Well educated workers

It is common to hear that the productivity of the Brazilian economy is hindered because our schooling rates are very low. From this point of view, we have poorly educated workers. This way of seeing the school at the service of the economy ignores the purposes of education, as well as forms of education outside the classroom. Well-educated workers are not necessarily those who spent long years within school walls. Let me illustrate this with a case that I am really familiar with.
Zé Nilton, my cousin, is a plumber. He attended only the first four years of school. After that, he began to work. With the help of my father and other master builders, Zé Nilton learned the plumber’s craft with experienced professionals in the field. He learned by doing.

My cousin was educated on and through the job, developing an extensive knowledge of hydraulics in a learning process that went through doing and integrating into a community of practice. Most educators, if asked to evaluate Zé Nilton’s education, will examine his school records, interview his teachers, check how well he performed in his studies. Few educators will investigate how he learned to be a plumber in a master/apprentice relationship in the day-to-day work on construction sites. Such a process is rarely seen as education.

As Zé Nilton did not reach high school, it is likely that the gentlemen and ladies of the academia will see him as an uneducated worker. But I can guarantee that Zé Nilton is a well-educated worker. He learned his craft at the best school there is for plumbers, the construction site. He learned the plumber’s craft with the best educators, companions, and masters who value and know their craft.

Here I should note that by saying that the worker is educated by working in workshops, involved in the production, I am not discrediting school education. Workers should have the most complete school education that can be offered by our educational systems. But a worker with a high school or even higher education degree, and without mastery of a craft, is not well-educated.

In the education of the worker, it is necessary to be clear about how the knowledge shared by a community of practice in the world of work is developed. Moreover, we need to know what kind of knowledge are those that, inappropriately, are called practice as opposed to theory. Here is a personal story.

It was an ordinary Sunday. Barbecue, beer, playing with the kids. There was a hydraulic problem that changed everything. In one of my bathrooms, the flush valve triggered. I closed the stopcock and decided to repair it on that day of rest. I disassembled the valve and figured that the problem was a little piece called cartridge, although I was unable to identify it. My plumber friends had already told me that a failure in the cartridge is what usually triggers a Hydra. Luckily, there was a building materials store open. I walked over and spread out the valve parts on the counter. The seller told me, pointing to a small piece, “the cartridge is broken”. So I bought a new cartridge and went back home willing to make the repair.

I assembled and reassembled the valve. But there was always something that did not fit. I talked to myself, trying to come up with instructions on what to do (theorizing). I lost my patience, cursed a lot, and after more than an hour of trial and error, the valve began working. But there was a water leak that I did not know how to fix. On Monday, I called a plumber to repair my valve. He took it apart with ease. He looked...
at the parts and reassembled the Hydra in a few minutes, while talking about soccer. It seemed like he did everything automatically. The valve worked; the leak was gone.

What differences are there between me and a well-educated plumber? I do not know. He knows. I work slowly, I make a lot of mistakes and I get an unsatisfactory result. He works quickly, fluently, achieves a good result. He has knowledge that I lack.

In Ofícios e saberes (COSTA; APRILE; BARONE, 2022), in the chapter “The living and the companions of death: the gravedigger’s job in the Countryside of Minas Gerais”, Lúcio Alves de Barros imagines a situation similar to the one I experienced with my valve. He suggests to the reader starts digging a grave. In the suggestion, Lúcio shows that any one of us, even though he can handle instruments suitable for making a grave, will get poor results and soon get tired. A professional gravedigger will take on the task with apparent ease, showing little fatigue and producing excellent results. Among other things, the gravedigger imagined by the author, as well as the plumber who came to my house, does things fluently, has a plan of action that unfolds in skillful actions. The knowledge he has flows in gestures, not in words.

It is worth quoting an author who speaks about a situation similar to mine about the plumber and Lucio’s about the gravedigger:

In my house, there are two rooms that have been recently repainted, one by a professional painter and the other by me. The professional was skilled at his job. I was not. Through what marks can one detect the difference? Well, the final product certainly says something. Looking closely at the walls I painted, you can see the irregularity of the texture; too much ink here, too little there. There are weak vertical veins where paint has flowed and small excesses or insufficient brushstrokes in the corners. The walls painted by the professional are uniform in texture and the corners admirably perfect (SLOBODA, 1993, p. 253).

I presented examples of apparently simple works similar to many others that can be observed in everyday life. The seeming simplicity of what is done by workers suggests that their knowledge can be learned easily and quickly. It is a minor knowledge compared to scientific knowledge. It should be noted that this perspective results in proposals for accelerated training of workers in short courses (in PRONATEC – National Program for Access to Technical Education and Employment, for example, most courses would last 300 hours). This perspective has been changing. Many researchers in the field of human sciences are showing that the on-the-job knowledge, the knowledge of the crafts, is as or more complex than academic knowledge. It is worth considering, for example, in the work Shop class as soulcraft: an inquiry on the value of work, reports on the knowledge of mechanics (CRAWFORD, 2009).

