

**“And the beer? Don't you want to check the expiration date?”: elderly women literacy students at YAE appropriating hegemonic mathematical practices**

**“¿Y la cerveza? ¿No quieres comprobar la fecha de caducidad?”: Mujeres mayores en clases de alfabetización en la EJA apropiándose de prácticas matemáticas hegemónicas**

**“Et la bière? Vous ne voulez pas vérifier la date d'expiry?”: Ses femmes âgées alphabétisées à l'EJA s'approprient des pratiques mathématiques hégémoniques**

**“Da cerveja, cês não quer tirar a validade, não?”: Mulheres idosas alfabetizadas na EJA apropriando-se de práticas matemáticas hegemônicas**

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### **Abstract**

The aim of this paper is to focus on elderly women learning literacy in Youth and Adult Education (YAE) appropriating hegemonic mathematical practices, which we call *numeracy practices* to highlight their discursive nature. We analyze the participation of these women in the discursive interactions that took place during a school activity proposed by the teacher and developed inside a supermarket, which involved reading the expiry dates of industrialized products. These interactions, due to their historical dimension and because they involve mathematical practices, are identified as *numeracy events*. The activity was recorded in audio, video and notes in a field diary and the interactions were carefully transcribed from these records. Our reflection assumes the theoretical contributions of studies on aging, literacy and numeracy, appropriation of social practices and constitution of the subject, proceeding with a social analysis of discourse. In this analysis, we discuss perspectives on the female aging processes and the production of meanings in social actions that literacy students carry out when

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they position themselves discursively, producing an understanding of dating system functioning and the semantic and pragmatic meaning of recording expiration dates on the labels of products for sale. Thus, we consider this appropriation as an instance of expression of these women – and of their continued constitution – as subjects of learning and knowledge, of experiences and culture, of memories and forgetfulness, of rights and expectations.

**Keywords:** Elderly women, Schooling of elderly people, Appropriation of school numeracy practices, Mathematical practices as discursive practices, Reading and writing of expiration dates for products.

### Resumen

El objetivo de este artículo se centra en las ancianas en el proceso de alfabetización en la Educación de Personas Jóvenes y Adultas (EJA), apropiándose de prácticas matemáticas hegemónicas, que denominamos *prácticas de numeramiento* para resaltar su carácter discursivo. Analizamos la participación de estas mujeres en las interacciones discursivas que ocurrieron durante una actividad escolar propuesta por la docente y desarrollada en el interior de un supermercado, que consistía en leer las fechas de caducidad de productos industrializados. Estas interacciones, por su dimensión histórica y por involucrar prácticas matemáticas, se identifican como *eventos de numeramiento*. La actividad se registró en audio, video y notas en un diario de campo y las interacciones se transcribieron cuidadosamente a partir de estos registros. Nuestra reflexión asume los aportes teóricos de los estudios sobre envejecimiento, lectoescritura y aritmética, apropiación de prácticas sociales y constitución del sujeto, procediendo con un análisis social del discurso. En este análisis, destacamos perspectivas sobre los procesos de envejecimiento femenino y sobre la producción de significados en las acciones sociales que realizan las alfabetizadas cuando se posicionan discursivamente, produciendo una comprensión del funcionamiento del sistema de datación y el significado semántico y pragmático del registro de fechas de caducidad en el embalaje de los productos para la venta. Así, consideramos esta apropiación como una instancia de expresión de estas mujeres – y de su constitución continua – como sujetos de aprendizajes y conocimiento, de experiencia y cultura, de memoria y olvido, de derecho y expectativa.

**Palabras clave:** Ancianas, Escolarización de personas ancianas, Apropiación de prácticas numeramiento escolares, Prácticas matemáticas como Prácticas discursivas, Lectura y escritura de fechas de caducidad.

## Résumé

L'objectif de cet article est de mettre l'accent sur les femmes âgées apprenant à lire dans l'Éducation des jeunes adultes et des personnes âgées (EJA), s'appropriant des pratiques mathématiques hégémoniques, que nous appelons *pratiques de numératie* pour souligner leur nature discursive. Nous avons analysé la participation de ces femmes aux interactions discursives survenues lors d'une activité scolaire proposée par l'enseignante et développée à l'intérieur d'un supermarché, qui consistait à lire les dates de péremption des produits industrialisés. Ces interactions, de par leur dimension historique et parce qu'elles impliquent des pratiques mathématiques, sont identifiées comme des *événements de numératie*. L'activité a été enregistrée en audio, vidéo et notes dans un journal de terrain et les interactions soigneusement transcrites à partir de ces enregistrements. Notre réflexion assume les apports théoriques des études sur le vieillissement, la littératie et la numératie, l'appropriation des pratiques sociales et la constitution du sujet, en procédant à une analyse sociale du discours. Dans cette analyse, nous soulignons les perspectives sur les processus de vieillissement féminin et sur la production de sens dans les actions sociales que les réalisent lorsqu'elles se positionnent discursivement, produisant une compréhension du fonctionnement du système de datation et du sens sémantique et pragmatique de dossiers de date d'expiration sur les emballages des produits destinés à la vente. Ainsi, nous considérons cette appropriation comme une instance de expression de ces femmes – et de leur constitution continue – en femmes de apprentissages et de connaissance, d'expériences et de culture, de mémoires et d'oublis, de droits et d'attentes.

