

## **Schools, teachers and rustics: exercise for a historical decentering**

Antonio Vicente Marafioti Garnica

Universidade Estadual Paulista (UNESP)

### **Abstract**

*With the purpose of drawing a historical picture of the education and action of teachers in the State of São Paulo countryside, this article sketches what we have called a "rustic" (Mathematical) Education, making use of an adjective already in use in Sociology. The term 'decentering', borrowed from Hall (2004), is used here to intensify a feature of the present study, namely, its intention of freeing itself from the more usual approaches, both in the History of Education and in the History of Mathematical Education, which take as their point of departure the big centers and 'classical' institutes of education (for instance, the Faculties of Philosophy), neglecting a plurality of aspects that, we believe, are essential to understand more widely and globally certain educational practices. To realize such intention we start from a characterization of the rural education system, and then situate the movement of expansion of the secondary education, whose apex takes place in the 1950s with the construction of schools and the need to train teachers to work in them. Although the region around Bauru (SP) is the focus here, it can be seen that the understanding emerged here can characterize other contexts. Finally, we discuss the Nova Alta Paulista, a region of more recent occupation, thereby configuring a movement of exchange between the State's older regions on one side, with their well-established institutions, and the 'new' regions on the other, allowing a glimpse of a kind of extended concept of colonization, now applied to the educational context.*

### **Keywords**

*Teacher education – Rural school – Decentering – History.*

#### **Contact:**

**Antonio Vicente Marafioti Garnica**

**Depto de Matemática**

**Faculdade de Ciências – UNESP**

**Av. Luis E. C. Coube, s/n.**

**17033-360 – Bauru – SP**

**e-mail: [vgarnica@travelnet.com.br](mailto:vgarnica@travelnet.com.br)**

The intention of this article is to initiate a discussion about the need for a decentering in the historical studies on teacher education and, specifically, on the education of mathematics teachers. It is considered that, when treated from a historically hegemonic point of view, the theme tends to concentrate around the Faculties of Philosophy, neglecting other trajectories, such as those of the teachers working in towns distant from the large urban centers. This study, because developed with respect to the State of São Paulo, is characterized by the figure of the rustic – at times regarded as a sociological element of relatively complete features, at other times as a label attributed more or less generically to the inhabitants of the São Paulo countryside – and is presented in three blocks. The first of them deals with the training and actions of rural schoolteachers; the second deals more specifically with the time of expansion of secondary schools, and the third block with the practices of the teachers of the last region of the state to be (re)colonized by the white man: the far west. Although making use of several sources, the fundamental references for this study are the works by Maria Ednéia Martins (Martins, 2003), Ivani Pereira Galetti (Galetti, 2004), and Ivete Maria Baraldi (Baraldi, 2003) – developed as projects of undergraduate scientific apprenticeship, master degree, and doctorate degree, respectively – without which the present text would not be possible. The three researchers in their works opt for the methodology of Oral History and intend to contribute, along with other works from a research group, to the mapping of teacher education in Brazil, a wide scope project still in its initial stages.

Albeit assumedly inscribed in the trend currently known as History of Mathematics Education, this article is concerned only incidentally with the "maths teacher", his training and practices. Such option is conscious and shaped after the observation that, when brought to the foreground, this specific

qualification dilutes the differentiations we want to highlight to, based on the, argue in favor of the decentering mentioned above.

### **Rustics, teachers, and rural schools**

Beira-corgo, brocoió, bronco, capa-bode, casca-grossa, jeca, macaqueiro, mateiro, matuto, mandioqueiro, mcorongo, pé-no-chão, queijeiro, roceiro, sertanejo, sitiano: caipira.

In the already classic text by Antonio Candido, "rustic" will express

a social and cultural type indicating what is in Brazil the universe of the traditional cultures of the countryman, those that resulted from the adjusting of the Portuguese colonizer to the New World, either by transfer and modification of the features of the original cultures, or by virtue of the contact with the aboriginal (2001, p. 26)

and it will be taken, by approximation, from the expression "countryside culture". In the Brazilian case, proceeds Antonio Candido, "rustic" could be taken as "caboclo", although in his work this term is reserved for the person mixed, however closely or remotely, of Indian and white.