Recently, there was a book published addressing the on-the-job knowledge with the notes of complexity that I am suggesting in this introduction: Ofícios e saberes: histórias e resistências de trabalhadores (COSTA; APRILE; BARONE, 2022). Based on this book, I am going to introduce themes that show how we can appreciate
the complexity of the knowledge of well-educated workers. And to show that well-educated workers can be found in a long-term history, I decided to complement my appreciation of the aforementioned book with the study of another that addresses the knowledge of workers in Rome, *Mestieri e professioni a Roma: una storia dell’educazione* (FRASCA, 1994).

To facilitate reading, I will not always use complete references regarding the title and authorship of the books under analysis. In most cases, I will only indicate the first word of the title of each book, *Ofícios* for *Ofícios e saberes: histórias e resistências de trabalhadores*; and *Mestieri* for *Mestieri e professioni a Roma: una storia dell’educazione*.

**Work is art**

I turn once again to the chapter in *Ofícios* about the profession of the gravedigger in a town in Minas Gerais. In an excerpt of an interview, the gravedigger talks about his work, a recently completed grave, and says that it is beautiful, well-finished, neat. It is not too much to say that his description could be summed up in one word, art.

I might have chosen another craft to consider the artistry dimensions of the work. But I thought that the impact of the story of the gravedigger was greater, drawing attention to the understanding of art in an unusual direction and challenging us to consider knowledge that is almost always invisible. In *Ofícios*, there are implicit or explicit references that the craft addressed is an art practically in all chapters. A wigmaker says it is an art to produce a well-tailored wig. The authors of a study on the production of backpacks by indigenous women refer to weaving as an art. The sidewalks built by Lisbon stonemakers are also said to be art. The jeweler’s work is art. It is art the craft of the prospector, hatter, soapstone sculptor, cheese maker, and many other professions that appear in *Ofícios*. In the history and understanding of workers, craft and art are synonymous.

Long before the use of the word craft to designate skilled work, the term was used to refer to the human capacities to produce and create. In *Mestieri*, the author finds that during a good part of the history of Rome, the activity of craftsmen was characterized as *ars* (art): *ars aurifera*, *ars coquinaria*, *ars ferraria*, *ars lanifica*, etc. It is also true that academic activities were sometimes called *ars*: *ars astronomica*, *ars geometrica*, *ars rhetorica*, etc. But the term did not have the same meaning in the two contexts. In the first one, there is a sordid art, in the second, a noble one.

Sordid was the work of the blacksmith (*ars ferraria*). Noble was the activity of the grammarian (*ars gramatica*).

The author of *Mestieri* quotes an observation by Cicero that is worth noting here. The great Roman orator, in a letter that sought to guide his son, says that there is no shadow of nobility in the workshop (p. 20). In that sense, one of the most important crafts in Rome, a baker, was a sordid art for Cicero. In the course of time, some sordid
arts were valued. This is the case of the craft of the doctor, surveyor, architect. Even so, these professions did not appeal to the nobility; they were exercised by freedmen or free citizens who did not belong to the patrician caste of Rome. There was an exception, the nobility began to be interested in painting and drawing. Many noble Romans (men and women) produced notable paintings. They did not do it as work, but as an interesting game (ludus). They did not accept commissions like craft painters. They painted just for pleasure.

Over time, certain crafts gained the status of what we now call fine arts. This led to a compromised concept of aesthetics that I will discuss later. It is now important to examine what was and is the worker’s understanding of the craft as an art. In this case, the idea of art is strongly linked to the ability to produce. And the worker identifies with what he produces. An example is the seamstress that I interviewed (BARATO, 2015), who said that she saw herself in the dresses she made as she saw herself in the mirror. Additionally to beauty, what professionals of a craft develop in their work is a well-done job, which satisfies them even if it is not noticed by others. A young electrician accompanied in his work (ROSE, 2007) finishes a wiring, tests it, and sees that it works. But he tells the researcher that he is redoing it, because it is ugly. The researcher then says that it works and will stay inside the wall, that no one will see it. The young man says that it does not matter if his work is hidden, because he does not do ugly things.

In Ofícios, “not doing ugly things” is an observation that appears at every step in the statements of interviewed workers. Perhaps the statements do not have the clarity of what the young electrician said, but they are in the words of cheese makers who resist and preserve a tradition, in the affection with which soapstone sculptors speak of their art, in the words of the wigmaker who claims a well-tailored wig to be art. In almost all cases, it does not matter whether the work will be valued outside the community of practice of the craft. What matters is that the work is valued by peers and that its beauty is recognized by the corporation. I saw many welds, accompanied by professionals saying that it was a beautiful job. Layman in the area, I never knew how to see art in welding. But professionals like the famous welder Lisa Legohn define welding as “the art of melting metals” (ROSE, 2007).

