professorial action. The research methodology is qualitative. It is enrolled in the field of clinic didactic interactions of PE and on the clinic analysis of teaching practices of expert teachers and beginners and to perceive "the case by case" and the singular subject (Terrisse, 1999). The collection and data analysis are inscribed within one time constructed or established temporality of the professorial action: the test (Terrisse, 2000) relying on the knowledge ostension scale (Robert, 2012). Results show that the combination between teacher's ostensive forms is a professorial gesture in swimming.

Keywords

Ostensions, Combination, Professorial Action, Clinic Didactic, PE Teachers

1. Introduction

A lot of researches in Math didactics have strolled around ostension, but few of them (Carnus, 2008; Robert, 2012) are bent on ostension in the PE didactic framework.

This original article proposes to study "the combined" ostension as a professorial action (Sghaier, 2016).

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In PE, some works, (Zimmermann, 1976; Pujade-Renaud, 1977; Vigarello & Vives 1986; Gal-Petifaux, 2000) stress the role of the verbal since it is the principal support of the trainer. However, many studies (Quintillan, 1992; Kohler, 1998) sustain teacher's actions, notably in physical activities where teachers and students relationships involve the body.

In this context, teaching situations when the teacher presents directly the knowledge to the student are qualified as "ostensive" practices (Salin, 2002). They represent "communication practices of a knowledge wherein the trainer provides all the constituent elements of the referred concept" (Ratsimba-Rajohn, 1977). Thereby, since it is a professorial act (Brousseau, 1996), it is put in evidence that the combination between ostensions is a way akin to a "professorial gesture". Moreover, this articulation seems, so dear, to this author "The possible-necessary articulation". In this sense, Bosch & Chevallard (1999) have noted that Maths activity itself supposes an articulation among the different "ostensive" and "non-ostensive" forms. From their side, Matheron & Salin (2002) deduce the persistence of ostensive practices, during Maths teaching and clearly highlight that "the ostension captures the other didactic procedures".

Thus, through this phenomenon, we think that the teacher has the choice of many ostension forms when he train or teach and the combination of these different ostensive forms can be revealing of professorial action.

2. Problematic and Research Questions

Within PE teaching framework, swimming is often done in difficult conditions. Where there is a disturbed communication and the proxemics between teacher-students is unsteady. However, information input is being done in a condition that the student stops his action, which interrupts the activity in water and constraints apprenticeship evolution.

Since then, the only content implementation, done by the teacher, could sound insufficient and misunderstood within the aquatic environment.

How, the students should understand what is said by their trainers or teachers, within these complex conditions? And how teachers of swimming, could transmit the knowledge?

Thereby the research problematic is interesting to the modalities and the ostension practice in swimming during the study of the effect of ostension combinations of the physical teacher education on the professorial competence.

This article on ostension in swimming stands exploratory and original, at least in Tunisian academic environment.

To be in this problematic, we question, the impact of the combination of physical ostension to the verbal one in swimming, on professorial action. Thus and through this study, we are going to answer the following questions.

- Are verbal sequences, sufficient for perfect communication, in an aquatic environment, especially when it is concerned of teaching arm in crawl movement as a named knowledge?
- What are the methods and the didactic strategies that must be selected by trainers in "swimming" and is the combined ostension could be considered as a professorial gesture in swimming?

Drawing inspiration from Brousseau's (1996) works who highlighted that the combination between ostensions is a method, which is related to a "professorial gesture". Our objective is to show that the variation and the combination between ostensive forms by the teacher, is not a haphazard and spontaneous phenomena.

Thereby, we postulate that this combination is the object of a true expertise in the thought Sporting Physical Activity (SPA) and it is revealing to the professorial action.

3. Method and Tools

We start from the following hypothesis: the combination between ostension forms by the teacher is revealing to the professorial action.

To deal with this hypothesis, first we have been inscribed in the PE clinic didactic field; afterwards we have realized a study in the case nearby two PE teachers and their first-year applied licence students in PE at Ksar Said (Higher Institute of Sport and Physical Education, Tunisia).

The purpose of this study is descriptive and comprehensive. The objective is not to modelize or to generalize.

3.1. Study Population

Within the research framework, a pre-observation has been performed to imbue class specificities and familiarize

the teacher and students to the presence of a researcher and a camera video. The experimentation took place at Manouba University in February 2015 at Bardo swimming pool.

Two first-year student groups have been selected to the experimentation of our protocol; each group has been submitted to apprenticeship meetings or sessions on the “movement crawl”.

Students are supervised by two specialized teachers that have different professorial experience. We call the expert teacher (T1) and the novice one (T2).