To designate the cultural aspects the term "rustic" ("caipira") is used here, with the advantage that it is not ambiguous (having always expressed a way of being, never a racial type), and with the disadvantage of restricting itself almost exclusively, by consecrated use, to the area of historical influence of São Paulo. (p. 28)

Considering that history often relates to what is documented and that documentation, as a rule, regards the life of the dominant clas-

ses, two main expedients were employed in the preparation of *Os parceiros do Rio Bonito* : documents from travelers of the 18th and 19th centuries that mentioned the countryman, and long talks with "old rustics from isolated places, to try and grasp through them how were the 'times of the elders'" (Candido, 2001, p.23). Combining guidelines as a sociologist, anthropologist, and historian, Antonio Candido wants to understand the problems that afflict the rustic, building upon the elementary problem of subsistence, translated into the study of the means of living, of the balance between the needs of a social group and their resources, either available or possible:

the needs have a double character, natural and social, because if their primary manifestations are organic impulses, their satisfaction is given by means of human initiatives, which become more and more complicated, and depend on the group to take shape. Hence the needs themselves become complicated and lose partially their strictly natural character to turn into products of the society. From which fact we can say that societies are characterized first and foremost by the nature of the needs of their groups and the resources available to satisfy them. (Candido, 2001, p. 29)

A text that seeks to "describe a process and a human reality, characteristic of the general phenomenon of urbanization of the State of São Paulo" (p. 13), and whose author's wish was – although he says that some of its parts could be expanded and bettered – that its concluding issue would serve as an introduction to the study of land reform, *Os parceiros do Rio Bonito* dedicated very little attention to the schooling of the rustic, despite the fact that the study was being carried out since 1947, having been finalized in 1954, and published in 1964, a long period of more than fifteen years during which the rural school went from a moment of vitality to one of relative exhaustion.

Children follow their parents since they are small, becoming accustomed in an informal manner to their experiences: agricultural and handicraft techniques, animal husbandry, empirical knowledge of various types, traditions, tales, moral code. Most of the people in the group studied were illiterate, men and women alike. Only one resident sent his son to the rural school, about half league away, for two years, but removed him from school soon afterwards because he thought that if the boy could already read and write a little there was no reason to keep him from helping him with the work. Still now, therefore, the family is the only educational institution for all of them, and some parents see literacy with certain distrust, for it takes their children away from them, turning them into literates. According to a resident, the daughter that learns the rudiments of reading and writing from a farmer's wife was already way ahead of him, for "she could see the letters". She herself claimed that she did not need further instruction because she could already write her name and her parents'. (Candido, 2001, p. 314-315)

Even if other sources agree on the large number of illiterates in the countryside and on the minimal level of schooling of the rural population, this single paragraph concerning schooling in the text by Antonio Candido comes to qualify this situation – as other texts and other theoreticians do – by allowing a interpretation tendentiously negative with respect to the importance attributed by the rustic to formal education, a reading to this day deeply ingrained in certain conceptions that allow to the History of Education (and we shall say, more specifically to the History of Mathematical Education) to focus on the big centers and their formative institutions. Ideologically, "The rustic has little study." came to mean, "The rustic chooses to have little study". In a series of articles about the rural

teaching in São Paulo during the First Republic, Zeila Demartini says that the rustic's need for schooling has always been associated to the improvement of his conditions of life, since to the schooling was attributed the possibility of improving and, fundamentally, "the possibility of overcoming their own conditions as peasants". Such struggle for schooling precedes "in the State of São Paulo the expansion of the processes of urbanization and industrialization", and these communities' aspirations have been overlooked by the state "(...) being left at the mercy of local political and economic interests. On the other hand", the author proceeds, "the low schooling of this population is justified (even among famous sociologists) as a result of their lack of interest for studying, something that our empirical studies have contradicted" (Demartini, 1988, p. 36).

The stocky rustic, alienated from the modern productive system, needed moral regeneration, cultural "substance", despite the fact that, following the establishment of the education system in the State of São Paulo in the first republican period, we can detect that "if the republican ideals were ample and aimed at the whole population, the educational policy adopted in that period was of a restricted coverage favoring the urban population, in detriment of those living in rural areas which, although constituting the majority, were precisely those considered at the time as more uncaring about school education" (Demartini, 1989, p.5). It is worth noting the ideological matrix of this discourse in the official documents:

The education of the caboclo and his children is, in our opinion, much more difficult than that of the immigrant. The caboclo, entirely against the school, does not understand its advantage to him or to his children (...), he does not have aspirations or comfort of any type, he takes from the elements of Nature, with great ease, everything needed for his meager

subsistence, making him unmotivated (...) In order to fulfill their aims, the schools destined to the caboclos and their children must have a peculiar organization of their own. Their scope shall not be the familiarity with books, but the moral regeneration of their pupils, the lifting up of their strengths, the development of latent qualities, which they have, but which are dormant with the neglect and abandonment in which they have lived; the schools must have a profoundly regenerative function (Anuario do Ensino de São Paulo, 1917, cf. Demartini, 1989, p. 12)

Like the works by Zeila Demartini and her group about the First Republic, our studies about the rural school point to the perverse manner in which this regeneration - deemed necessary due to the caipira's imperviousness to schooling - was implemented.