**Mots-clés:** Femmes âgées, Scolarisation des personnes âgées, Appropriation des pratiques scolaires en numératie, Pratiques mathématiques comme pratiques discursives, Lecture et écriture des dates d'expiration.

## Resumo

O objetivo deste artigo é focalizar mulheres idosas alfabetizadas na Educação de Pessoas Jovens Adultas e Idosas (EJA), apropriando-se de práticas matemáticas hegemônicas, a que chamamos *práticas de numeramento* para destacar sua natureza discursiva. Analisamos a participação dessas mulheres nas interações discursivas durante uma atividade escolar proposta pela professora e desenvolvida dentro de um supermercado, que incluía fazer a leitura de prazos de validade de produtos industrializados. Essas interações, por sua dimensão histórica e por envolverem práticas matemáticas, são identificadas como *eventos de numeramento*. A atividade foi registrada em áudio, vídeo e apontamentos em diário de campo, e as interações foram

cuidadosamente transcritas a partir desses registros. Nossa reflexão assume as contribuições teóricas dos estudos sobre envelhecimento, letramento e numeramento, apropriação de práticas sociais e constituição do sujeito e implica uma análise social do discurso. Nesta análise, tensionamos perspectivas sobre os processos de envelhecimento feminino e a produção de significados nas ações sociais que as alfabetizadas protagonizam quando se posicionam discursivamente e elaboram uma compreensão de como funciona o sistema de datação e dos significados semânticos e pragmáticos do registro de prazos de validade nas embalagens de produtos postos à venda. Assim, consideramos essa apropriação como instância de expressão dessas mulheres – e de sua continuada constituição – como sujeitos de aprendizagens e conhecimentos; de vivências e culturas; de memórias e esquecimentos; de direitos e expectativas.

**Palavras-chave:** Mulheres idosas, Escolarização de pessoas idosas, Apropriação de práticas de numeramento escolares, Práticas matemáticas como práticas discursivas, Leitura e escrita de prazos de validade.

***“And the beer? Don't you want to check the expiry date?”: elderly women literacy students at YAE appropriating hegemonic mathematical practices<sup>3</sup>***

The purpose of this article is to focus on an audience in basic education to which research in mathematics education has only recently begun to turn its investigative attention: elderly people<sup>4</sup> who were excluded from the educational system as children or adolescents and who are willing to experience school in maturity<sup>5</sup>. Despite the specificities of their conditions, intentions, and provisions for education, highlighted in article 21 of Lei 10.741/03 (Brasil, 2003), known as the *Estatuto do Idoso* [Elderly People's Statute], there is no public educational policy aimed especially at serving this audience in the school system (Oliveira, 2013). Elderly people who wish to start or complete their basic education are then included in initiatives offering elementary or secondary education in the youth and adult education (YAE) modality, like anyone over 15 or 18 years old who has not completed each of these stages, as established in Parecer CNE/CEB 11 (Ministério da Educação [MEC], 2000).

Those norms require that this type of teaching should provide opportunities for teenagers, young people, adults, and elderly people to update their knowledge, show their skills, exchange experiences, and access new work and cultural opportunities. In this sense, YAE would represent “a promise to implement a path of development for all people of all ages” (p.10). They also highlight the inclusion of elderly people in the right to education, reiterating that “YAE is a promise of life qualification for everyone, including elderly people, who have a lot to teach the new generations” (Brasil, 2000, p. 10).

However, the elderly population has specific characteristics and different educational needs not explicitly addressed in official documents and are much less considered in the proposition and development of curriculum proposals. Nevertheless, these people are in the classrooms, contributing to discussions about the role of schooling and other elements that go

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<sup>3</sup> In this text, every time we use the word “practice” in the composition of expressions such as “social practice,” “sociocultural practice,” “discursive practice,” “mathematical practice,” “school practice,” and “numeracy practice,” we refer to human actions, considered, however, as endowed and producing cultural meanings, referenced in ideological arguments and parameterized by power relations, and therefore supported “by socially constructed epistemological principles” (Marinho, 2010, p.78).

<sup>4</sup> According to official documents that refer to rights and duties linked to the issue of aging in Brazil, people with 60 or over are considered old. However, our study understands aging as a relational process involving historical, social, cultural, and economic dimensions and physical, functional, and mental aspects. Throughout the fieldwork that supports it, we identified literacy students' discursive stances that placed them in a non-static relationship (sometimes of belonging, sometimes of denial) with this life cycle, its conditions and restrictions, and the procedural nature of aging.