Accepting that certain crafts are framed in the field of fine arts contradicts what workers of any craft have to say. This is an interpretation of people who cannot see beauty through the eyes of those who produce it. Analysts of crafts can fall into the trap and see a dichotomy between what the author of Mestieri calls sordid art versus noble art. This happens, in my opinion, in the analysis of the craft of a paver in Ofícios. Sidewalk projects designed by architects are seen as art, relegating the art of the paver to execution. It seems that paving is art only when conceived by an architect. One explanation for why this happens is that the conception of art has historically been dissociated from that of craftsmanship, although workers continue to see beauty in what they do.
The second chapter of *Ofícios* addresses work as art (*Craft, work, and art*). The text examines the etymology of work-related words; art, skill, craft, using famous dictionaries and the historical contexts in which the words emerged. There are authors who separate art from work. They understand that fine arts, and even decorative arts, is not work. This is a recent understanding that emerged with bourgeois society, "since the artistic vision of the worker is different from the expectations of the Capital"(COSTA; APRILE; BARONE, 2022, p. 44). To that moment, the word art was comprehensive, as can be seen in *Mestieri* in the case of Roman society.

The authors of the second chapter of *Ofícios* suggest that the understanding of what is work is associated with the idea of suffering (the Latin root of work – trepalium - can be translated as torture). But Christianity softened this understanding, as *Mestieri* recalls when examining the motto “ora et labora” of Benedictine monasteries. In the same book, there is a reminder that Augustine of Hippo emphasized the dignity of crafts, except those aimed at trade (usury and profit contradicted Christian virtues). I think that Christianity is not the only explanation for such a change, as in Roman society crafts were historically gaining status. This can be seen, for example, in the growing importance of the collegia, the Roman craft guilds, in the political life of cities (BROWN, 2012).

In the second chapter of *Ofícios*, there are analyses of the various terms that were used to designate human work. This is a necessary measure to see how work was and can still be understood as art. And beyond the etymology, it is necessary to examine how the worker sees his work. To this end, the authors of the chapter resort to the concept of qualified work. In a direction contrary to what today is a partial view of work, revamped with the name of competence, the idea of qualification is that of comprehensive knowledge. The authors of the chapter “Craft, work, art” show, in several passages, that the idea of work as art defines the identity of the worker in a similar direction to that proposed by Wenger in his studies on communities of practice (WENGER, 1999). I think that the old saying "you are what you do" applies here to understand how the view of work as art shapes the worker’s subjectivity.

It is worth dwelling on the idea of a qualified worker and, more specifically, on the notion of qualification, since it registers, however many resist seeing it, the effort of the worker to make himself recognized as the subject of his actions and to therein recognize themselves. Or even, so that it is understood that he and his work are inseparable, and that his work, his craft, and art are intertwined.

In my view, the two books analyzed suggest that the term art to define craft can be understood as knowledge. They, however, do not make much progress in the direction of an epistemology of work, of know-how. They even use the old dichotomy between knowledge and skill. Concomitantly, they offer indications that favor understandings that doing is the deepest basis of knowledge.
It is worth recalling the education proposals of the Black Mountain College (ADAMSON, 2007), the most radical experience of learning the arts by doing. Josef Albers, the institution’s most influential professor, said that “learning does not occur by mastering theory or knowledge, but through the inductive experience of doing” (ADAMSON, 2007, p. 84-85). These ideas resumed what Dewey had already proposed in *Democracy and education* and *Art as experience*:

> His [Dewey's] central idea was “experience”, defined as a moment of interaction with objects and processes. Education, Dewey argued, should aim to shape experience as to encourage the moral and aesthetic dimensions of learning. Professional education must adhere to this principle: the idea that experience with materials can be developed through handicraft skills (DEWEY *apud* ADAMSON, 2007, p. 79).

Dewey’s ideas were taken up in the field of philosophy by Mark Johnson in the book *The meaning of the body: aesthetics of human understanding* (JOHNSON, 2007). For the author, aesthetics must be understood as what Dewey called experience. It is worth remembering the meaning of experience for these authors: a moment of interaction with objects and processes. This is the basis of all knowledge. And aesthetics, in this sense, is not appreciation of beauty as understood in the field of fine arts, but art that results in creative changes in a given field (carpentry, mechanics, welding, cooking, etc.)

I took a necessary detour by recalling ideas from Dewey, Albers, and Johnson. The brief visit to these authors suggests that *Ofícios* and *Mestieri* should further progress in the field of epistemology of work based on analyses of crafts as art. This, however, is not easy. The idea of fine arts predominates, causing our discourse to downgrade the aesthetics of work – especially manual labor –, ignoring experience in the sense suggested by Dewey.