The study by Martins (2003), focusing on the training and activities of teachers and students from rural schools in the 1950s and 1960s (decades that preceded the rural exodus, which in the State of São Paulo begins to take place more intensely from the 1970s onwards), shows that little has changed in that picture. Despite the large interest and attention with which the rural communities saw the possibility of formal education, rural schools continued to follow the criterion of offering classes up to the "third year", preventing children from the countryside from completing primary education. Only the primary schools, usually situated in the towns, offered schooling up to the "fourth year". Forced to work to contribute to the family budget, it was common at that time for children to give up their studies. The discourse for equal opportunities - loudly proclaimed by teachers and by the education policy as a whole - was not matched, as it can be clearly seen, by efforts towards the equality of conditions.

The social project of those that denounced the inequalities is a project of moralization

of capitalist society: it is a reformist project that presents itself as a progressist project, but is from the beginning condemned to impotence. (...) The idea of inequality of school opportunities is the direct expression of the meritocratic ideology, which can be summarized as follows: a just society is a society that gives to all its children equal opportunities - at the outset. At the end point, well, may the best win! (And too bad about the losers.). This ideological form is deeply engrained in the school apparatus and in the 'petit bourgeois egalitarianism'. (...) By emphasizing the inequality of opportunities, the meritocratic idea shifts the attention from what is essential: the structural differences in conditions, such as result from the class structure. (...) Either the equality of opportunities brings with it the equality of conditions or - what is much more likely - the inequality of conditions, in the short term, takes to the inequality of opportunities. (Bertaux, 1979, p. 44-45)

The teachers that worked at the rural schools were educated in Normal Schools, and no specific training – with respect to the habits, experiences, and clientele of the rural area – was given to them during their education. Alongside such lacunal education, the natural difficulties faced by those teachers must be considered. Accustomed to the life in – even if sometimes small – cities, they were prematurely made to live in cottages or farms, many times needing the help of local landowners, having to live with difficulties in transport, and lack of teaching support material. Besides those difficulties, the extreme vigilance of teaching inspectors (who, restricting themselves to a position of technical control, gave the final exams to the pupils, and made surprise visits to check on class journals) and the lack of pedagogical support were endured with a view on a future position in a

primary school. Displaying in their testimonies an idyllic vision of the docile peasant, with his healthy habits and his authentic and natural way of being – a good savage – the teacher from the rural school, longing and avid for urbanity, made of the countryside a "land of passage" (Martins, 2003), leaving in his short stay a trail that pointed vividly to the distinction between the comfortable situation in the cities and the hard life in the countryside. His testimonies allow us to understand that the discourse of modernity, welfare and access to consumer goods, so painstakingly and widely publicized by them, contributed to dissociate the rustic from his roots, turning out to be one of the driving forces behind the rural exodus. What was taught in the rural areas – the old teachers say proudly – was just like what was taught in the city, considering fundamental such education to allow the caboclo to enter the urban life when he left the countryside; an exit that sooner or later would happen due to the precarious conditions of peasant life, conditions always directly or indirectly highlighted by teachers to their students. Consigning the redemption of a lifetime of negativities to the possibility of abandoning the countryside, teachers – as well as some of the official discourses of that time – mix up urbanization and rural exodus: "The rustic is condemned to urbanization, and every effort of a scientifically based rural policy (...) must be exactly in the direction of urbanizing him, which, it should be noted, it not the same as bringing him to town" (Candido, 2001, p. 282).

These reflections come from the work of Maria Ednéia Martins (Martins, 2003), and they were made possible by the gathering and analysis of testimonies from eleven teachers, five students, and one teaching inspector, covering a wide geographical scenario where these actors moved, involving the towns of Álvaro de Carvalho, Agudos, Araraquara, Arealva, Areiópolis, Avaí, Bauru, Bernardino de Campos, Cafelândia, Duartina, Cabrália Paulista, Echaporã, Gália, Jacanga, Lins, Martinópolis,

Mineiros do Tietê, Nova Guataporanga, Ouro Verde, Pederneiras, Piratininga, Pompéia, Presidente Alves, Presidente Prudente, Reginópolis, Ribeirão Grande, Rinópolis, Santa Cruz do Rio Pardo, Santo Anastácio, Tibiriçá, Timburí, and Uru, all municipalities of the State of São Paulo. These reflections coincide with – and in certain aspects expand and deepen – considerations from previous studies about the education of rustics in their rural schools, and also allow understanding aspects that transcend the schooling in the countryside, making it possible to cast a view upon certain bottlenecks of the education system as a whole – specifically those related to teacher education.

As to the relationship between school, family, and community, Martins' study shows that it was not unusual for the community to take responsibility for the construction of schools, refusing to simply submit to the given conditions, developing certain strategies to guarantee access to school knowledge, trying to overcome the precariousness of the system offered by the State, even though such initiatives, as an unwanted side effect, collaborated to exempt the public authorities from responsibility with respect to the maintenance and development of rural school nuclei and their surroundings. It should also be noted the decisive contribution of the family in the formal education of the children. In that respect, Martins observes, as regards the teaching of mathematics, that the first processes of counting and rudimentary arithmetic operations were often developed at home. The interest displayed both by the rural community and by the family contributes to reconfigure the picture of the rustic's aversion for formal education.

