

## LANGUAGES FOR SPECIFIC PURPOSES AND SUSTAINED SILENT READING. A NEW CHALLENGE FOR THE MILLENNIAL STUDENTS

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**Abstract.** *The teaching-learning process of languages for specific purposes has undergone a paradigm shift as the new generations of students are digital natives, using the new technologies all the time. In our paper, we present the profile and attributes of the new students, we introduce the concept of new pedagogy and its requirements and we present the innovative project of Sustained Silent Reading (SSR) run with the first-year students in a language for specific purposes course. Our aim was to encourage our students to read in a foreign language and to rewire them for an activity which develops their specialised knowledge, language and critical thinking skills, while striking a balance between their daily habits, which involve browsing, clicking from one digital space to another and scanning pages and sites, and carefully reading and analysing content.*

**Keywords:** *millennial identity, new pedagogy, languages for specific purposes, sustained silent reading*

### **Preliminary considerations**

The new technologies are part of our lives both on the personal level and on the professional level. They have fostered interconnected and polycentric communities of practice which revolve around communication and collaboration, but at the same time, they have shaped a new identity for our students. With our language for specific purposes courses, we aim at building bridges for our students and meeting their current needs and preferences. We use and adapt practices and strategies in order to engage our students, help them become competent language users and prepare them for a dynamic, ever-changing, unstable society.

In what the languages for specific purposes are concerned, we have observed that students have changed over the past years in terms of ways of relating to the language courses and in terms of language choice. Their profile has changed as they are millennials, the digital generation for whom technology is a *sine-qua-non*. Meantime, there is a growing trend among our students to be interested in English because this language still is the *lingua franca* par excellence online and offline and because most of their academic work is based on it (conferences, workshops, events, bibliography) and they will use it in their future professions as well. Hence, at our university, we have noticed a dramatic decrease in interest in French in comparison with English.

In this paper, we present the millennial students' profile, the communication strategy that we use with our students in order to build a community of learners and a project which requires students' attention and concentration for a larger time span, developing their critical thinking, specialised vocabulary and sharpening their cognitive abilities and skills.

### **French versus English at our University. A Case in Point**

At Babeș-Bolyai University, Romania, the students' curricula contains one compulsory language for specific purposes course (English, French, German, Italian, Russian or Spanish). Even though the language courses plethora offered is quite vast, the vast majority of students choose English over any other language. Thus, at the Faculty of Psychology and Educational Sciences, in the second semester of the academic year 2017-2018, there was a huge discrepancy between the number of students who followed the English for Specific Purposes

course (ESP) and gave the test of linguistic competence at the end of the year in comparison with the French for Specific Purposes course (FSP): 413 students to 31 students.

In what the English groups are concerned, the high number of students allows for more homogenous groups both in terms of fields of study and in terms of language levels. Hence, we had 3 categories: Pedagogy and Early Education (11 students in Pedagogy and 76 in Early Education Studies), Special Pedagogy (54 students) and Psychology (272 students). With the exception of the students in Early Education Studies and Pedagogy who were divided into Pre-intermediate, Intermediate and Advanced groups, all the other students were divided into intermediate and advanced groups. In contrast, for French there was only one group and this one was heterogeneous. There were 12 students in Early Education Studies, 1 student in Pedagogy, 6 students in Special Pedagogy, 10 in Psychology and 2 students in Social Sciences (one in Social Work and another one in Sociology). The group contained students from A1 level up to C2. However, C2 was the exceptional case of a student who grew up in Canada and for whom French was actually the mother tongue. Out of these students, 6 students had DELF diplomas and their courses were validated without them giving the test of linguistic competence at the end of the second semester.

### **Theoretical background**

The underlying theoretical perspectives and assumptions regarding the identity of digital born students and their patterns of behaviour and preferences signal the need for a new pedagogy in order to create an efficient and productive teaching-learning environment both for the language for specific purposes language instructor and for the students.

### **Millennial Students' Profile and Attributes**

Millennials are the newest generation in higher education. They are born through 1982 and 2000. They are diverse and have characteristics which are unique to the digital age. They are very active, involved in many things at the same time (they have a very active spare time, they perform voluntary work, some are working, some are enrolled at more than one faculty). They are hyper connected all the time, they use their smartphone devices, they have a profile and they are active on various social network sites. They are preoccupied by self-expression, connection and relationship building and social networks constitute the proper digital space to perform these needs (see Stern 98).

