Defining Italian Grammar Laboratory Model: First Results from a Participatory Research

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Abstract

Can we speak about laboratory in Italian language teaching? Some school subjects are approached with a laboratory method, but this kind of perspective is not usual to teaching Italian L1. Likewise, there are not many scientific contributions on this topic.

We try to fill this gap through a participatory research aimed to observe and propose a teaching and learning model of Italian grammar as laboratory. This research, led by Indire, involves a network of five schools, twenty-two teachers and four hundred students, from primary up to secondary school in two years of educational experimentation of Grammatica Valenziale (GV) [14].

GV is a grammar scientific model, alternative to the traditional one, that offers a more active and reflective approach to the language learning. We used this theoretical model as a basis for our research hypothesis: since we introduce a change in disciplinary, we will be able to get a methodological innovation [10].

Through a Design Based Research approach [9] researchers and teachers worked together to achieve two main aims: observing GV in action in classroom and to analyzing it through p2p observation, self-analysis and video analysis; analyzing the data of the first year of experimentation, we could highlight some useful elements in order to identify an enquiry-based learning process in a grammar lesson.

In this contribution we will introduce a first approximation of an Italian grammar laboratory model.

Keywords: Laboratory; Italian grammar teaching, enquiry-based learning; Design Based Research;

1. Italian grammar and active methods: a possible merge?

Methodological and didactic reflection on Italian L1 teaching has lagged if compared to other teaching subjects. There are very few studies on active teaching applied to this discipline and the concept of Italian language laboratory has not yet been defined nor sufficiently investigated. This gap is probably due to the complexity of the subject's epistemic status, composed by very different sectors: grammar, basic language skills (reading, writing, listening and speaking), literature and language semiotic aspects [4]. Some of these elements, like grammar, are traditionally the prerogative of transmissive teaching and mnemonic learning. Indeed, Bertocchi [4] says that it is necessary to talk about and investigate not only one, but several Italian laboratories on the basis of the different aspects of the subject.

Indire is involved in study and experimentation of innovative proposals for Italian L1 teaching. In this context, we have conducted in the 2016/17 school year the participatory research "Didattica della grammatica valenziale: dal modello teorico al laboratorio di grammatica in classe"⁵ (Teaching Valency grammar: from the theoretical model to the laboratory of grammar in the classroom) [6] aimed to experiment and validate a vertical curriculum and lab model based on Grammatica Valenziale (GV) [14], viz. “Valency Grammar” [1].

The project involved 22 teachers of Italian L1 and about 400 students from primary to secondary school, belonging to a network of 5 schools in Palermo. We proposed to replace traditional praxis of Italian grammar teaching, based on a set of rules and definitions, with GV, a scientific model that allowed a more reflective and active approach to study the language.

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⁵ The research project is part of “Didattica laboratoriale multidisciplinare” – 10.8.4.A2-FSEPON-INDIRE-2017-1 - realized in the Italian Operational Programme 2014 – 2020 “Education” (Per la Scuola – competenze e ambienti per l’apprendimento) for the implementation of the European Social Fund (ESF).
The research hypothesis is: we can transform the teaching method into a more active and laboratory approach, introducing a scientific and more reliable disciplinary content [14] [10] [6].

GV is an explanatory model of structure and function of linguistic system, based on an approach both semantic and syntactic: by "valence" (as for chemical elements) we mean the ability of the verb, based on its meaning, to attract a fixed number of sentence elements to form a complete meaning expression (nucleus of sentence) [14]. The connections pattern is represented by a radial scheme (fig. 1), an alternative to traditional linear representation.

This language analysis model seems to work similarly to mental system of sentence construction or "implicit grammar" [10] [14]. Therefore it requires students to reflect and to explain their linguistic structures and it leads to a more interactive lesson, in which the whole class is more involved. Consequently, we assumed that this model could have positive effects on the motivation to study as well as on the learning outcomes of the students.

The research aims are to:

- investigate what happens when we introduce GV in the teaching and learning process;
- experiment and validate a vertical GV curriculum from primary to secondary school;
- identify and describe a laboratory model of GV.

This contribution focuses on the results emerged about third aim.

2. Research: from reflection on practices to construction of a model

2.1 Research methodology

To achieve these objectives we needed a research methodology strongly linked to teachers practices, but at the same time able to build a operational model starting from a new reference framework: to engineer a laboratory model from the scientific theory of the GV [7].

Therefore we have chosen the methodology of Design Based Research (DBR) [9], that “attempt to engineer innovative educational environments and simultaneously conduct experimental studies of those innovations” [5]. This method relies on an iterative process of design, enactment, analysis and redesign [8] based on a close relationship of theory and practice, in which the theory is both foundation and result of this approach [13]. Similarly to Action Research, DBR is a pragmatic approach.
realized in the collaboration between researchers and practitioners to solve real problems in real contexts, but also it aims to identify general principles and guidelines [12].