While regarding as somewhat "inadequate" the education they had at the Normal Schools as a preparation for their work at the rural schools, the teachers take their own education as primary school pupils as the main ingredient for their teaching practice: they

assumed the same positions, and reproduced the same approaches, of their old masters. That lack of connection between action and specific training, a "practical" training, based on their own experiences as pupils, and supported by their own experiences as teachers, can be seen in other times and other spaces. This shows very clearly how impervious the real educational system was to the intentions and prescriptions of the formal levels of training, and even to the "mandatory" education policies.

Still on the subject of teachers who worked in rural areas, Martins detects the discourse of the many sacrifices needed to the exercise of the teaching profession. That discourse is based on the lack of didactic material, on the inadequacy - or inexistence - of pedagogical support, on the lack of preparation of the teachers for working with multi-year classes, on the difficult access to schools, on the lack of preparation to live away from your family and from the comforts of urban life, and on the accumulation of functions. But if, on one hand, those difficulties are revealed, on the other the very same discourse reveals that the sacrifices were not made disinterestedly: they were like requirements – regarded maybe as "natural" – for entering the public teaching profession, a profession wished for in view of the lack of options, or for the social status, or for the good salaries; they served, therefore, to the individual aspirations.

Although teachers were responsible for all administrative tasks of the school and of teaching, for a long time they did not participate in the processes of final assessment and promotion of their pupils: teaching inspectors and principals carried out those functions. Learning, assessment, failure, and promotion are all taken here almost as synonyms, a "strategy" that must be considered in the light of a context that privileged with points for the classification in transfer exams the teachers with the highest number of approved pupils. There was constant vigilance upon teachers, something that can be

observed in the statements about the visits from teaching inspectors, which were not arranged in advance, forcing teachers into a state of permanent alertness, keeping the school in "good working order", and themselves in constant vigilance with respect to the others and to themselves.

The possibility is considered that, due to the specifics of rural schools, and particularly in view of their regime of multi-year classes, the pupils might develop certain autonomy, which can be envisaged as potentially productive. If, on the one hand, urban schools – without multi-year classes – were regarded by many as a "model", the rural schools offered the students an experience, albeit forced by the circumstances, of sharing of knowledge, so that all, each one in their own rhythm, could be catered for. The work with multi-year classes was not characterized as a negative element by any of the respondents. Teaching strategies that foster the autonomy of the rural pupil were, however, always applied, according to testimonies, in a context that strengthened urban models. Pupils, living with a teaching "equal" to the urban one, because following the same programmatic contents, ended up having an enfeebled and superficial teaching, considering that the conditions of the rural school did not allow the same results to be obtained.

The training of teachers that taught mathematics at primary schools is revealed to be quite lacunal, but the contents to be covered were varied, although not always fully attained. Few teachers managed to go far into the themes of mathematics and reach, for example, the study of fractions and percentages. There is much emphasis on the decimal system – practically restricted to counting –, on the four basic operations, on the "resolution of problems" (in fact, "applied exercises"), and on the memorizing of the multiplication tables from two to nine. The big difficulties with respect to teaching and learning of the "problems" were not in the

operations that should be solved, but in the understanding of their contents, both by the teachers and by the students (whence the large concern with the language), and in knowing which strategy to use to solve them. Greater difficulties, however, are found when dealing with the operation of division (specially by a number with threedigits) and with the inability to memorize the multiplication tables, since at the third year the students were supposed to "know" the tables, something that would bring more speed to the operations and to solution of the "problems".

Despite these various difficulties and lacunae, the rural pupils that continued their studies consider, in their testimonies, that their education was adequate. But the fact that some of them overcame, at least partly, the inequalities of conditions hides what for many<sup>2</sup> was the prevailing factor for their abandonment of their studies.

Due to a well known and widely publicized "fall in the standards of schooling", what was taught and learned at the rural school seems to have acquired an aura of quality (good quality) in the memory of those who experienced schooling in the countryside, particularly as students, making it impossible for them to assume a more critical stance with respect to the role played by the school in the loss of identity of the rural man. (Martins, 2003, p. 165)