Millennial students have attributes that are shaped by the strong tie between this new generation and the use of technology. These attributes influence the way in which they related to others in the personal life, but also at the institutional level, in our case higher education. Thus, we should take these attributes into consideration if we want to establish an efficient and successful teaching-learning context. In what follows, we customise a list of millennial attributes adapted from Frand ("Starlink" 10) in order to highlight the attributes that we observed in our students nowadays:

- Laptops, tablets, smartphones, the Internet and the WWW are not technology. They are part of our students lives in the same manner as telephones and television are to the previous generations.
- "Reality is no longer real" as everything can be modified by using digital technologies.
- "Know-how" is more important than "know-what". Knowledge is only a click-away, available and accessible for everyone and that is why knowing where to find the information, what sources are reliable and what suits the students' need is more

important. Moreover, it is far more interesting and engaging for them to be involved in projects and real-life activities, rather than accumulate information.

- Learning should resemble a game-like situation. They like to be involved in trial-and-error and discovery tasks, rather than having a set of steps and procedures at their disposal and simply applying them (like in the situation of the drills, fill-in type or matching types of language exercises).
- “Multitasking is a way of life”. Students engage efficiently in several activities at the same time. It is typical for them to work on a school project, chat on sns and listen to music at the same time.
- They expect 24/7 service. They contact their teachers via emails and private messages on sns and demand quick answers. They are part of a culture in which delays are considered a sign of forgetfulness or indifference.
- “Consumer and creator are blurring. In a file-sharing, cut-and-paste world, distinctions between creator, owner, and consumer of information are fading. The operative assumption is often that if something is digital, it is everyone’s property” (“Starlink” 10-11).
- They are always connected and in touch via multiple devices.

To this list we add another insight into the identity of students. Other researchers also define the identity of millennial students and they consider that there is a number of defining characteristics, each with its inherent development (Monaco, Martin 44):

*Special* → rewards for participation

*Sheltered* → structured-enforcement of rules and regulations

*Team oriented* → works well in groups, socially active

*Confident* → high level of optimism, technologically savvy, want to assist in creating own knowledge

*Pressured* → perform when being judged, immediate and continual feedback on progress

*Achieving* → challenges grades and testing methods

*Conventional* → respect for cultural differences

The identity and the attributes of the millennial students have implications for the classroom which has to meet the new personal and professional needs, preferences, cognitive abilities and expectations of the digital generation.

### **New Pedagogy for the Millennials**

Given the characteristics and the needs of a new generation, researchers consider that it is necessary to develop a new pedagogy in order to educate the *NetGen*. We also argue that a different approach is needed in order to make students engaged and actively-involved. Students need new competences in order to be functional in a high-tech world and traditional teaching methods which focus on memorization and drills are no longer productive. Students need digital competences, but at the same time, they need critical thinking skills, autonomy and responsibility for their learning. To develop all these, students must be engaged in meaningful-based tasks which are relevant for their personality and for their community of practice. Moreover, it is claimed that:

real-world experiences merged with sustained engagement and collaboration offer opportunities for learners to construct and organize knowledge; engage in detailed

research, enquiry, writing and analysis; and communicate effectively to audiences (Barron, Darling-Hammond apud Scott 2).

*Facebook community* can be included in this new pedagogy because it is the Romanian students' preferred way of interacting with their peers, offering them the medium for self-expression and helping them become part of various groups. Students are always on Facebook, scrolling down the Facebook page and scanning their friends' multimodal exposures. Students are practising a sort of digital voyeurism on the platform and they are mostly interested in fast, informal communication through reactions expressed via the *like button* or nonverbal (emoticons) and paraverbal contributions (the online rendering of paralanguage - the non-lexical elements of communication: intonation, pitch and speed of speaking, hesitation noises, emphasis).