An example of this can be seen in *Ofícios*, in the chapter on hatters. A professional in the field says that his craft is associated with art. In the subtext, this statement sees art in hatmaking only insofar as it forms part of a set of fashion productions, not as an act with its own aesthetics. In this case, it seems that the person does not see art in the craft itself, unless the hat is an accessory made for special occasions. Thus, art is not seen in the everyday activity of the hatter. This is reminiscent of the difference between sordid art and noble art, pointed out in *Mestieri*.

In the two analyzed books, there is a view that all crafts are art. The case of the hatter, highlighted in the previous paragraph, is not the rule. Most workers in any craft know that they make art. What they do outlines their individualities. The view of work as art in this case is subjective. But there is an objective counterpart, as in history, crafts are defined as art. In the case of Rome, this holds true for the doctor, surveyor, and architect, as well as the weaver, baker, and goldsmith. The personal view of workers and the social view of the crafts indicate that doing is a knowledge, an art.
The art of crafts is, in the terms proposed by Johnson, an aesthetic experience that is the root of any knowledge. Aesthetics precedes epistemology. Or, to put it in other terms and using a verse by Paulinho da Viola, “things are in the world, I just need to learn”. The understanding that crafts are art, as we have seen, indicates that each craft, by doing, structures the peculiar knowledge that is the worker’s heritage. This explains why many workers insist on continuing the traditions of some crafts, making art. When he does not make art, the worker loses knowledge.

Workshop and school

In the two books analyzed, there is often a tension between learning in workshops and learning in schools. Reflections of this tension can be seen in the importance gained by laboratories in technical and technological courses. In my study on the work and training of the teacher in EPT (Portuguese acronym for professional and technological education), I make the following observation:

In the school environment, laboratories occupy increasingly more spaces that were occupied by workshops. This trend is yet another indicator of EPT schooling. Operating laboratories does not require teachers to be able to produce works typical of professions related to the course they teach. Laboratories are almost always didactic environments, designed to teach scientific and technological bases that are part of the training curriculum for technicians and technologists. In this case, what is expected of teachers is the ability to suggest uses of space, posing problems to be solved, suggesting testing of certain principles or hypotheses. In these types of situation, teachers behave more like scientists than professionals identified with the profession that is the target of the course. What is done in the laboratory is science, and concrete work is far from this type of experience (BARATO, 2021, p. 87).

The schooling of professional education is a victory of literary education over the education that was taught in workshops (MJELDE, 1987). Some uninformed critics see learning in workshops as mere repetition. In part, this happens because the academia does not consider the workshop as an educational space. In Mestieri, Rosella Frasca recalls, for example, that the classic work A history of education in antiquity, by Henri J. Marrou, does not devote a single line to the training of workers in workshops. In Mestieri, the author references learning in workshops in several passages. The Italian term for workshop is bottega, the Latin is tavern. I will take the liberty of using one or the other instead of workshop so as not to be repetitive. The Roman tavern was a place where products were produced and sold, it was, therefore, a workshop and a store. It was, moreover, a space that housed apprentices.

Based on archaeological finds, Rosella Frasca describes what a pristine tavern, a bakery, was like. There, raw materials were processed, dough was prepared, bread was baked, product was sold. To perform all these functions, the bottega had the necessary spaces for the millstone, moved by horses or slaves, tables to prepare
the dough, ovens, and showcases to display the bread. The baker, therefore, had a broad mastery of the production process, unlike bakers today. In other taverns, of metallurgy, footwear, textiles, etc., it could be seen this same mixture of workshop, shop and place for apprentices to live. There was, therefore, continuous exposure of apprentices to the professional world in which they would exercise their craft.

The catchphrase learning by doing, often used to characterize professional education, does not fully capture how education in workshops took place. The apprentices, who arrived at the bottega between the ages of seven and nine, became part of the family, with the master assuming paternal duties of education. There, it was not only the skills of a profession that would be learned, but also the technologies, the value, the worldviews:

[...] the artisan bottega conserves almost all the characteristic functions of the [traditional] structure of work pedagogy in a broad sense, not only of professional knowledge, but also of behavioral models, of mental understandings, with vast repercussions on the personality of who frequented it, of their insertion in society: in short, it is a peculiar ideology (FRASCA, 1994, p. 83).

The pedagogy of the Roman workshop is not guided by classes, subjects, academic knowledge. It is guided by the product that is made there. It does not ask what the learner should know, it asks what he should do. Here I quote the author of Mestieri: "[...] learning was considered almost only in relation to production demands, and thus modeled on the needs and rhythms of the master, the corporation, the order [...]" (FRASCA, 1994, p. 93). Such a guideline is entirely opposite to that of academic education focused on the content of a classical culture based on literary works. Such an a guideline is also entirely different from what is highly valued in today's school education, student-centered teaching.