#### **Other teachers, secondary school, CADES**

Almost immune to what went on around them, the cities had the primary schools nota eliminada? to which aspired those graduated from the Normal Schools. In the 1950s, when the rural education system had barely started to give signs of exhaustion (today the rural schools are headed to extinction in the São Paulo countryside) and served as a first hurdle in a teacher's career, when the rural exodus and the general phenomenon of urbanization in the State of São Paulo still caused few

worries, and when, therefore, the land reform - "which since then has become a trivial subject", in the words of Antonio Candido - was a political discourse or theme of "specialized economic and agronomic investigations", a stealthy - but wanted - ghost begins to invade the space: the expansion of secondary education to the countryside, producing a tidal wave of constructions of new school buildings. "The number of existing state schools was small throughout the state", recalls Gilda Lúcia Delgado de Souza. "The construction of school buildings started in the mandates of Jânio Quadros and Carvalho Pinto. The latter was the Finance Secretary of Jânio Quadros when he was prefect of São Paulo and governor of the State in 1953 and 1954, becoming himself governor of São Paulo in 1958. (...) the government plan gave priority to constructing school buildings" (Souza, 1998, p. 260). It is thus no longer about primary schools: it was the expansion of the secondary school. However, how were these schools to be provided with teachers, built in towns distant from the capital and from other regions (where teacher education courses were also to be found, some of them already of some tradition)? It was necessary to intensify the training of teachers for the secondary school, something that the faculties of Philosophy could not cope with. From such necessity there appears CADES, the Campaign for the Improvement and Diffusion of Secondary Education, created during the administration of Getúlio Vargas in 1953. Despite the emergence treatment given to the problem, the shortage of teachers to complete the schools' staffs remained flagrant almost a decade later:

From December 1942 to October 1960 around 29184 secondary school diplomas were registered with the Ministry of Culture and Education. (...) However, more eloquent than the language of these numbers (...) is the Campaign for the Improvement and Diffusion of Secondary Education - CADES -

, which annually organizes emergence courses, after which the candidates are entitled to definitive registration as a teacher in groups of disciplines. The reality remains: we need sixty thousand teachers this year for the secondary school, and we have less than a fifth of that number qualified in Faculties of Philosophy, that is, 9750. (Revista EBSA, n. 154, Jan/1961, cf. Baraldi, 2003, v. a, p. 53)

The specialized literature in Education and in the History of Education keeps an astounding and unjustified silence with respect to this teacher training campaign. CADES played a role in the São Paulo countryside far more important than the faculties of Philosophy with regard to the training of its teaching staff, an importance that repeats itself in other States of the Union.

Scattered throughout Brazil, the Secondary Education Inspectorates, working under the State Secretariats for Education, took care of implementing the CADES courses starting in 1956, according to Baraldi (2003). Those intensive preparation courses for the proficiency exams gave to those approved in them the right to register as secondary school teachers, and the right to teach wherever there were no teachers licensed by faculties of Philosophy. In general, those courses lasted for a month (January or July) and were designed to deal with the deficiencies of teachers until then lay or with training far below standard with respect to pedagogical aspects and to the specific contents of the disciplines they would teach or were already teaching. The little material researched about CADES allows us to observe the strong humanistic thrust of the campaign, often denoting a radical and explicit intervention from the Catholic Church in the conduction of its activities.

In such configuration of lacunal and hasty education to supply the secondary schools of the interior of the State, CADES was exemplary. There were - in what were then the



medium-sized towns – no training centers nearby (considering that the "neighborhood" we refer to here is relative to a time when transportation systems were highly deficient). CADES, although fundamental to supply teachers to fulfill the demand in all school disciplines, was a complex of training courses that took place during vacations and, as we saw, gave to the teachers - many of them already in effective exercise of the profession - a provisional registration that allowed them to work in the secondary schools without teachers with specific training from faculties of Philosophy. The provisional registration would be valid until the establishment of a faculty of Philosophy.

By the end of the 1960s the first faculties appear in the countryside, rendering unnecessary the courses and proficiency exams promoted by CADES, since its function of speeding up the training of staff was not sufficient to secure it a place in continuing education, a subject still little mentioned at the time. In 1971, with the new Law of National Education Bases and Guidelines, the proficiency exams are no longer valid. (Baraldi, 2003, v. a, p. 74)

Finding it impossible to attain education in a faculty of Philosophy, many teachers in the countryside had to resort to the enfeebled training of the CADES. The testimonies from these teachers are nevertheless clear when attributing to their own experiences as pupils the effective responsibility for their training to work in the classroom as teachers. They had learned from their teachers in the everyday practice on the school benches, just like the rural teachers had done. There was, therefore, no continuous education process, but a series of brief and scattered moments, from which they reconstituted their teaching strategies. Basically, the training for these teachers took place as a re-articulation of their experiences as pupils.

