Tying Thoughts and Forging Bonds in Language and Content Instruction
Redefining Literacy Through Social Annotation Tools

Rossella Di Rosa
University of Pennsylvania

Julia Heim
University of Pennsylvania

With two years of remote or hybrid instruction at our backs, it is possible, if not common, to reframe the difficulties and drawbacks that the COVID-19 pandemic posed to teachers, educators, and researchers, considering them not obstacles but rather opportunities for reflection. While we may feel more comfortable with remote teaching and learning, and this in itself affords us an ease should these transitions be needed in the future, it is also important that we recall the challenges that instructors—and specifically foreign language instructors—had to face during these unprecedented times. Recognizing these obstacles and the ways they were overcome helps us look more critically at the value they may still provide us in our classrooms. For instance, it was vital to think of effective ways to humanize online courses, recreate or build a sense of community in the virtual setting, encourage full participation, and spark students' engagement in both synchronous and asynchronous sessions. Hence, not only did instructors devote a lot of time and effort in familiarizing with and implementing successful online teaching practices in their courses, but they also identified in many of them a potential to enhance face-to-face teaching once their universities returned to fully normal in-person operation. For us, at the University of Pennsylvania, the lessons we learned over the past two years are shaping the ways we teach differently today.

Among the plethora of strategies, techniques, and resources we explored to enhance online teaching, social annotation tools such as *Perusall*, proved particularly successful across all the different language, culture, literature, and cinema courses at our institution. By elaborating on our various uses of *Perusall* and its function in our classes we offer frameworks for those looking to develop their digital pedagogical toolkits and extend their learning communities outside the confines of their classrooms.

Social Annotation Tools (heretofore referred to as SAT) are crucial resources for teachers and especially for language instructors, who can now choose among different options such as *Hypothes.is*, *Genius*, *Social Book*, *High-*

Brow, *HyLighter*, and *Perusall*. They all allow users to annotate, comment and interact with myriad texts, films, audio, images, and graphics. Many scholars across disciplines have discussed the potentialities of these SAT and how they can contribute to the development of students' literacies and foster deeper skills such as meta-cognition and critical thinking (see Joanna Wolfe 2002 & 2008; Julie Sievers 2021; Anne Mendenhall and Tristan Johnson 2010). When it comes to foreign language learners, SAT can provide students with opportunities to interact with different and meaningful input (written, audio, and visual texts), develop and/or expand vocabulary and fluency, foster question-answer interaction, practice and improve writing abilities, and develop or practice reading skills (Kohnke and Har 2022). For instance, SAT enhance reading comprehension since learners can use students' annotations to decipher or clarify the meaning of complex passages. Furthermore, they are useful for improving and developing reading strategies which allow them to engage with more complex materials (Fei et al. 2020), and provide opportunities to engage in reading non-linearly, which helps them "increase their chances of strong comprehension" (Sievers 427).

From a broader learning perspective, SAT allow students to develop or strengthen their media literacy and digital competences while facilitating organization and creativity. Indeed, these tools engage students with material in ways that play to their comforts and strengths, since the digital space allows them to creatively transform/enhance a traditional text into a multi-mediatic digital product that combines the original text with their annotations, links, pictures, music, videos, and any other supplementary information (Pennington 2017; Sievers 2021). Furthermore, the benefits of SAT expand to aiding in the development of higher-level skills or approaches that lead to knowledge acquisition, such as meta-cognition and critical thinking. Some researchers have analyzed that SAT are involved in the activation of cognitive processes that are conducive to learning and can foster the development of mental abilities, such as "reasoning, problem solving, and abstract thinking" (Fei et al. 900), thus allowing students to self-reflect and introspectively examine and evaluate what they have read and learned (Mendenhall and Johnson 2010).

Our theoretical analysis would be incomplete if we didn't consider the social benefits of SAT, which, through their knowledge-sharing nature, foster, students' engagement, social reading, and collaboration. As Julie Sievers has pointed out, these tools stress and remind us of the "social dimension" of reading and writing (Sievers 429). Through collaborative readings, students whose annotations are visible may engage with their peers by reading and responding to each other's comments. In this way, they dialogue with

their colleagues, their teachers who populated the text (or video, image, audio, etc.), the prompts, and of course the texts themselves. There is also the potential to use SAT as a platform for group work while examining a text or video. Hence, one of the greatest advantages of implementing these tools is that they allow instructors to create and strengthen a sense of community between students, teachers, and class members.