<sup>5</sup> In the search for research that addressed the relationship between aging and specific school content, in particular, school mathematics, undertaken in the CAPES Bank of Theses and Dissertations, with no time limit, we only found works produced from 2011 onwards: Caroline Buaes (2011), Flavia Grossi (2014;2021), Luciano Lima (2015; 2019), Gizele Martins (2016), Rômulo Manguera (2017), Matheus Scagion (2018).

beyond the perspective of insertion, reinsertion, or repositioning in the job market and explaining demands for the appropriation of socially valued practices in societies marked by cultures of writing (Galvão, sd), which is why they are called *graphocentric societies* (Soares, 2001). Indeed, in these societies, in the different ways of knowing and dealing with the world, people, and situations, writing is appreciated as an instrument that enables and/or legitimizes social practices. This occurs in different contexts, whether in school or not, and even in those that do not make direct use of the technology of writing.

In the case of the elderly population, however, their demands for the appropriation of literate practices that today reach classrooms reflect the direct association between illiteracy rates and age groups, which denounce a legacy of school exclusion of large contingents of the population that persisted in Brazil in the second half of the 20th century. The bulletin published by the Continuous National Household Sample Survey (In Portuguese: Pesquisa Nacional por Amostra de Domicílios Contínua – PNAD) (Instituto Brasileiro de Geografia e Estatística [IBGE], 2019) points out that the illiteracy rate among people aged 60 or over –18.0%, equivalent to almost six million illiterates– is considerably higher than in other age groups, decreasing as age cuts include younger people<sup>6</sup>.

Elderly women's situation reflects particularly the intense and persistent gender inequalities, which cut across various social markers (ethnic, racial, class, generational, religious, professional, among others), which define the possibilities of relationships between people and between them and knowledge and institutions, in different instances of social life – including the school space.

And, as they have lived in a context of deprivation, restrictions, and exclusions, agingnon-literate women see education as a means of overcoming a social condition that is not usually favorable to them. Many of them, having been deprived of school education as children or teenagers, seek school in adulthood or even in old age, configuring the YAE in Education of Young, Adult, and Elderly People, which is an important space for the search for social and cultural inclusion, alongside its functions of professional education (Arroyo, 2017) and privileged literacy agency (Soares, 2001).

However, social situations involving reading and writing increasingly demand more knowledge that involves practices of quantification, measurement, ordination, and classification (D'Ambrósio, 1997). Those practices make up the ways of using written language

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<sup>6</sup> PNAD-2019 (IBGE, 2019) indicates the following illiteracy rates when establishing other age cuts: 6.6% among those aged 15 and over, 7.9% among the public aged 25 and over, and 11.1% among those aged 40 and over.

and are constituted by them because mathematical representations are present in written texts and because the very written culture that constitutes them “is also permeated by principles based on the same rationality that forges or parameterizes the so-called numeracy practices and is reinforced by them” (Fonseca, 2009, p. 55).

The information in written texts circulating in the most diverse instances of social life reflects how those who write them – and those who presumably should read them – relate to the world and society. We can see how the representations, references, and arguments that structure or simply appear in these texts “are often associated with ideas, symbols, and criteria that relate to what we learn to call ‘mathematics’ in the school context” (Fonseca, 2017, p. 110). Interested in discussing the relationship of elderly women students at YAE with school practices and taking the school as a literacy agency in a graphocentric society, we think we should reflect on the relationship of these women with such mathematical ideas, symbols, and criteria that permeate the texts that circulate in this society and invest them with values and “Cartesian ways of thinking about the world” (p. 110). Such values and ways of thinking and saying the world (Freire, 1982) are established as structures of the social practices in which those texts are inserted – and, thus, of the social practices in which older students at YAE participate.

Considering the school as a privileged literacy agency this paper identifies mathematical practices –taken as discursive and, as such, sociocultural practices– as a decisive component in the configuration of relationships in *graphocentric* societies –which refer to socially valued behaviors in writing cultures– and *quanticrats* –which grant quantification the decision-making power in the various actions of social life. Thus, by focusing on elderly women who are the protagonists of ways of appropriating these practices in an institutional literacy project, this article seeks to confront the challenges of recognising and guaranteeing the right of elderly people to school education. Therefore, here, mathematical practices will be called numeracy practices: to highlight their discursive nature and insertion in the set of literacy practices. In this sense, focusing on a group of elderly women, literacy students at YAE, appropriating school numeracy practices –discursive practices that involve ideas, criteria, representations, and procedures that we associate with School Mathematics–, we take such appropriation as a possibility to achieve and validate rights made possible by the acquisition of a linguistic system – in this case, the dating system, in reading expiry dates printed on labels of industrialized products.

This willingness to investigate how elderly women appropriate school practices – especially school mathematical practices– is part of an effort to focus on them as women of

learning and knowledge, experiences and culture, memory and forgetfulness, rights, and expectations.