In the early 1970s the Short Licenciateship in Sciences began to thrive, and eventually became widespread, giving birth a little later to specializations in subjects that

would complement them and give legal right to the teaching at the secondary level. At the same time, the so-called "vacant courses" appear, offered by private institutions as a counter option to the Licenciateship in Sciences with Specialization in Mathematics, which took four years with classes during the week. It can be easily seen that the law of survival of the secondary teacher was based on obtaining this university title. The professional practice of many teachers, based on schoolbooks, on the few courses offered by the official bodies, on the "asking here and there" about methods and contents, should now be formalized to continue to happen. Obviously, the mandatory and urgent nature of this "education" became the need for a simple formalization, something that even the questionable weekend courses could provide. At the end of this whole trajectory of training and formalization, there remained the model of the Normal School, the level to which most teachers then active had had access. It comes as no surprise, then, the statement that more than the faculties of Philosophy, the main inspiration for the teacher education courses was the structure of the Normal Schools, which in Brazil had been created in the mid 19th century (cf. Bernardo, 1986).

The work by Baraldi, which serves here as a fundamental reference, is constructed from the testimonies of eight teachers who, although having started their teaching experiences in different periods, allow to understand a trajectory of training and action that spans a period of at least thirty years (from 1950 to 1970). Their narratives mark quite clearly the differences in education indicated so far, highlighting the importance of CADES, and emphasizing that teachers educated in faculties of Philosophy working in the countryside were few, often coming from traditional or wealthy families. As regards mathematics, the testimonies collected allow to discern certain common influences. Among them we highlight specifically Cid Guelli, whose work around Bauru spread to most of the state, and Júlio

César de Mello e Souza, teacher of the CADES and author of manuals for the campaign. Among the schoolbooks, there are, amongst others, references to those by Ary Quintella and Osvaldo Sangiorgi. The latter is also referred to when modern mathematics comes to scene, to which teachers dedicate a great deal of attention in their testimonies, mostly disapproving of the movement.

The history of the rustic school education, written in the gaps of the official history of Brazilian education, moves, thus, along paths distinct from those walked by pupils and teachers in the urban centers. City dweller, cosmopolitan, elegant, refined, and sophisticated are, according to dictionaries, antonyms to "rustic".

#### **Teachers, colonizers, New Alta Paulista**

It is not strange to extend the expression "rustic schooling" to the interior of the State of São Paulo and apply it to areas other than the rural ones. A large part of the countryside - notably the west region, where we have concentrated our investigations about the History of Education and of Mathematical Education of the São Paulo countryside - is of relatively recent colonization. Let us see, for example, how to characterize, within this mapping of the rustic schooling, a new region of the colonization process of São Paulo.

The New Alta Paulista, in the extreme western regions of the state, was the last region of the state to be colonized by the white man. The regions called "São Paulo backlands" appear as spaces to be occupied in consequence of interests linked to the coffee. It is thanks to the growing of coffee from the mid 18th century that the State of São Paulo conquers leadership in the Brazilian political and economic arena. The trajectory of the coffee plantations in the state starts at the Paraíba Valley and marches towards the more interior regions, bringing with it two main consequences: the immigration and the creation of a transportation system, that is,

the construction of railways and roads, since it is upon the triplet "coffee, railway/road, immigrant" that rests the colonization of the State of São Paulo and, consequently, that of the New Alta Paulista. By the end of the 19th century, moment when the pioneering march advances toward the backlands, the immigrants subsidized by the government arrive in great numbers in São Paulo. However, the coffee farmers are not satisfied with the government subsidy, and the same men who founded the railway companies associate to participate directly of the organization of the immigration. With the initiative and the capital from the coffee landowners, several companies are created in São Paulo to recruit immigrants, particularly Italians, to work in the plantations. From the region of Campinas, the expansion frontiers press forward, and the coffee occupies new areas. Now, the purple-soil lands that come in stretches one next to the other begin to guide the march towards the countryside. And so, the State of São Paulo, with its gigantic coffee plantations, is home to the third large aristocracy of the nation - the coffee farmers, heirs to the sugar cane lords and to the big mine owners- , and conquers the leadership in the economic and political scenario. To this state come migrants - particularly from the North - to which European immigrants are added. The triplet "road-truck-railway", fostering transportation, makes the colonization advance more and more.

According to Alfredo Bosi (2002), the words "colonization" and "culture" derive from the same Latin verb (colo), which for the Romans meant, "I dwell, I occupy the land". He defines "colonization" as a project that aims at occupying a new land, exploit its riches, and dominate its natives. "Culture" is a term defined as "the collection of practices, techniques, symbols and values that must be transmitted to the next generation to guarantee the reproduction of a given state of social coexistence", adding that "education" is a "given institutional moment of this process".