As we have shown, these tools provide new ways of developing and/or reinforcing traditional learning abilities, digital competencies, as well as other trans-disciplinary skills and abilities, such as working collaboratively, solving problems, thinking critically, and making cross-disciplinary and cross-mediatic connections, all of which may be transferred beyond the language classroom, and even, and perhaps more importantly, beyond the university. At the same time, these annotation tools invite educators to rethink the traditional forms of reading and writing and consider how the "notions of culture, creativity, and literacy are being redefined in the online communities" (Pennington 259). Moreover, what SAT are also telling us is that this redefinition is not just necessary, it is necessarily digital.

PERUSALL IMPLEMENTATION IN ONLINE COURSES

Our initial decision to incorporate *Perusall* into our teaching practices was, quite simply, because our institution started integrating it into our Learning Management System in August 2020, and we were searching for digital resources to help with our transition online.[1] We were specifically interested in a tool that would allow us to build a classroom community and to promote students' engagement in synchronous and asynchronous meetings when the COVID-19 pandemic forced us to teach remotely. The features of SAT, and more specifically *Perusall* proved numerous: exportable snapshots for collections of quotations and figures; textbook integration; detailed downloadable data reports including time engaged, "confusion reports," and posting frequency; and multilingual "read aloud" options for increased accessibility (though Italian leaves a bit to be desired).[2]

Perusall could thus humanize our online language courses and recreate discussion-based learning experiences at all language levels, while providing us an increased ability to assess the success of our activities and improve accessibility. We created different assignments that focused on individual and group readings, listening comprehension, and multimedia annotations. Specifically, we uploaded different written or audiovisual texts (social posts,

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[1] Educators without this LMS integration can create an account and start using it directly through perusall.com.
[2] https://infocanvas.upenn.edu/guides/perusall/.

interviews, newspaper articles, short stories, video recipes, and film clips among others) and posed specific questions geared toward negotiating meaning; clarifying muddy points; facilitating grammar understanding; eliciting written and oral language production; analyzing genre characteristics, etc.

We learned that the more detailed and collaboration-based the guidelines were, the more students were motivated to interact with one another and their annotations; some such guidelines may range from: comment on a passage already annotated by a student, express agreement or disagreement with a comment, and provide a common solution to the problem/argument posed by the text, to name just a few. Moreover, we found that these *Perusall* assignments better prepared students and increased participation in the discussions which took place in the synchronous meetings via Zoom. Indeed, students felt more confident sharing their answers, opinions, and questions with instructors and their peers. Even those students who were more shy or resistant to unmute themselves were able to take part in the discussion because they had received support and encouragement from their classmates in *Perusall* or because they had collaborated in group assignments.

We observed therefore that thanks to *Perusall* every student found a welcoming space to participate in digital or in-class conversations and to express their thoughts, views, and cultural perspectives. Hence, not only did *Perusall* contribute to enhancing students' discussion, but it also helped us to foster diversity, inclusivity, and equity in different ways. First, in all discussions, students felt included and able to contribute to the class, deprioritizing only the loudest voice or most confident students—confidence, it is important to remember, is often linked to socio-political, cultural and/or economic privilege. Second, students' engagement was respectful of the learning space and the various voices who inhabited it. Of equal importance were the ways *Perusall* allowed us to accommodate different learning styles and abilities; the text or videos being engaged with were then responded to using various outputs, allowing us to multiply the modalities we use to facilitate learning.

PERUSALL IMPLEMENTATION IN FACE-TO-FACE COURSES

Once in-person teaching resumed in Fall 2021, we continued exploring *Perusall*'s potentialities and finding other ways to integrate technology into our courses. In teaching Italian language and culture at different levels, this tool allowed us to create collaborative activities with multipurpose learning objectives. At the beginner level, we created assignments in which

learners interacted with written texts, annotating unknown words in order to define them using context or peer-to-peer interaction as in Image 1, or digitally responding to a visual prompt to practice the grammatical structures studied, as in Image 2 (See, Appendix A).

For oral communication practice, we created audio recordings of a text so that students could listen and repeat word pronunciation. We found *Perusall* particularly useful for practicing often neglected skills such as intonation, pauses, and punctuation, through assignments in which students recorded themselves reading texts aloud after listening to a recording of the instructor reading the same content. Other assignments we created aimed at developing or refining students' listening, comprehension, and writing skills, by interacting with short film or documentary clips, as in Image 3 (See Appendix B).

Very often, in using *Perusall* we were able to design assignments that combine all three modes of communication (interpersonal, interpretative, and presentational), especially when designing materials for our advanced language and content courses.