### **The theoretical-methodological paths**

The empirical research material that supports the reflection we propose here was produced through a classroom ethnography (Bloome, 2012) carried out in a literacy class in the YAE modality at ABC Institute (Amigos do Bem Coletivo), in the small town of Barroso, countryside of Minas Gerais. In addition to developing social actions that serve people in socially vulnerable situations, the Institute offers several elementary education classes for young, adult, and elderly people. We followed a literacy class of 12 women aged between 53 and 91. The main investigation technique of this work was class observation during the 2018 academic year, although we also used other techniques and took several actions while producing empirical material: semi-structured interviews, notes in a field diary, consulting school documents, collecting and analyzing teaching materials, and students' written production.

For this article, we selected one discursive interaction among the many in which we identified those elderly women, who attended literacy at YAE, positioning themselves discursively in relation to ideas, knowledge, criteria, procedures, or representations somehow associated with hegemonic mathematics. We call these events *numeracy events*. The events are not, however, fortuitous or episodic: “involving ways of using language, they are inserted in a historical context; and they carry and produce history, as they are carried out by historical subjects, whose action also makes history continue its course” (Fonseca & Grossi, 2023, p. 487).

Taking the discourses in general –and, in particular, the discourses that mobilize and produce mathematics– as a social practice, we considered that, in these events, the participants appropriate discursive numeracy practices and, therefore, focusing on them helps us understand the learning dynamics that are forged in them and know the people who carry them out in this educational context.

However, it is essential to clarify that when understanding the dynamics of mathematical learning as appropriation of numeracy practices, we do not consider them as individual cognitive exercises. We understand that its processes are configured as sociocultural action, and, therefore, the analysis of how people appropriate numeracy practices cannot:

be limited to the approach of apprehension of the syntactic and semantic dimensions of mathematical knowledge, but must consider that the relationships of subjects and groups with this knowledge are produced in discursive mechanisms, governed by the pragmatic



intentions of their production, distribution, uses, and repercussions (Fonseca & Grossi, 2023, p. 489).

The conception of social practices appropriation that we adopted here is based on the studies that Smolka (2000) makes of Vigotski's work, mainly when she focuses on understanding the meanings of human actions. This conception of appropriation allows us to contemplate the multiple meanings of the subjects' actions based on their positions in the social practices in which they participate. Even though each person has specific and unique tools to reconstruct these social practices internally, it is in the sociocultural experiences of the subjects and in the discursive contexts of the interactions in which they participate and in which they appropriate social practices that the positions assumed by individuals are constituted. And these positions also constitute them, in an always dialectical relationship (Smolka, 2000).

The relational dimension of discursive practices appropriation allows us to observe, in interlocutory games, the relationship between appropriation and meaning. Appropriating a practice presupposes the production of meanings that enable you to incorporate that practice into your world system – made up of individual experiences forged in relationships between people and groups marked by cultures and power relations. Thus, adopting the concept of appropriation responds to a willingness to understand those elderly literacy students in their singularities and as social subjects. This requires understanding the subject we find in Paulo Freire's work (1974, 1979, 1982, 1992, 2000). Even though the expression “social subject” is not identified in this work, we understand that this construct is nourished by Freire's elaborations on the dialogic subject (Freire, 1979, 1992), the subject of culture (Freire, 1974, 2000), the subject of the process (1979), the subject of knowledge (Freire, 1974, 1979, 1982) and, finally, the historical subject (Freire, 1974, 1992, 2000), which we see taking shape when those elderly women studying literacy at YAE appropriate numeracy practices.

As aging is also a social process, it is marked by the discursive practices of the social context and the personal experiences of each individual – practices and experiences permeated by the hegemonic values of specific social groups and society. Quantification, ordering and classification, for example, are widespread practices, valued and rooted in societies forged in modern rationality. Thus, in our society, discursive practices that involve cardinality, order, measurements, a certain way of organising and appreciating space and forms, standardisation and classification –all of which we call numeracy practices– shape many of its social processes and, in a way, shape these processes.

Therefore, identifying events in which old women, literacy students at YAE, appropriate sociocultural practices that involve ideas, procedures, principles, rules, concepts, skills, or

content that we associate with school mathematics helps us understand the processes through which they deal with aging – especially in their relationships with learning and knowledge, experiences and cultures, memories and forgetfulness, and rights and expectations.

In fact, these women's engagement in a literacy project suggests that, in some way, they inquire about knowledge and make themselves available to occupy the position of apprentices. The learning objects in that school context, however, go beyond the appropriation of the alphabetical system, including, in a special way, mathematical knowledge intentionally contemplated in school activities and those that are called upon in interactions because they parameterize different practices in which those elderly women participate, also forming the narratives that weave about such practices. It occurred to us, therefore, to focus on elderly women leading processes of numeracy practices appropriation due to the burden of sociocultural relations that are engendered in these practices and that produce and tension discourses about: women and mathematics; women, poverty, and old age; old age and learning; cognition, memory, and aging; popular culture and school culture; and the right to education and life projects. This production and tension of discourses establish possibilities and prohibitions for the experience of schooling in old age and the experience of old age itself for poor and poorly educated women.