2.2 Research program and tools
The research program has been adjusted on DBR and discussed with the teachers involved, for the purpose to create a collaborative and shared process. In the first “year”, researchers, disciplinary experts and teachers worked together during various activities in face-to-face workshop and on a dedicated online platform.
The path includes four different phases.

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<td>• study of the documentation and observation methods/tools planning of a teaching unit with the help of experts and pairs</td>
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<td>• implementation of the second teaching unit</td>
<td>• Individual and group intermediate analysis of the first class experimentation</td>
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Tab.1 Research phases

The whole process has been carefully observed and documented with two aims: helping teachers to reflect on their process of didactic innovation and collecting data for further analysis.
The group used many tools for observation and documentation of the experience, such as:

- logbook for the documentation of what happened during class experimentation;
- narrative document for direct chronicle of the observation in class;
- structured grid for observation;
- video interview to teachers;
- video interview to students;
- video record of the lesson;
- student questionnaire.

2.3 Analyzing practices, looking for patterns
The project proposes GV as a basic scientific theory that, through the teaching/learning practices, can generate a model for didactic transposition. Clearly enough, teaching practice is the core of the modeling process.
Practices are actions [16] that happen in what Marchive [13] calls “teaching situation”, made by the whole complex of didactic and non-didactic elements. A practice has a content, various methodology, several actors, is situated in time and space, in a social dimension. In brief, we assume as paradigmatic of teaching/learning process Marguerite Altet’s [2] “contextualized interactive processes”. Trying to observe a so manifold object, we set, as underlined, multiple tools in order to collect and analyze data from the activities.
To bring out this level of complexity, tools weave various kind of elements. They make possible to:

- observe practice from multiple point of view from teacher, student and researchers;
- collect both quantitative and qualitative data;
- consider practices realized at different times during the process;
- analyze the lesson during, before and after class activity;
- reflect on the practice both as an individual practitioner or researcher and as part of a community.

In this context, video was particularly relevant, because it can be assumed as documentation tool and as analysis object; so, it can be a sharing media as well as a trigger for reflection by multiple perspective: self-assessment, peer review, expert analysis.

Looking for a fil rouge both to tools elaboration and to data analysis structure, we assume “three main categories or domains of observation that constitute the practice of teaching: the ‘relational’, the ‘pedagogical’ and the ‘didactic’ domains” [3]. Each domain is composed by a set of dimensions and indicator. We work on this level in order to elaborate a structure tailor-made for this project.

According to this structure, we set a grid to collect and analyze data from all records corresponding to each practice. So we have a multilayer picture of each practice and we have also a frame structured enough in order to detect identities, differences and similarities, from which we can be able to identify meaningful patterns in order to infer a lesson model.

3. First results of field study

From the documentation analyzed as described, emerge – about students and teachers – first significant elements [6] that we highlight separately, according to the structure of the three domains [3], even if they are intrinsically linked.

**Epistemological or knowledge domain**
- immediacy and easiness of understanding semantic approach and GV fundamental concepts: this model is more "logical" than traditional grammar;
- teachers start their lesson with a provocative *incipit* to destroy consolidated beliefs of traditional grammar;
- effectiveness of representation in graphical schemes of the sentence structure.

**Pedagogical domain**
- frontal lesson turn in to a participated lesson;
- this grammar is strictly related to workgroup;
- GV is organized as a scientific laboratory for mental and concrete manipulation of language;
- flexibility of model allows the use of different strategies, different media, non-digital and digital tools;
- this model needs both moments of prior knowledges recall and moments of final conceptualization.

**Domain of relations and management of the class**
- GV seems to be a “democratic” and potentially “inclusive” grammar that allows all students to contribute to construction of shared knowledge;
- a decentralization of the teacher who assumes a coaching attitude;
- need for a flexible use of space and time.

4. A lesson-laboratory model with the Grammatica Valenziale

These results allows us to outline a first "model" of GV lesson structure:

1. a “provocative” *incipit* to destroy beliefs and gain the attention: teacher use a dialogic lesson focused on a linguistic phenomenon;
2. a *moment of prior knowledge recall*, realized through brainstorming, collective re-examination of the material produced by pupils, etc.
3. identification of the problem to solve (*delivery*);
4. *central exploratory phase*, consisting in creative or manipulative activities, realized with a participated lesson or through workgroup, such as:
   - representation of scenes evoked by verbs and phrases through imagination ("close your eyes and imagine"), dramatization, drawing;
   - mental and concrete manipulation: adding, removing or moving elements of sentences.
5. systematization through sentence graphical representation, according to the radial schemes of valence: each student is involved in a discussion on these representation and participates in the shared discovery process.

6. moment of synthesis and final conceptualization is aimed to think about process and results as a base for the next lesson. It is realized collectively through the formulation of shared definitions, fixing discovered rules, creation of concept maps etc.

This model of a lesson-laboratory in grammar teaching will be validated in the second year of research. Moreover, in 2018/2019, Indire is planning to launch the experimentation of this model in different contexts.

References