In the workshop, the author of Mestieri observes, knowledge is developed in a continuous relationship between master and apprentice. This relationship is not unidirectional. Rosella Frasca notes that this relationship is reminiscent of the famous Hegelian figure of the master/slave, in which the definition of being of one and the other is based on mutual dependence. By doing, master and apprentice continually exchange knowledge.

It is worth asking how school education is seen in Rosella Frasca’s book. Therein are comments about the traditional academic education in Rome, which is not the object of this analysis. One topic, however, needs to be addressed here: in Mestieri there is interesting information about a typically Roman educational institution, the Pedagogium.

The Pedagogium provided professional training using conventional, school education strategies. It fully distanced itself from the pedagogy of the workshop. The institution trained young slaves to accompany young patricians. To this end, the former learned content from the education offered to the nobility, and they would also learn some useful crat that could be exercised in the house of their lords. In the latter case, the pedagogy was not that of the workshop, but of the school. Rosella
Frasca is sympathetic to the Pedagogium, understanding that such an institution offered an alternative to the professional training conducted in bottegas.

In Ofícios, there is no case of a profession conventionally learned in workshops. It is possible that this can be explained by the absence of a pedagogy of workshop learning among us, since, in most cases, the status of professional learning is more used as means of employment for disadvantaged people, not as an alternative for professional training. However, in all chapters of the book, there are indications that the crafts were learned in situations analogous to those described by Rosella Frasca in Mestieri. The jewelers whose stories are told in one of the chapters of Ofícios learned from masters of the art in workshops. In the chapter about prospectors, although it is not very clearly addressed how workers are trained, it is clear that professionals learned the trade in mining sites. The same goes for hatter and wigmaker.

Workshops were family enterprises. As we saw in the analysis of Mestieri, apprentices were paternally welcomed by the masters and crafts were learned as part of family education. It should be noted that the sons of masters were also apprentices. In some crafts covered by the book coordinated by Costa, Aprile and Barone (2022), learning also occurs as part of family education. The craft of the artisan cheesemaker is a family tradition. Making artisan cheese is the result of a learning that takes place on a daily basis, from children simply helping in the production process that culminates with complete mastery of the craft.

This familiar dimension of learning also happens in the artisanal production of grappa, the Italian distillate made from grape bagasse. Armenian food cooks narrate that they learned from mothers, grandmothers, or aunts. Massimo Ferrari, a chef well known for his restaurants in São Paulo, says he learned from his father at the family restaurant. It is in the family environment that the craft of the soapstone sculptor is learned. It seems, in all these cases, that there is no intention to teach. One learns by participating, as recalled by the the authors of Chapter 5, a study on the craft of artisan cheesemakers. Family life is not separated from professional life.

The learning of crafts takes place through comprehensive education. Even if it is not formally in conventional master/apprentice relationships, it has an ontological background absent from school education. At school, knowledge is built. At the workshop, an identity is developed, one learns to be. To be a cheesemaker, to be a wigmaker, to be a hatter. In Ofícios, this is shown by the narratives of many professionals. A jeweler does not just know how to make jewelry, he is a jeweler.

I delve a little deep to the interpretation of the words of the workers saying that they are, not just that they know. In learning and exercising crafts, the worker produces works and identifies with them. The works shapes the subjects who make them. Here we can once again see the ideas of Dewey and Johnson regarding knowledge that is born from human/world interactions towards the maxim “you are what you do”.
The roots of the pedagogy of work are found in the workshops, in the production homes, in the prospecting sites, in the grappa distilleries, and in the other places that associate knowledge and production of works. But there are difficulties in accepting that this is the pedagogy of crafts. Such difficulties can be observed in several chapters of Ofícios.

Statements by interviewed professionals and interpretations of the authors, when examining training for the craft, sometimes privilege courses. Sometimes there are criticisms of the lack of courses in the area. Sometimes training in specialized courses in the craft is seen as insufficient to train professionals.

In Chapter 6, Grappa – the Italian Cinderella: stories of innovations and resistance of families of distillers in the lands between Vicenza and Treviso, Francesca Dell’Olio makes, on pages 187-188 of Ofícios, the following record of the words of a grappa producer, Jacopo Poli:

There are courses organized by the Mach Foundation in San Michele all’Adige (Trento) and also by the Cervetti Agrarian Institute of Conegliano (Treviso), heir to the Royal Institute of Oenology, in which the fundamentals of distillation are taught; but I must say that, in practice, you learn in the distillery. At least we never hired people who came from these courses... in fact, yes, there was a young man, but he had approached the distillery very vaguely, and we had to train him here.