#### ***“And the beer? Don't you want to check the expiry date?”: Social discourse analysis***

In the analysis of the interactions in which we identified the appropriation of mathematical practices –and which thus compose numeracy events–, we adopted the social discourse analysis proposed by Norman Fairclough (2001), seeking to understand, in the discursive dynamics of a YAE mathematics class, how those elderly women carry out practices of meaning the world and not just representing the world, “constituting and constructing the world in meaning” (p. 93).

The event we incorporated here to our discussion is part of a didactic sequence the class teacher planned to approach everyday issues with elderly women in the class. After working on reading the printed label of an industrialized banana cake and creating a classroom laboratory situation in which the students analyzed different types of product labels that were in the Institute's warehouse, the teacher proposed the possibility of observing and reading the expiry dates of certain products in a supermarket.

With the teacher's help and guidance, the students first created a list of products whose expiry date they would like to see at the supermarket<sup>7</sup>. The products chosen were tomato paste, sachets, rice, cornmeal, beans, sugar, coffee, pasta, and milk. However, as women walked through the supermarket aisles and looked at its shelves, other products aroused comments and curiosity. Among these products is beer, highlighted by Dona Cecília<sup>8</sup>, a 91-year-old woman.

In the long discursive sequence that occurred during the activity proposed by the teacher –consulting the expiry dates of goods available on the shelves of a supermarket–, we observed the students in the literacy class at YAE experiencing processes of meaning and forging ways of appropriating practices of school numeracy, numeracy practices in social life, consumer practices, and practices related to the aging process.

During the visit to the supermarket, after passing through the *fruit and vegetable* section, to the surprise of the teacher and the other women who were walking towards the personal hygiene products sector, Dona Cecília interrupted the product list and suggested that they “checked” the expiry date of the beer.

Tabela 1.

“*And the beer? Don’t you want to check their expiry date?*” (Grossi, 2023, p. 232)

Class on August 20, 2018 Monday – 8 a.m. to 10 a.m. – 54th day of class observation 3rd video - Recording time: 00:18 to 16:37 (Duration: 16min19s)		
Class time (a.m.)	Participant	Speech
		[The students walk from the produce sector to the personal hygiene products sector.]
10:00	Dona Cecilia (91 years old)	<i>And the beer? Don’t you want to check their expiry date?</i>
10:03	Flávia (researcher)	<i>Pardon?</i>
10:04	Dona Cecilia (91 years old)	<i>Of the beer?</i> [Laughs along with the researcher.]
10:07	Flávia (researcher)	<i>Here, Vanessa, look!</i>
10:08	Olga (73 years old)	<i>Beer?</i>
10:09	Dona Cecilia (91 years old)	<i>“What about the beer? Don't you want to check on their expiry date?”</i>
10:12	Vanessa (teacher)	<i>Wow, we're going to the beer. Where's the beer?</i>
10:13 am	Dona Cecilia (91 years old)	<i>There's beer there.</i> [Indicates with her hands the aisle where the alcoholic drinks are kept.]
10:15	Vanessa (teacher)	<i>Alright, let's go. You want to look at the beer, let's look at the beer then.</i>
10:24	Dona Cecilia (91 years old)	[She caresses a bale of canned beer with her hands.] <i>It's difficult with the beer because it's a big package.</i>

<sup>7</sup> The list of products prepared by YAE literacy students was analyzed in Grossi and Fonseca (2023).

<sup>8</sup> The research participants authorized using their real names through their signatures on the Free and Informed Consent Form (TCLE).

10:27	Flávia (researcher)	<i>There is a can there, look...</i> [Shows the loose beer cans outside the bale with one hand.]
10:32	Vanessa (teacher)	<i>Is there? There it is...</i> [Points to the same cans that the researcher indicated.] <i>Write it down, Séia, beer.</i> [Séia is student Edilsea's nickname.]
10:42	Dona Cecilia (91 years old)	<i>I'll take one here for us to see.</i> [She takes a can of beer off the shelf and quickly looks for the expiry date on the bottom of the can. Olga approaches Dona Cecília to try to see the register. Dona Cecília squints her eyes to try to see the product's expiry date.]
10:57	Vanessa (teacher)	<i>Dona Cecília is going to have a beer.</i>
10:59	Edilsea (53 years old)	<i>Wow, I didn't know she liked it.</i>
11:01	Dona Zélia (61 years old)	<i>Hey, Dona Cecília, you are going to have a beer, right?</i>
11:02	Dona Cecilia (91 years old)	[Looks at the bottom of the beer can.] <i>Not here.</i> [Refers to where they are looking for the expiry date.] <i>I can't find it.</i>
11:03	Vanessa (teacher)	<i>Look at the bottom. Sometimes it's at the bottom, usually at the bottom.</i>
11:06	Dona Cecilia (91 years old)	[Looks again at the bottom of the beer can.] <i>No, it's not.</i>
11:07	Vanessa (teacher)	<i>Yes, it is, look there.</i>
11:08	Dona Cecilia (91 years old)	<i>Oh, okay.</i> [She brings the bottom of the beer can closer to her eyes.]
11:09	Vanessa (teacher)	<i>Very small.</i> [Takes the can of beer from Dona Cecília's hands to read the expiry date.]
11:09	Dona Cecilia (91 years old)	<i>But it's so small.</i>
11:11	Vanessa (teacher)	<i>Let's see. This one doesn't even have 'expiry date' written on it. She's just the number, look....</i> [Shows Dona Cecília the date printed on the can.] <i>Write it down, Séia, sixteen, twelve, two thousand eighteen.</i>
11:24	Dona Cecilia (91 years old)	<i>Eighteen, right?</i>
11:24	Vanessa (teacher)	<i>Yes. You must drink it quickly because it expires now.</i> [Edilsea laughs out loud.]
11:26	Dona Cecilia (91 years old)	<i>It expires now. We must drink it all, right?</i> [Laughs along with the teacher.]