T1 have been teaching swimming since 14 years in University, he is a national champion in swimming and he has been training since 20 years. However, T2 has an only academic formation in swimming and she is teaching for her first year in University. She never training swimming before.

3.2. Observation Protocol

The observation, took place along a meeting, with each of the two teachers, in the middle of the cycle that is bearing the movement crawl. This observation is at the core of the apprenticeship cycle, which guarantees a didactic goal according to [Marsenach & Merand \(1987\)](#).

The first devoted meetings with diverse evaluations are less rich at the level of the teaching content. The first observation is with the expert teacher and the second one is with the novice teacher each meeting lasts 45mn.

3.3. Clinic Didactic Methodology

Knowing that this research is inscribed in the clinic didactic orientation of PE. Our methodology privileges the study from the qualitative case. It relies on the study “case by case” or “one by one” ([Terrisse, 1999](#)). To apprehend subject’s singularity and complexity. This singularity is taken in account in clinic didactics by a particular attention to the personal history of each teacher, though the study of his “already-there” ([Carnus, 2003](#)).

That is to say, to take in account in priority and in posteriority “what singularizes each teacher and his practices form an epistemological and didactic point of view” ([Buznic, 2009](#)).

3.4. Data Collection

The collection method and data analysis are registered in a distinct three time constructed temporality and crossing the professorial action. The “already-there” and the “post stroke” ([Terrisse, 2000](#)) in thesis works, see [Table 1](#). Yet in the framework of this article we have been limited to a second time, that of the test.

The ostensive practices have been described and classified, starting from the audio-video meetings recordings and from semi-directive and/or verbatim data of interviews (a priority ante and post meeting and post stroke).

The treatment of the collected data is equally organized according to these distinct phases of clinic didactic methodology. It is concerned to study, only the second phase, and the test, which corresponds to the teacher subject confrontation to test knowledge transmission. During the test phase, audio and video recording of meetings are finished by an immediate ante-meeting interview and by an immediate post-meeting interview.

The collection and the analysis of data of [Table 2](#) are sustained on knowledge ostension’s scale ([Robert, 2012](#)). Subsequently, the different ostensive forms and the combinations are coded and accounted in quantitative and illustrative forms, to each of the two teachers.

4. Results

The obtained results of each studied case are illustrated in [Figure 1](#), according to test of professorial action ([Terrisse, 2000](#)). T1 and T2 are two teachers specialized in swimming with different professorial experience. Knowledge ostension forms in [Figure 1](#) show clearly the difference between the two teachers at the level of their professorial experience. Moreover, it is revealing the professorial action of T1. The combined knowledge ostensions and gesture forms are two current acts in swimming.

Table 1. Data temporal collection ([Terrisse, 2008](#)).

Already-there	Test	Post-stroke
SPA conception Conception of his teaching	Observation in situ confrontation of the intended knowledge in the class	A return on PE new formulation meetings

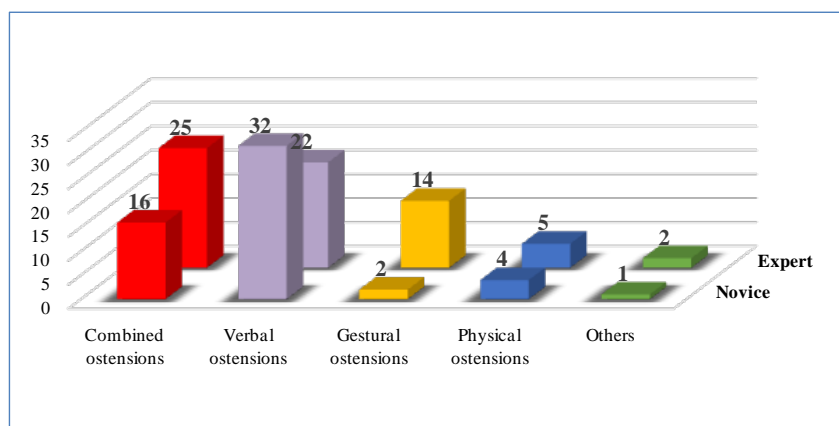


Figure 1. T1 and T2 knowledge ostensions forms.

Table 2. Modeling of knowledge ostension's scale (Robert, 2012).

Ostensive form	Comments
Private physical ostension total or partial (Manipulation)	The knowledge is showed to the student by an intermediate manipulation of his body, by the teacher. This manipulation may be total (from the beginning to the end of the movement).
Direct verbal ostension	The knowledge is enunciated and/or explained by (T) PE teacher who does not masters motor knowledges or who does not want to "demonstrate".
Particular verbal ostension	He passes through the student cognitive channel. He can have a resort to one particular verbal ostension form (knowledge evocation by generalization).
Symbolic gestural ostension	Knowledge is to be seen through teacher gestures. A meaning, a code, is set. Commonly with all students of the group-class.
Direct physical ostension total or partial (demonstration)	The teacher demonstrates the knowledge physically. This demonstration could be total or partial.
Disguised ostension, either enviremental adjusting or a questioning.	The knowledge is demonstrated by the intermediate, either by putting first environment objects or by a questioning with the student on his pertinent objects often linked to the particular verbal ostension.
No ostension	Knowledge construction is under student responsibility.