*Sustained Silent Reading*, abbreviated to SSR, could be used as our strategical antipodal to Facebook communication aiming at consolidating an oasis in which students have time to reflect and engage in deep thinking about subject matters. It is a school-based individual activity designed to involve students in constant silent reading over a particular time span and it is aimed at modelling students' attitudes towards reading, cultivating an enjoyment for it. As we live in world of continuous notifications, interruptions, scrolling and scanning, SSR is a helpful strategy to help recalibrate our students and remind them that besides the digital fast, flamboyant, interactive devices of their lives, they also need activities which require uninterrupted and undivided attention. In this way, they are able to reach full concentration and to be fully focused on a task. SSR develops critical thinking and familiarises students with different cultural aspects. It is particularly useful for a language for specific purposes course as it develops specialised vocabulary and it trains the students for the reading skill which is also a component of the test of linguistic competence that they have at the end of the second semester, which is, in most cases, also the last one for the language for specific purposes course.

Researchers claim that the millennials have a regimented schedule of extra-curricular activities which have decreased opportunities for independent creative thought and decision-making skills and this provides challenges for both employers and educators (Monaco, Martin 43) and we consider that SSR can be helpful in this respect as well.

Facebook communication and the performance of SSR with our students represent projects to promote the new pedagogy needed and help us reach a balance between the skills developed by the digital components and those developed by the non-digital ones.

### **Two-Folded Didactic Approach**

Having in mind the identity of the millennial students in our class and the cognitive change brought about by the new technologies, we tried to provide a two-folded approach in our class. On one hand, we inserted a digital component, enacted via a Facebook group. In this way, we met the need to provide an interactive, collaborative and informal space for our students. On the other hand, we introduced a component which demanded a focused mind, obtained through the Sustained Silent Reading Activity. Hence, aiming at forming an offline and online community of practice where our students feel at ease to interact with each other and with the language instructor in the foreign language taught, at the beginning of the academic year we set up *secret Facebook groups*. We shared information and resources with our students and communicated with them in a relaxed and informal manner via the posts and comments, but also private messages. The group was secret so that the privacy of our students was respected, and communication was triggered. In this way, students felt disinhibited and willing to participate, knowing that only their colleagues have access to the group. The central

focus of the group was the language for specific purposes taught in class and the group requirement was that every contribution is in the foreign language taught.

Sustained Silent Reading was announced on the Facebook group via posts by the language instructor on a weekly-basis with the purpose of sending constant reminders of the activity, but also of acting as teasers, increasing their interests and motivating them. The posts also contained hyperlinks to the texts selected for the SSR.

The SSR took place for 10 minutes at the beginning of the English and French class with all the students for the entire second semester of the academic year 2017-2018.

The students in the English class performed this activity in the first semester as well when we organised a pilot project which took place only for a few sessions and was done in collaboration with another language instructor in ESP, involving also the students at the Faculty of European Studies (see Cotoc, Nistor).

All the students received the texts in advance and they brought the texts printed out, but they were also allowed to read them on their smartphones devices in case they forgot to print out the texts. However, they were highly advised to perform the activity in the analog manner, with pen and paper so that they could underline important ideas and concepts and write down notes alongside the text.

We adopted a different strategy for the implementation of the SSR with the English groups in comparison with the French groups. With the English groups, SSR involved using a text which was connected to the previous unit studied in class a week before and, hence, it was a reinforcement activity. It was not followed by further discussion, but triggered instead individual reflection and critical thinking, being also an opportunity for students to be honest with themselves and take responsibility for their learning process on the long run. In contrast to the English groups, with the French group, the SSR project was newly introduced in the second semester, following the pilot project run with the English students in the first semester. The SSR involved using a text that was connected to the unit discussed in class in that particular week. Hence, the text served as a basis for communication and the silent activity was followed by a brainstorm and a discussion of the main points of the texts chosen. As the group was so diverse, containing students from A1 to C2 level, the post-SSR section of the course also involved the discussion and the contextualisation of the unknown and important concepts and terms from the text. In this way, SSR was integrated in Unit of the Course and it gave coherence to the content of the course. We also tried to fill the gap between the lower level students and the students with an operational level of French who sometimes received the role of teachers, explaining to the others the problematic aspects.