The author records the testimony of another professional, who says that it is necessary to have a technological foundation for progress in the craft. And he makes such a claim based on his studies at an oenology school. It seems, in this case, that taking a course is highly valued. What one respondent sees as lacking, another sees as necessary for training in the craft of producing grappa. In the case of the wigmaker, a famous professional reveals that there is no didactic material on the craft and that courses to train the professional are rare. But he understands that it is necessary to organize courses to prepare professionals in their field.

In Ofícios, the tension between the pedagogy of the workshop and the pedagogy of the school is interestingly characterized in Chapter 8 – “The craft of the hatter: from art to production technology”. The craft had strong links with European immigrants who arrived in Brazil in the 19th century and followed a very old historical tradition. In this sense, it is clear that the training of the hatter took place in workshops:

Since the founding of the first workshops, hatmaking was anchored in the knowledge of European immigrants whose pedagogical capacity allowed small workshops and later the first factories to become the right place for the first hatters to learn (p. 267).

The link between the worker’s European origin and his pedagogical capacity should perhaps be rethought. In Ofícios, Chapter 9, “Arhuaca women weave and care for the ‘heart of the world’”, it shows that workshop learning is not typically European. It is born from the demands of work that give rise to masters capable of coordinating the learning of the craft.
The authors of the chapter, Rosa Elisa M. Barone and Maria Rita Aprile, list several courses whose aim is teaching millinery production techniques, almost all of them linked to the field of fashion. They are short courses that do not teach the craft per se, but content that can be useful for fashion professionals. Anyway, when reading the text, it is worth asking whether a full course to train hatters can replace the learning in workshops.

The appreciation of school education for professional training can be more emphatically seen in Chapter 3, “From food guilds to chef: transformations in the cook’s job”. Here, I quote a passage that is worth mentioning:

It can be seen, in this field, a transformation in the organization and dynamics of cooking from a sector associated with crafts to the sphere of legitimized cultural production, a movement that led to a change in the denomination of the most prestigious professionals in this field - from cook to chef, associated with a change in Status - from craftsmen to intellectual producers, indicating related changes in work and in the mode of production (BUENO, 2013, p. 89-90).

This comment on the transformation of the cook’s craft suggests a negative perspective of the professional who learned in the workshop, the craftsman, in comparison with the professional who learns at the academia, the intellectual producer. This view appears several times in quotes by the author from the literature on gastronomy and the cook’s profession. Maybe it would be better to say that the chapter illustrates what I am calling the tension between the pedagogy of the workshop and the pedagogy of the school. In one passage, for example, the author notes:

The cook Georges Auguste Escoffier, mentioned above, recognized as the great master of modern cuisine and also one of the main advocates of the professionalization of cooks and the work of a chef, began his learning according to the logic of the craft, through on-the-job training and the master-apprentice relationship in restaurants and hotels in France (JAMES, 2008, p. 101).

The author mentions and uses the expression that, in the workshop, the apprentice develops empirical knowledge and learns based on reproduction. The expression on-the-job training appears several times in the chapter to refer to learning by doing. I understand that the expression takes us to the opposite of education, with solid theoretical bases. Perhaps I am exaggerating in my comments, seeing in some passages of the chapter a reflection of educational thinking that characterizes professional training actions in workshops as mere repetition, as some educators tend to say.

In other passages of the text, professionals trained in workshops are characterized as “practitioners”. The expression sounds negative. It seems that the practitioner only knows how to execute, but does not have solid bases of knowledge.

Here, it is pertinent to comment on the label empirical knowledge to characterize what is learned in workshops. This label suggests that what is learned in the
workshop is based on common sense, very distant from scientific knowledge. It should be noted that current knowledge sciences characterize the knowledge predominant in workshops as procedural, a term that suggests that on-the-job knowledge has its own epistemological status that does not depend on or oppose scientific knowledge. One should not forget, as Rosella Frasca points out in Mestieri, that much of scientific knowledge was born from the work of craftsmen.

There is erroneous information in the chapter, one that the first technical course in cooking appeared in 1970 at the Hotel-School from Senac in Águas de São Pedro. In fact, what was structured at the time was a basic training course for cooks, modeled on the pedagogy of the workshop and conducted by masters of the craft. It is worth mentioning that this course continues to exist with the original characteristics, although the same school now offers a higher education course in gastronomy. I spent two weeks observing this course in recent years and found that it remains an example of development of the pedagogy of the workshop (BARATO, 2015). At Senac's school, it is possible to observe the contradictions between the pedagogy of the workshop (basic cooking course) and the pedagogy of the school (higher education course in gastronomy).