We want to show, firstly, the transgression of the initial activity script agreed upon in the classroom when the list of products whose expiry date the students would search for in the supermarket was drawn up. This itinerary was not completely ignored, but the set of products covered was added to those in which they saw their interest arise when they walked through the supermarket aisles – an interest that is directly related to their consumption habits, with their curiosities regarding the products (“*And the beer, don't you want to check expiry date?*”; “*We'll see... nail polish.*”) and with the way in which the definition (and registration) of expiry date operates in them (“*But it's so small*”; “*It expires now. We must drink it all, right?*”).

In a way, the fact that they were older than the teacher and were in another territory, out of the classroom, also authorized them to commit this transgression, which was, more than consented to, encouraged by the teacher, adhering to the students' dispositions and assuming in

the interaction the role of a character contaminated by students' curiosity and enthusiasm (*"Wow, we're going to the beer. Where's the beer?"*<sup>9</sup>).

Furthermore, in carrying out the activity proposed, we see that, at the same time that the students of literacy at YAE mobilized coding systems, symbols, and meanings that structure, parameterize, and are used in the representation of expiry dates, they also contemplated, expressed, sympathized with, welcomed, enjoyed, postponed, and stressed the conditions of the aging process itself – in particular, the conditions inherent to female aging. In this sense, based on the tensions carried out by literacy students, who positioned themselves as women of learning and of knowledge, culture, experiences, memories and forgetfulness, rights, and expectations, we consider crossings and displacements in the aging process, experienced by these women at this stage of life, in a situation of school literacy.

When reading and evaluating the expiry dates of products, students displayed knowledge acquired throughout their lives, expressed desires and enjoyed the possibilities offered to them and authorized by aging. However, this knowledge, desires, and possibilities also highlight restrictions of aging bodies, such as visual limitations and diabetes-related problems, for example. Thus, knowledge and restrictions typical of lived life appeared when, inside the supermarket, students took products in their hands and made some inference about them or from them – to detail recipes, advertise, entertain themselves, remember situations, reveal preferences and pleasures, but also signaling prohibitions or difficulties.

The expression of their liking the products and the assessment of the possibility of purchasing or consuming them, contesting, or reiterating stereotypical representations of female aging, disseminated by elitist, sexist, racist, and ageist perspectives, tension and diversify the ways of representing, rethinking, and experience this stage of life. The students' intervention in the activity proposed in the school context, but developed in another territory, allows them to find new experiences or new meanings for their experiences in the present time. From this perspective, it occurred to us to consider the expression of their interest and concern, as well as the access and permission they conquered to consume –and reveal that they consume– alcoholic beverages: *"And the beer? Don't you want to check expiry date?"*; *Hey, Dona Cecília, you are going to have a beer, right?"*; *Wow, I didn't know she liked it."*

Thus, these manifestations that convey the possibility of new experiences and new forms of freedom are also ways of overcoming deprivations and prohibitions experienced by these

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<sup>9</sup> On several occasions, we identified utterances in which teacher Vanessa disregards verbal agreement as a rhetorical strategy, which makes her play a role that would win the intimacy of the students through a stylistic identification with her speech.

women at different stages of their lives, contradicting, as Debert (2004) observes, the association between old age and loss: “The idea of a process of loss has been replaced by the reflection that the more advanced stages are favorable moments for new achievements, guided by the search for pleasure and personal satisfaction” (p. 14). Furthermore, they overlap with the view that elderly women or those in the process of aging “have the experience of someone who does not arouse interest, does not receive invitations, that they are 'different.' It is the feeling of someone who feels on the margins, precisely because, materially or symbolically, they are placed on the margins” (Britto da Motta, 2018, p. 89).