### **SSR Analysis: French Texts' Overview**

The texts chosen for SSR in the FSP course were in accordance with the topics discussed in the classroom, were rich in specialised vocabulary and up-to-date. Like with the English group, even with the French group, where there were also students who had a lower level of French, the texts chosen were the same for everyone in the group. We implemented the activity uniformly as Romanian and French are both Romance language and, as a consequence, the phenomenon of intercomprehension should facilitate the understanding of French content, especially in writing where students have more time to process information. Moreover, the students who were enrolled in our French for Specific Purposes course had contact with French prior to the course and, thus, they could understand and/or learn at least bits and pieces from a French text. Needless to say that the engagement with the content during this “informal encounter” with the text was different and in accordance with the language level of the students: the students with a good level could actually read the texts, while the other ones performed a superficial analogue browsing.

We also introduced some current controversial topics in order to stimulate students' interest and to engage them in problems and issues that reflect nowadays debates at the national and international level, allowing them to get familiarised with French approaches to the same issues discussed in Romania and, in this way, broadening their horizon. We also thought that introducing controversial topics might engage even the students with a lower level of French as they should arouse their curiosity because the millennial are attracted by up-to-date events. The texts selected also aimed at introducing students to different cultures and subcultures, building on a tolerant and respectful attitude and the open-mindedness towards otherness.

The texts used for SSR in the FSP course were shorter (one or two pages long) and they were part of the units: some of them were abbreviated articles which were adapted to the level of the textbook/course unit designed by the language instructor - B1/B2 level texts), while the ones for the English course were longer and they were not part of the units: articles, blog posts, and the level was B2 and higher.

The first course in FSP was the introductory course in which they were introduced to the concept and the requirement of SSR. With the second course we already started the project, as follows:

- **Unit L'attention:** SSR1 *La concentration* is focused on the contemporary lack of attention due to the daily usage of high tech devices, providing a humorous demonstration that this impaired cognitive function has always been present and, therefore, it is not only an effect of the digital society. As a continuation, SSR 2 *Une série de courtes textes (Comment l'attention varie-t-elle?; L'effet stroop; L'effet cocktail party; L'expérience du gorille invisible)* provides short descriptions of three experiments connected to the functioning of attention.
- **Unit Apparences:** SSR 3 *Identité. Le Nom* highlights the patriarchal social systems promoted by the naming process for females as this category always builds an identity through the name in relation to a male figure (the surname is usually that of the father, when they marry they take their husband's name, their children also take the name of the husband, then in case of divorce, the woman is the one reconfiguring the name identity).
- **Unit J'apprends:** SSR 4 *Changer, pas si facile...* and SSR 5 *L'african, Jean-Marie Gustave Le Clézio, Mercure de France, 2004* are connected to the topic of the unit, but in different ways. SSR 4 provides a reflection on the contemporary advice to change and improve oneself. In contrast, SSR 5 contains a fragment from an autobiographical essay. Although at the first glance, the text seems to be disconnected from the unit under focus, it presents the author's melancholy and childhood memories, inviting to a subtle reflection on the education offered by life and experiences, and not by studies and books. SSR 6 *Confiance en soi. La Posture* presents the positive impact that body language and a powerful posture can have on the way in which we perceive ourselves and the social identity constructed.
- **Unit Privé:** SSR 7 *Une vie française* and SSR 8 *Les nouveaux mâles se cherchent*. SSR 7 debates the traditional female / male gender roles and proposes an alternative model, while SSR 8 addresses the controversial topic of metrosexuality.

The SSR also provided us the possibility to browse and analyse the content of the texts included in the units and to check if they actually reflect a language for specific purposes course in terms of issues, specialised knowledge and vocabulary items contained. Hence, analysing our texts using the digital tool *voyant* and the *find* function in word, we observed

that the most frequent lexical items in our corpus were not specialised words, but words that belong both to French for psychology and to general French: *nom(s)* (47), *femme(s)* (24), *vie* (24), *attention* (22), *identité* (21), *posture(s)* (21), *enfant(s)* (20) and *enfance* (10), *homme(s)* (19), *père* (18), adjective *droit(e)* (9) and the noun *droit* (6), *fille(s)* (15), *temps* (14), *ans* (12), *jeune(s)* (12), *poisson* (12), *amour* (11), *mère* (11), *monde(s)* (11), *peut* (11), *changer* (9), *faire* (9), *fois* (9), *corps* (8), *devenir* (7), *épaules* (7), *famille* (7), *pays* (7), *présence* (7), *chercheurs* (6), *conseil(s)* (9), *gens* (6). That is why, at first glance, some texts seem to be related to general topics, but the careful reading provided by SSR and the follow-up conversations and activities proved that the texts actually contain in-depth information, present experiments and situations about relevant topics in psychology and trigger discussions, debates and activities specific for a LSP class.