In a recent research (Galetti, 2004)

testimonies from five mathematics teachers that worked in the New Alta Paulista region between 1950 and 1970 were collected and analyzed. Excepting one of them - who was born and lived always in the region - those teachers were pioneers, coming from "older regions" of the State of São Paulo who, by taking up their posts as teachers in the New Alta Paulista, integrate into the expansionist project established in this region from the first decades of the 20th century, becoming "actors" not just in the educational and cultural process, but also in the colonizing process of a region far away from the big centers. At the time, this region had a precarious transportation and communication system; the growing of coffee in small and medium-size farms dominated, and the workforce consisted mainly of Italian and Japanese immigrants with a poor command of the Portuguese language. The teachers arriving in the region have diverse backgrounds, and their testimonies display that clearly. Two of them - who were interviewed precisely because they constituted exceptions to the rule in a universe composed of primary and "CADESian" teachers - had gone to universities in the capital of the state (PUC and Mackenzie). Another interviewee, soon after completing the " " high school was approved in an entry exam to the official teaching and, in 1957, moved to the New Alta Paulista taking a licentiate in mathematics years later in a "vacant course" in the town of Guaxupé in Minas Gerais. The other two participants - like the previously cited teacher, closer to the rule than to exceptions - began to teach mathematics soon after finishing their Licentiate in faculties of the New Alta Paulista, one of these faculties being founded by one of the interviewees educated in the capital. The few teachers that had their education in universities of the São Paulo City had had contact with experienced teachers, among them some foreign and renowned teachers in the field of mathematics; had made use of a varied bibliography and had access to good libraries. At their arrival in the New Alta

Paulista, they found a new "landscape" that demanded from them a "transposition" of the culture they were comfortable with. They needed to be creative, because "a new public" requires practices for the teaching of mathematics that cannot be the same ones used in the "older regions". Thus, the teaching that develops in the region is peculiar, surprisingly similar and different from the one in the "older" regions of the country, for while keeping the mathematical contents traditionally taught at schools, new practices are created with the purpose of transposing them to the new ground. The colonization gives "new hues" to the daily practices of teachers who taught mathematics at that time: teachers coming from the big urban centers develop and maintain a "project" to transpose to the children of the migrants and immigrants the mathematics learned either at the university or with renowned teachers. "The colonization confers an air of restart and drive to centuries-old cultures", says Alfredo Bosi (2002), and those teachers-interviewees attest that assertion. The agents of the process of colonization are not only those who work the land. A wide spectrum of workers, among them the educators, are also colonizers. To the mathematics teachers, the verb *colo* assumes its basic sense: to take care of, with the meaning of "caring for", caring for the teaching of mathematics.

The "bandeirante" and the teacher - differently from what had happened in the 18th century, when the São Paulo bandeirantes and the Jesuits were involved in bitter fighting - brought their practices together, working, each one in his own style, in the colonization project. While some grew crops and traded, others built roads and railways, and other still contributed to a project of school and cultural education. Those teachers did more than to dedicate to teaching mathematics at school, they developed an expansionist project with respect to the teaching of mathematics. They redirected the school trajectory of the colonizers' children, trying to give them access

to traditional "secondary" schools and universities of the capital. We see repeated here, therefore, a cycle of exclusions similar to that pointed out when we referred to the rural school: the inequality of conditions - here, the inexistence of certain schools or universities in the region - refers the children of the colonizers to the education in the big urban centers, a distortion that, to a certain extent, can be explained by the need of one group to set itself apart from the others. To make it easier for the children from the rural areas to attend to school activities, the teachers-colonizers of the New Alta Paulista reach the point of taking them in to their own homes, establishing links that, extrapolating the school period, last to this day. They also took care of the training and development of the other teachers of the region since, being friends with well-known scholars, they could receive in visits to the region, in which occasions they established forums - in which the New Alta Paulista mathematics teachers participated, graduated or not - where a new type of mixing takes place, that between the academic mathematics known and produced by those scholars and that taught by the local teachers. The colonization confers other "air of restart and drive" to the school mathematics culture. Those teachers also "sowed" new faculties, with mathematics courses, in the New Alta Paulista, in which they lecture and to which they write books. Although initially those faculties had neither a staff with academic education nor good libraries, they fulfilled their role of giving a specific training both to teachers without qualification who were already teaching mathematics at lower and upper secondary schools levels, and to those that would respond to the growing demand of the regions as a consequence of the colonization process. Nowadays, the large majority of the mathematics teachers working in the New Alta Paulista region have graduated from these faculties, whose first seeds were sown by those teachers. However, the "air of restart and drive"

were not restricted to the New Alta Paulista. The teacher-colonizer goes after "academic certificates", a formality that as already discussed the legislation begins to demand. In the 1970s the courses run and advertised by the CENP (Coordination Office of Pedagogic Studies and Standards) begin to be part of the teacher education landscape, and teachers take part in them, integrating themselves to projects of the State of São Paulo Secretariat for Education.