In recent years, there has been a significant growth in higher education courses in gastronomy in Brazil (cf. page 111 of Ofícios). In 1999, there were two higher education courses in gastronomy, in 2015 there were 132. The kitchen appealed to middle-class children. Explanations for this show that economic changes made room for the attractive profession of chef. And higher education courses in the area show that dreams of careers in the field of gastronomy do not happen as soon as graduates obtain their diploma. The path to becoming a chef is a long one, the result of a career that involves entering the job market in positions at the base of the occupational pyramid.

Despite the fact that the pedagogy of the school won the battle with the pedagogy of the workshop, the latter returns as knowing requires doing it. Massimo Ferrari said something that is quite clear about this: "A chef is trained by doing! The school paves the way well, but if there is no constant practice, the study will be meaningless!" (p. 140).

There are initiatives in the Chamber of Deputies and in the Senate for the professions of cook and gastronome to be regulated. Bills on the subject usually adopt the existence of recognized courses to train professionals as the main argument for regulation. If the law is approved, only those formally qualified will be able to occupy the position of cook or chef. At the time of implementation of the law, "practitioners" with three or more years of experience in the position will have their profession recognized. After that, only graduates will be able to exercise the craft.

This professional regulation will be a victory for the pedagogy of the school. Formal education will be a filter to enter the profession. Any person who learns only through the pedagogy of the workshop will never be able to ascend to leadership positions, nor even hold the title of cook. The legal market reserve will penalize the poorest,
as it has already happened with many other professions. Examples in this direction can be seen in the academic requirements that have kept the poorest away from law in the United States and from polytechnic engineering in France (WRESCH, 1996).

As I mentioned at the beginning of this section, there is a tension between the pedagogy of the workshop and the pedagogy of the school. Professional training leaves workshops and arrives at classrooms and laboratories. This phenomenon appears in the two books under analysis. And sometimes workshop education is downgraded to mere repetition or development of empirical knowledge. In this case, it prevails an epistemology that downgrades the know-how. Mechanisms such as medical residency show that school pedagogy has a deficit in professional training. Formally or informally, the pedagogy of the workshop returns to professions that are crafts.

Crafts and values

What is learned in workshops? There is a widespread understanding that one learns to perform techniques, nothing else. For this reason, it is believed that professional training in schools is a step forward, as there students will learn not only techniques, but scientific content, in addition to a framework of values. In technical and technological courses, ethics, for example, is an important subject, taught in the classroom. However, students do not incorporate ethical principles thus taught and schools have difficulties in this field. I was consulted by a school that could not keep its students interested in ethics in a training course in the area of informatics. Because of student complaints, the coordination had already changed teachers four times in the same class. And the lack of interest in ethics classes was explained by the students themselves: they thought that the subject was an empty discourse and reduced laboratory time.

In my response to the school, I said that ethics were being taught in the lab. It was there that students were learning the nature of their professional commitments. This learning appeared, for example, when the students established differences between themselves, the professionals, and the users of the programs they wrote. The demands of programmatic knowledge generated a feeling of superiority towards the user. This was learned in the laboratory, in the act of programming, not simply words that were added to doing. Doing always carries meanings and, in the professional field, part of such meanings are of an ethical nature.

The consultation by the school on teaching ethics in the technical course in programming aroused my interest in a study about values and professional training. This study ended up being sponsored by UNESCO and was published under the title *Fazer bem feito: valores em educação profissional e tecnológica* (BARATO, 2015). In my investigation, most of the observations were made in an environment where a craft was taught. I tried to verify how axiology, ethics, and aesthetics appeared together in the professional doing. My hypothesis that professional values are built through on-the-job action is reinforced in several passages of the two books herein analyzed, *Mestieri* and *Ofícios*. 
In Mestieri, the author, when commenting on the existence of itinerant craftsmen, notices that they were well accepted and supported by their peers in the places where they arrived. In Ofícios, cooperation is a principle practiced by workers and corporations. On the other hand, in the Roman world, observes Rosella Frasca, cooperative behavior was not common among intellectuals. A term we can use to talk about cooperation in the world of crafts is companionship. For example, I found in my study that there was often cooperation in welding and sewing laboratories. Students with difficulty were spontaneously helped. From the narrations of Mestieri and my observations in my study, we can say that cooperation is a trademark of workshop work. It should be noted that cooperation is not, in the workshop world, the application of an ethical principle learned verbally. It is an ethical dimension that is learned and practiced through action.

Another interesting aspect that appears in the Italian historian’s book is the observation that the workshop work is always collective. In other words, art in the workshop is not an individual product, unlike in the field of fine arts. In this sense, the apprentice sees himself as an author as does the master. In turn, on sidewalks designed by architects, the pavers do not sign the work, it is not seen as a collective work, contrary to the tradition of the crafts.