In fact, driven by the search for pleasure and personal satisfaction, Dona Cecília (91 years old) is interested –and invites her colleagues to this interest– in identifying the beer's expiry date (“*And the beer? Don't you want to check expiry date?*”), which, in a way, amazed the others (“*Wow, I didn't know she liked it.*”) and raised curiosity (“*Beer?*”) and jokes among the students (“*Hey, Dona Cecília, you're going to have a beer, right?*”). Dona Cecília's statement impacts her interlocutors, inducing reactions, including the researcher, who is surprised by the interest of that old woman (“*Hey? ... Here, Vanessa, look!*”) and the teacher, who is enthusiastic about this interest (“*Come on then,... Do you want to see the beer? Let's look at the beer then.*”).

However, while Dona Cecília, a 91-year-old woman, is enthusiastic about taking part in a numeracy practice of reading the beer's expiry date (“*There's beer there... I'll take one here for us to see.*”) (Figure 1) –because she proposes it, she is gaining the necessary skills to carry it out, and because she gives it a special meaning–, she is faced with (and faces) the limitations of the aging body, which prevent her from seeing the information on the package: “*Not here... I can't find it.*”; “*No [the validity], it isn't here.*”; “*But it's so small.*”



Figure 1.

*Dona Cecília removes the beer can from the shelf (Grossi, 2023, p. 238)*

To find the information on the product label, Dona Cecília brings the bottom of the can closer to her eyes –as she had just learned while searching for the location of the tomato paste expiry date (Figures 2 and 3)– and counts on Olga's (73 years old) help, who, despite being evangelical<sup>10</sup>, approached her colleague and was willing to help her find and read the expiry date on the beer can (Figures 4).



Figure 2.

*Dona Cecília reads the expiry date on the tomato paste packaging (Grossi, 2023, p. 238)*



Figure 3.

*Dona Cecília reads the expiry date on the beer packaging (Grossi, 2023, p. 239)*

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<sup>10</sup> In evangelical communities, the consumption of alcoholic beverages is generally discouraged or forbidden.



Figure 4.

*Dona Cecília and Olga get closer to the beer can (Grossi, 2023, p. 239)*

The first beers that Dona Cecília found on the shelf were packaged in bales of 12 “cans” (473 mL can), gathered in plastic packaging. Dona Cecília even considered handling a whole load of beers to read the expiry date: *“It’s difficult with beer, because it’s a big package.”*. However, finding the individual cans, she took in her hands just one can of the product and allowed us to witness her appropriation of the practice of reading the expiry date not only in its syntactic dimension –by looking for the stamp of the date on a flat exterior face of the can of beer, displaying skills associated with handling packaging to locate information in the label text, and associating the numbers read by the teacher (*“Sixteen, write it down, Séia, twelve, two thousand eighteen.”*) to its function in the text–, but also in its semantic and pragmatic dimension, operating with the meaning of those numbers (*“Eighteen, right?”*) and considering, in a mocking tone, the consequence of this information: *“It is expiring now. We must drink it all, right?”*

Dona Cecília's joke reiterates that discourse, as Fairclough (2001) warns us, “is a practice not only of representing the world but of the signification of the world, constituting and constructing the world in meaning” (p. 91). In his argument, the author distinguishes three aspects of the constructive effects of speech:

Discourse contributes first and foremost to the construction of what are variously referred to as social identities and subject positions for social subjects and types of self. [...] Second, the discourse contributes to building social relationships between people. Third, discourse contributes to the construction of systems of knowledge and belief (Fairclough, 2001, p. 91).

Dona Cecília will not buy (at least on that day) that beer, nor will her colleagues drink it – not even a can, much less all of it! But the joking observation she made demarcates the



transgression of the social identity of a “prudish old lady,” thus constructing, for herself and for elderly women, a new social identity with the right to leisure, consumption, and pleasure. The colleagues' engagement in this discourse, expressed in the comments that help to constitute the scene, established, in other words, the social relationship that connected students and teachers, subjects and researchers, fellow literacy students, or aging consumers. Furthermore, all the interaction caused by Dona Cecília's interest in checking the beer's expiry date contributed to the construction (and deconstruction) of systems of knowledge and belief about beer consumption, its conservation, consumer attitudes, on the behavior of old, black, poor and literate women in YAE.

Despite the restrictions that the aging process imposes on some physical capabilities, it seems that, for these women who were willing to become literate at this stage of life, that process also allows new forms of freedom that are combined with new values, new behaviors, new desires, new perceptions of the world and oneself, new reflections on life, new positions, new achievements, new dreams, and new life projects. In this sense, aging becomes a phase of life in which women feel authorized to transgress what is socially said and expected of the condition of elderly women. In effect, Dona Cecília, despite having visual limitations in reading expiry dates and discursively recognizing her condition as an aging woman, marked in her physical appearance by the color of her hair (“*We are both grey-haired, aren't we?*”), feels authorized both to suggest the consumption of a can of beer and to, in public, caress the hair of a man who is not related to her –he is the shop owner– , being observed by several people. She commented, purposely with double meaning:

Table 2.