5. Discussion

Through the scale of knowledge ostensions (Robert, 2012), Figure 1, test one analysis helps us to illustrate differences between ostensive practices of two teachers. During the test of T1 we have enumerated 25 combined ostensions, 8 of them occurred during the presentation phase of situations. 16 took place during apprenticeship phase and only one occurred during the appraisal phase. The major parts of combined ostensions are registered at the level of the first four situations.

Thus, we have identified 14 symbolic-gestural ostensions with two as oratorical and rhythmic. We have also, registered 5 private physical ostensions under partial gesture form demonstrations. However, the combined ostension's dominant number; symbolic, gestural and physical private registered at the level of T1, show that he transmits a personal experience and/or a corporal expertise, made often from "his personal life" as a specialist and "corporal feeling" (Ben Jomaa & Terrisse, 2014). In that only the body makes "the only place of adventure" (Vigarello, 1982).

Through these ostensive forms, the expert teacher adapts his interventions in functions of his learner's capacities and intentions in order to ameliorate his relationship to knowledge. In addition, T1 regulates student's apprenticeship by "personalizing", "relevant traits" by the means of his own body from learning to production which is equal to "co-construct" the reference in class (Schubauer-Leoni, 2008). This reference is represented by the means of his corporal expression. It is "a didactic contract" form here according to students; it is a landmark to be respected and a pledge for success. This reference feeds a didactic memory or a "class memory" (Brous-

seau & Centeno, 1991) and by becoming step by step a didactic history of a lesson, of a sequence or of a year that reveals a professorial corporal experience.

For this, these combined gestural dominant ostensive practices are knowledge images and are conveying messages teacher's body, which reveals his professorial action and testifies his personal and sporting expertise in swimming.

Through, in his teaching test, T2 makes mainly resorts to verbal ostensions; 14 particular verbal ostensions and 18 direct ostensions.

For combined ostensions we have ticked off just 16, 10 of them occurred during the presentation phase of situations and 6 during apprenticeship situations. We have registered only 2 symbolic gestural ostensions at T2 meeting, though the reduced number recorded in the site of T2, show that he often enunciates and explains the knowledge verbally.

In effect, T2 has a tendency to pass through student cognitive channel because she resorts either to the direct verbal ostension or to the particular form (knowledge evocation by generalization).

These two ostensive verbal forms remain insufficient when are treated as technical apprenticeship. Vigarello & Vives (1986) works showed that the technical discourse needs detours through gestural phases.

This interpretation is also supported by Marsenach & Merand (1987) that they consider, gestuality as part of ostensive practices of the teacher.

In this interactional and ambiguous environment (swimming), T2 verbal ostensive practices are usually disturbed by sound waves and poorly understood by students. Consequently verbal message transmission is still insufficient in swimming teaching process.

To communicate, T2 obviously resorts to these verbal ostensive forms and we will see that T2 does not master motor knowledge and does not like to "demonstrate" physically. This shows clearly her corporal non-expertise, notably in SPA swimming.

6. Conclusion

Through, knowledge ostension's scale (Salin, 2002; Robert, 2012) results put in evidence that the expert teacher uses mostly combined and physical ostensive forms, whereas the novice ostensive forms are often verbal. In fact, the combined and gestural ostensive practices typify teaching practice of the expert one. They are revealing of his "personal logic", of his singular strategy of the contingency management of environment (Brousseau, 2011) and his "professorial signature" (Blanchard-Laville, 2004).

By this sense, combined ostension number makes clear that his professorial body expression reminds at the same time to "body expression, silence language" (Pujade-Renaud, 1977) and/or to "eloquent corpse" (Jorro, 2004). By contrast to the expert teacher, the analysis of verbal ostensive practices of the novice teacher reveals her non-expertise in the taught SPA.

In fact, T2 seems to have a "silent body" that does not want or like it to be seen.

To conclude, ostension that constitutes this article focal remains interesting to be studied at all forms; because many of them can be combined from the most "direct" to the most "disguised" in function of teacher purpose and strategy (Brousseau, 1996).

Finally, the study perspective articulates around the idea of that this combination can be thought about as a susceptible didactic strategy to help teachers of swimming and particularly teachers of topocinetical activities.

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