It is also worth considering the idea that the chef is an artist whose work is carried out by workers who are merely “craftsmen”. This view of the profession of the chef breaks with the idea that all kitchen workers make art. In both cases, the pavers and the cooks, I think that corporate values are contradicted because of the schooling of professional training, which sees the workshop as just a place to learn work techniques.

In Rome, the values of each profession were reinforced by the collegium, a craft corporation with very peculiar characteristics. In the premises of the collegium, many social and religious activities took place. The latter had their own brand for each craft. Through religion, the peculiar work of the corporation was celebrated. This had important ramifications in terms of identity. Rosella Frasca observes that the headquarters of the collegia, in addition to being a place for craftsmen to meet socially, were constructions that sought to show the social prestige of the craft.

This is confirmed by epigraphic records that show that the craftsmen of Rome reacted to social contempt, seeking to gain civic dimensions to express values of their own activity: the skill, dedication to work, loyalty to family tradition, recognized and respectful affection for the master, didactic effort (FRASCA, 1994, p. 108).

As I have already noted, the books under analysis show that the values in the crafts are associated with action, with doing. I collect some examples that can be found in Ofícios, which show different facets of the values that we can find in crafts.

In the already mentioned Chapter 9, “Arhuaca women weave and care for the ‘heart of the world’”, the title itself already indicates that the images that the weavers embroider on backpacks are laden with symbolic values, linked to the history, culture,
and beliefs of an ancient people. Arhuaca women do not just make backpacks, they portray a way of seeing life:

The fabric produced reflects their lives, expresses their coming and going movements, their dynamics, behaviors, lifestyles, and ways of being. In the understanding of the arhuacos, human beings have the capacity to adapt to the codes left by Aty Nawowa, the “owner” of the fabrics (p. 308).

Handcrafted products are often seen as a folkloric curiosity. This, however, is not the perspective of the workers. They see in what they do an expression of what they are and what their ancestors were. Crawford notices this in a traditional craft that he studied, that of pipe organ builders; workers feel like companions of craftsmen who practiced the same art centuries ago (CRAWFORD, 2015). Weavers see their work in the same way.

In “The living and the companions of death”, Chapter 16 of Ofícios, what is said by a gravedigger about the care that he takes with relatives and friends of the deceased are touching. This ethic of care is also perceived in the descriptions he makes of his work. Minimal details of placing the coffin in the grave are always thought of with a view to doing it well, which considers the feelings of those who follow the last farewell gestures.

In the relations between the work contractor and the prospector, in addition to the expectation that the worker masters his craft, he is expected to be trustworthy. In the ethics of prospecting, you cannot cheat on your companions. This trait of the craft is one of the aspects that most calls our attention in Chapter 10, “The craft of illegal prospectors in Minas Gerais”. In almost all crafts, work is a way of preserving the cultural roots of a people or a social group. When a craft disappears, not only does a way of working disappear with it, but beliefs and values that were reaffirmed by doing, by the articulation between the worker and his work. In Ofícios, the connection between work and tradition appears prominently in two chapters, one that addresses the manufacture of artisan cheeses - Chapter 5: “Making cheeses and maturing dreams” – and another in which women insist on continuing traditions of the cuisine of their people – Chapter 4: “Female hands dedicated to traditional Armenian cuisine in São Paulo”. In both cases, the work conserves a tradition that has a flavor of resistance, not only for what is produced, but for the maintenance of cultural traits of ancestors that continue to be remembered.

Each craft has a framework of values that the workers reveal in the testimonies collected in Ofícios and in the historical records from Mestieri. I have not shown, here, all the richness that these books present about crafts and values. I have presented only a sample of what can be found in both publications. It is worth remembering that, in a previous section, I showed another dimension of values in crafts, the aesthetics. I understand that Ofícios and Mestieri should also be read paying attention to the relationships between the cultural dimensions and the crafts. The doing of each profession gives life to cultural values that are always linked to works produced by workers.
Final remark

In *Mestieri*, Rosella Frasca shows that mass production needs have resulted in situations in which workers only performed simple operations and did not need the time-consuming training in workshops. Knowledge no longer belongs to workers, hijacked by a system that relegates crafts. Rome, in a way, anticipates this crumbled work. The end of certain crafts impoverishes the education of workers. In *Ofícios*, each chapter is a record that particular crafts survive. And they are not just a curiosity in the field of work. They are examples that there is still room for well-educated workers. The boo suggests that the study of crafts can point to interesting paths regarding the education of workers. It suggests that there is a know-how that continues to exist if learning takes place in workshops. As we saw in references regarding Dewey's pedagogy (ADAMSON, 2007), action is the starting point for the construction of meaningful knowledge.

I reach the end of this text aware that I was not able to show all the richness of *Mestieri e Ofícios*. I conclude this review by stating that both books deserve the reader's attention. They can help educators better understand what I have called, here, a well-educated worker.

Referências