*“We are both grey-haired, aren't we?” (Grossi, 2023)*

Class on August 20, 2018 Monday – 8 a.m. to 10 a.m. – 54th day of class observation 3rd video - Recording time: 00:18 to 16:37 (Duration: 16min19s)		
Class time (a.m.)	Participant	Speech
07:32	Dona Cecilia (91 years old)	[She stops in the aisle and greets the supermarket owner] <i>“We are both grey-haired, aren't we?”</i> [Runs her hand through the supermarket owner's hair.] <i>Finally, I touched a man's head today.</i> [Dona Cecília, Dona Terezinha, Olga, and the supermarket owner laugh]
07:51	Flávia (researcher)	<i>Really?</i>
07:53	Dona Cecilia (91 years old)	[Looks in the direction of the researcher and comments:] <i>I ran my hand over his head.</i> [The researcher laughs out loud.] <i>I ran my hand over his head, poor thing. He's nice.</i>

In a way, when making fun of drinking beer or caressing a person of the opposite sex, Dona Cecília, despite suffering the hardships of an aging body and the consequent physical, psychological, social, and cultural implications, seems to exercise what Debert (1994, 2004) and Britto da Motta (1998, 2002) call “new forms of freedom.” Reaching 91 seems to exempt her from meeting socially imposed standards and allows her to experience her time. Subverting the logic of what it means to be “old”, Dona Cecília and many elderly women embrace the present time with the opportunity it provides them: emancipation from certain responsibilities and various commitments, freedom from the precepts established on women, the right to fun and empowerment, even though they are not immune to the dictates of the aging body (Gerolamo, 2019).

Indeed, these dictates of the aging body (such as the limitation of visual capabilities) can prohibit or exclude these women in literacy courses from numeracy practices (school or other instances of social life), such as those that engender the recording and reading of the system of codes for expressing expiry dates.

During the activity at the supermarket, Dona Cecília was not the only one to show difficulties resulting from low vision. We observed several colleagues protesting against the visual limitations that prevented them from seeing the registers or led them to get confused due to the size or shape of the letters and numbers and little highlighting of information<sup>11</sup>. In response to the students' visual difficulties, the teacher, the researcher, and some colleagues also mobilized to help them when they noticed them bringing the packaging close to their eyes or moving them away to see them better: *“Look at the bottom. Sometimes it's at the bottom, usually at the bottom.”*; *“Very small.”*; *“We'll see... This one doesn't even have 'expiry date' written on it. There's just the number, look...”*.

Therefore, we believe that observing this school activity developed by teacher Vanessa and her students inside a supermarket allows us to understand not only how numeracy practices of reading and registering expiry dates are appropriate *“in practice”*, complying with the teacher's pedagogical intention; but, above all, it helps us to understand the conditions of female aging, constituting and being constituted in these processes of appropriation.

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<sup>11</sup> The National Health Surveillance Agency (ANVISA, 2002) is also responsible for standards and regulations relating to packaging labeling. The agency establishes that label text cannot “use words, signs, denominations, symbols, emblems, illustrations, or other graphic representations that may make the information false, incorrect, insufficient, or that may mislead the consumer, error, confusion, or deception, in relation to the true nature, composition, origin, type, quality, quantity, validity, yield or form of use of the food” (3.1a). According to ANVISA, the expiry date must be stated clearly and precisely and placed in a legible place on the packaging.

## Final considerations

The choice of the school context to focus on elderly women, leading ways of appropriating school numeracy practices, reiterates this public's human and constitutional right to school education. However, the meanings they attribute to the school experience at this stage of life still need to be discussed, considering various conditions and perspectives that involve possibilities and restrictions to access and enjoy the right to education by all people.

In particular, the school approach given to reading expiry dates would provide students, even later in life, with the possibility of entering commercial establishments, accompanied or alone, removing a product from the shelf, reading the information on the packaging, and, eventually, consider them in their decision to purchase or consume the product.

Although the teacher's pedagogical action focuses on promoting mastery of the syntactic and semantic aspects of the system for representing expiry dates, it is the pragmatic issues involved in the practices of writing and reading the information printed on the packaging that provoke and encourage these women to seek an understanding of the functioning of the system and the meaning of the register produced with the symbols that compose it. In effect, the deprivation of this understanding –dictated by their socioeconomic condition, which is also reflected in exclusion from the school system– prohibited them, over many years, from exercising the right to access and consider *the information "expiry date" or "due date"* in their decision-making as consumers. Hence, being at school and appropriating the way it mobilizes, structures, teaches, and deals with the *textual genre label*, in a way, also enables them to understand and question the conditions of production of this *text* in compliance with standards and legal requirements of their quanticratic, industrialized, and capitalist society.

The meanings produced, in turn, constituted in a situation of school literacy, also constitute the literacy students because they provide opportunities and configure ways for those women to assume –through what they say and what they remain silent about– their condition as women of learning and knowledge, experiences and cultures, memories and forgetfulness, and rights and expectations.

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## **Data Availability Statement**

Data sharing does not apply to this article because no new data was created or analyzed in this study.

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