Despite the fact that the practice and education of the teachers in the State of São Paulo countryside go on largely oblivious of the parameters dictated by the traditional faculties of Philosophy established in the urban centers, it is possible to discern with respect to the colonization of the New Alta Paulista some elements from which an association between those two realities begins to take shape more clearly, although we should not forget that these are new times, in which the laws governing the production systems tend to articulate themselves more explicitly around a large matrix dictated by the capitalist economy, with strong - detrimental - repercussions to the more primitive and communal forms of organization of the rural nuclei. The urbanization process intensifies, and today the cities are similar to each other, with their malls and their dazzling lights, with transportation and communication systems that reduce distances and turn - at least apparently - into homogeneous regions areas which until recently were extremely different and far apart.

Now, looking at the past of the rustic society, we see that the goods incomprehensible to it made it possible to define human types more or less complete within their standards and their possibilities of economic, social, religious and artistic life. However, because the rustic man is ever more incorporated into the sphere of the cities, we see that, while that happens, those usages, practices, customs become largely survivals, to which the

groups cling as a defense. (Candido, 2001, p. 283)

### **Rounding off (albeit provisional)**

Eu sou trezentos, sou trezentos-e-cincoenta,  
As sensações renascem de si mesmas sem  
repouso,  
Ôh espelhos, ôh Pireneus! ôh caiçaras!  
Si um deus morrer, irei no Piauí buscar outro!  
Mário de Andrade, "Eu sou trezentos..."

The term "decentering" that gives the tone to this article was employed by Stuart Hall in his *Identidade cultural na pós-modernidade*. By using this term the author wants to refer to the way in which the subject has been conceptualized in the modern thought:

My objective is to trace the stages through which a particular version of the "human subject" – with certain fixed human abilities and a stable feeling of his own identity and place in the order of things – emerged for the first time in the Modern Age; how he became "centered" on the discourses and practices that shaped the modern societies; how he acquired a more sociological or interactive definition; and how he is being 'decentered' in late modernity. (Hall, 2004, p. 23)

The united, rational, Cartesian, illuminist subject is progressively decentered, and reveals itself contemporarily as fragmented, conceived in mutant forms by the various theories and approaches to understand it. "Decentering" is, therefore, a term we make use of as inspiration with a similar but distinct sense from that used by Hall. Distinct, because it is our intention to develop an exercise that indicates the possibility – we might say the need – of studies that take as their points of departure not the historical hegemonic center (the "big" cities, the "traditional" educational institutions, the "renowned" professors, the "classical"

textbooks), but their periphery and their anonymous actors. Periphery and center participate in this exercise as poles that interact necessarily. There is no center without a periphery, neither there is periphery without a center. Our intention, thus, is not to deny those centers and their importance, but by focusing on the periphery, make it possible a perspective that has been systematically neglected by the historical studies on Education, and specifically on Mathematical Education. Similarly to Hall's intentions we have the proposition of assuming the subject as essentially fragmented, denying the possibility of seeing, for example, "the" teacher, "the" rustic, "the" pupil, "the" periphery, "the" center, from static and well-established definitions. It would be more adequate, grammar permitting, to say "some" teacher, "some" rustic, "some" pupil; since each subject shelters a number of identities, and positions itself in the world as a "one who is many" – assumed here the fragmentation proper to it. The rustic, as a possible example, does not assume just one peasant identity of good savage, but traverses other identities, being an inhabitant of small towns, timid or enlightened participant of the urban crowds, shopping center cowboy, teacher, pupil, teaching inspector, colonel, father, mother... and each reality (landscape) in which the potentialities of the subjects are effected is formed from the various looks that perceive it, being therefore itself multifocused, dynamically conceived in perspective.

Finally, apart from those points, we emphasize that the reader of this article may have the impression that the specificity of mathematics has not been depicted adequately, being barely sketched here and there in a vague and enfeebled manner. It has been the author's deliberate choice to point out that which could be a second form of decentering: an article about Mathematical Education that does not take the issues of mathematics as its main thread. To center the text around the figure of the "mathematics" teacher, around the

"mathematics" classes, around the teaching of "mathematics" - although an important task, and well developed in our three main references - would take the focus away from what seemed to us to be the most important at this moment, since we sought to understand how, in the history of school education, a diversity of themes have been neglected, making the pendulum always swing towards the classical viewpoint that takes the exception for the rule.

Maybe if this study had moved more in the sphere of Mathematical Education proper, those dissonant elements that we tried to deal with here - the tortuous processes the countryside teachers have gone through in their actions and educations - would have remained so concealed and diluted that, as is the case in the usual historical treatments, they would seem devoid of importance, incidental and anecdotic.

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**Antonio Vicente Maradioti Garnica** teaches at the Department of Mathematics of UNESP in Bauru, and in the Graduate Program in Mathematical Education at UNESP in Rio Claro. He holds a Bachelor degree in Mathematics, an MSc and PhD in Mathematical Education from UNESP Rio Claro, and has carried out post-doctoral studies in the U.S.A. Currently he is a CNPq researcher and coordinates the “Oral History and Mathematical Education Group ([www.ghoem.com](http://www.ghoem.com)).