### **SSR for the FSP course: Instructor's and Students' Perception of the Activity**

Students were monitored during the SSR and they received constant guidance and support from the language instructor's part. The instructor also got involved in the activity and performed SSR as well, whenever possible. At the same time, the instructor walked around the students to answer any queries that the students might have had (regarding problematic vocabulary and structure, the choice of texts, understanding). However, the language instructor did not interrupt the students and approached them during the SSR only if they signaled that they need help. The activity always started sharp on time and the timing was always precise (not less or more than the time allocated). The students received clear instructions to take the activity seriously and came prepared for this. In comparison with the English groups, the students from the French group always had the texts printed out. This might have been a consequence of the fact that the texts were integrated in the units for the French groups, but not for the English ones and also of the fact that the project was organised at a lower scale (only a few students).

Observing the students, we consider that they benefited from these 10 minutes dedicated to individual and silent work as they got the chance to make the transition to the language for specific purposes course and to reflect on problematic aspects before the class actually started. They also received the texts in advance, which actually gave them the time to prepare at home in case they thought that it would be difficult for them to actually see the texts for the first time in class.

Inherent to this activity was also the informal testing of the extent to which students can actually have access to information in accordance with their language level and of the kind and amount of information they extracted from the texts. We also checked if this activity can actually trigger other activities/the entire unit. In this respect, after the SSR, we organised question-answers sessions, brainstorm of ideas, pair and group discussions, we wrote down words/expressions, we checked students notes and we solved vocabulary exercises. Hence, the activity was indeed efficient for everyone, even though in a different way, and it also acted as a prompt for the rest of the course as this activity constituted the basis of the warm-up activity and the unit itself would then continue with the same topic.

At the end of the second semester, we applied a survey both to the English groups and to the French groups. In what the English groups are concerned, there were also students from the Faculty of European Studies and the number of respondents was much higher, 326 respondents in contrast with the respondents from the French group which were only 21. In this study, we analyse the results obtained with the students in French because we aim at analysing the FSP community of learners which constitutes a minority at our faculty in comparison with the ESP community of learners, which is treated in a different study focusing on a collaborative project involving the students at the Faculty of Psychology and Educational

Studies and the students at the Faculty of European Studies (see Cotoc, Nistor). Hence, we observe the FSP micro-community of learners in order to see if a micro-community of students can reflect a macro-one because we assume that the millennials have the same learning preferences and behaviour regardless of the fact that the languages involved in the teaching-learning process derive from different language families (a Romance language versus a Germanic one), have a different status and popularity at our university and the students' usage of and contact with these languages on a daily-basis is different. Moreover, we were particularly interested in the results obtained with the French group because it was a heterogeneous group.

In what the FSP students' responses are concerned, 20 students in French declared that they enjoyed the activity a lot, 15 declaring that they were fully engaged in this activity and 5 students declaring an average participation. When asked if they continued the activity at home in case they did not finish reading the texts in the 10 minutes allocated to this activity, 7 students always continued reading as a homework, while 13 sometimes continued it every now and then and only one student answered negatively. We consider that this is due to the fact that the students received short texts and managed to finish them in class. The vast majority of them considered that the texts chosen were of average difficulty, all of them stated that they learned new words and most of them searched for the new words in dictionaries and tried to use them in context afterwards. They also declared that they developed their specialised knowledge because the SSR focused on up-to-date text related to their fields.

When asked what they liked about the activity, their answers covered the following aspects: the concept of SSR and novelty of the activity, the topics and the length of the texts, the individual work implied and its unfolding into pair/group work. They also appreciated the diversity of the texts and the fact that it helped them improve their vocabulary. Some of the comments include:

*Pendant de notre activité j'ai aimé beaucoup la lecture silencieuse parce que a été une nouvelle chose [...]*

*Dans activités j'ai aimé la diversité, mais et sujets de discussion.*

*J'ai aimé le fait que les les textes ont été intéressantes et courtes.*

*J'ai aimé que nous lisions individuellement*

*Pendant cette activite, j'aime que j'ai réussi assimiler de nouveaux mots.*

We also received 7 comments which cover elements that students did not enjoy during the SSR. However, we consider that they are subjective and, hence, they do not invalidate the activity. We write the comments below in their original form:

*Les exercices étaient trop nombreux ,je voulais plus de communication.*

*Je n'ai pas aime le fait que je n'ai pas fini de lire la lecture du texte.*

*Parfois, la quantite d'information.*

*Il a été peu de temps pour analyser complètement le sujet de cette journée.*

*Le seul problème serait les textes qui étaient un peu difficile, mais avec les explications je*

*pourrais les comprendre.*

*Ce que je n'ai pas aimé dans les activités que j'ai effectué a été le fait que j'ai parlé de*

*metrosexuels, parce que nous ne pouvons pas juger les gens pour des plaisirs et leurs besoins.*

*J'ai deplu le sujet sur les metrosexuels*

The students' answers validated our activity and our choice of texts in terms of students' perception and attitude towards the new activity introduced in their course as part of a new pedagogy designed for the millennial students.

### Conclusions and Future Directions

In conclusion, millennial students need a new pedagogy which strikes a balance between informal, interactive, collaborative, online and offline practices of the Facebook communication type and activities of the SSR type. The SSR activates and develops cognitive abilities different from the ones which are formed during dynamic, short term, flashy activities which the millennial students engage in both personally and professionally on a daily basis due to the digital age.

In what SSR is concerned, there are many future directions which are relevant for a language for specific purposes course. This activity could be adapted and implemented in various ways. One option would be to use different texts in heterogeneous groups and then put students with different language levels in pairs and make them report to one another. Another suggestion would be to dedicate the 10 minutes at the beginning of each course to a different kind of activity (watching a video, playing a game etc.) or to a different activity every course: one course watch a video, the next read a text and so on. Moreover, the SSR could generate various interactive and useful projects. Some examples include:

- Collaborative projects based on SSR: The class could be divided into *students-designers of activities* and *students-recipients* as the intermediate/upper-intermediate students could design vocabulary exercises for lower level students. While the more advanced students create the exercises, the students-recipients receive another task that the students-designers will receive later, when the first group solves the exercises received. In this way, students improve their vocabulary and they are involved in designing the teaching and learning process. The instructor is only a facilitator and an observer;
- the gamification of the vocabulary acquisition process as students could be involved in various competitions: extraction and explanation of difficult words, taboo games, etc. based on the SSR texts;
- Presentations which use SSR as a starting point;
- A specialised language for specific purposes online glossary based on the vocabulary studied during SSR and built by students.

### WORKS CITED

- Cotoc, Alexandra, Roxana-Maria Nistor. "Theoretical Aspects and Applications of Sustained Silent Reading in the ESP Class." *Journal of Romanian Literary Studies (JRLS)* (2018): 240-251.
- Monaco, Michele, Malissa Martin. *The Millennial Student: A New Generation of Learners*, 2007. Available at: [https://www.researchgate.net/publication/228343335\\_The\\_millennial\\_student\\_A\\_new\\_generation\\_of\\_learners](https://www.researchgate.net/publication/228343335_The_millennial_student_A_new_generation_of_learners) [accessed Aug 29 2018].
- Millennials: Our Newest Generation in Higher Education*. Northern Illinois University, Faculty Development and Instructional Design Center facdev@niu.edu, www.niu.edu/facdev, 815.753.0595. Available at: [https://www.niu.edu/facdev/\\_pdf/guide/students/millennials\\_our\\_newest\\_generation\\_in\\_higher\\_education.pdf](https://www.niu.edu/facdev/_pdf/guide/students/millennials_our_newest_generation_in_higher_education.pdf)

- Educating the NetGen: Strategies that work. Participant Packet*. Starlink, 2004. Available at: <http://www.starlinktraining.org/packets2004/packet129.pdf>
- Scott, Cynthia Luna “THE FUTURES of LEARNING 3: What kind of pedagogies for the 21st century?” *UNESCO Education Research and Foresight*, Paris [ERF Working Papers Series, No. 15], 2015.
- Stern, Susannah. “Producing Sites, Exploring Identities: Youth Online Authorship”. *Youth, Identity, and Digital Media*. Ed. Buckingham, David. The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning. Cambridge, MA: The MIT Press, 2007. 95-117.

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<https://voyant-tools.org/>