In these higher-level language courses and culture classes (taught in English) *Perusall* was useful, as we noted earlier, to promote Sievers' idea of social reading among students, who could read the same text, reflect, and comment on it individually or in a group, as in Image 4 (See Appendix C).

A crucial aspect of social reading was, therefore, interaction. In annotating, commenting, or thinking on a passage, students could engage in a conversation with their peers who either were interested in the same passage, struggled to understand its main ideas, or simply wanted to express agreement or disagreement with a comment posted by another student or the instructor (Image 5).

In culture courses, for example, these assignments—whether through video or text annotation—became collaborative learning spaces where students shared resources, made connections to other texts and concepts studied in class, and worked to reflect on and even answer each other's questions. Students' comments created a subtext with ideas, expressions of support, doubts, or questions that students could also graphically mark with an orange question mark, which turned out to be extremely useful to identify students' inquiries among all the posts they submitted (we want to be sure that in the in-class discussion we answered the questions or concerns students posed). Hence, *Perusall* was an effective tool to promote a form of "dialogic learning" similar to what Robin Alexander had developed since 2000 (and Adam Gomaran and Martin Nystrand discussed before him in

the '90s), which is grounded in the sociocultural theories and dialogism of Lev Vygotsky and Mikhail Bakhtin. Per Alexander, students can experience dialogic learning if they are engaged in a discussion whose aim is to "advance understanding, expand ideas, and build and evaluate arguments" (Alexander 1). This form of learning, which starts in a digital space through *Perusall* and continues in the classroom, encourages student exchanges, and facilitates collaboration in the service of co-constructed meanings. In other words, when students annotate, comment, and reflect on previous entries and commentaries (proof itself of active learning), they "build their understanding together" (Kohnke and Har 8) which in turn leads to the production of new perspectives and ways of thinking, a prerogative, Fecho and Botzaki note, of a dialogic classroom (see Allred et. al. 2020 and Fecho and Botzaki 2007).

In addition to creating a dialogic space, *Perusall* fostered independent learning, an aspect we didn't consider when we designed our courses and identified their learning outcomes. Indeed, we observed that students were often motivated to independently research an aspect they found particularly meaningful in texts or videos, investigate possible meanings, and look for connections with what they knew from other courses or disciplines, etc. Hence, we can also conclude that *Perusall* played a crucial role in developing learners' autonomy.

In addition to using *Perusall* in the service of our learning goals and diversity objectives, it's important to highlight the ways that *Perusall* can also be used as a means of student assessment, and as such the annotation tool serves as much as a pedagogical tool as it does a learning one, as in Image 5 (See Appendix D).

As we mentioned, the tool allows instructors to check the class's overall performance and identify students who have annotated or contributed less to the discussions. This is a pathway for understanding who might be struggling or falling behind and works to facilitate meta-critical reflection of our pedagogical approaches through low-stakes data collection.

CONCLUSIONS

From our experiences of implementing *Perusall* in our online and in-person courses, we observed that it positively affected students' learning experiences and enriched instructors' teaching strategies, helping them to achieve myriad pedagogical goals.

For our learners, *Perusall* and other SAT help enhance the development of several skills and abilities simultaneously, from fundamental learning abilities such as (reading, writing, listening, speaking) to deeper skills (crit-

ical thinking, problem solving, collaborative learning, creativity, and originality). They provide a means of dialogic learning where students can build meaning together through conversation based around a text or piece of media, while also creating connections between the media under investigation and other materials as students create paratextual connections through the sharing of digital links and resources. In this way students who do independent research and contribute this material to the shared learning space both develop learning autonomy and create direct connections to the material thus increasing personal investment and fostering motivation.

From a pedagogical perspective *Perusall* and other SAT increase multimodal engagement which is necessary for any universal design approach to teaching and expands opportunities for content engagement. Furthermore, it helps foster diversity by: making space for students who feel more comfortable participating after direct textual engagement; increasing student outputs; and accommodating various learning styles. Students and teachers alike were provided opportunities to strengthen their digital competences and formal and informal relationships between students and with instructors were reinforced while the confines of the classroom were simultaneously expanded.

Social Annotation Tools are just a few of the resources that were brought to bear as we struggled to rethink teaching and learning in the Covid classroom, but it is through them and with them in mind that we should continue to question and develop our pedagogical approaches; it is only through continued learning that we, as instructors, may best work in the service of our disciplines and our students.
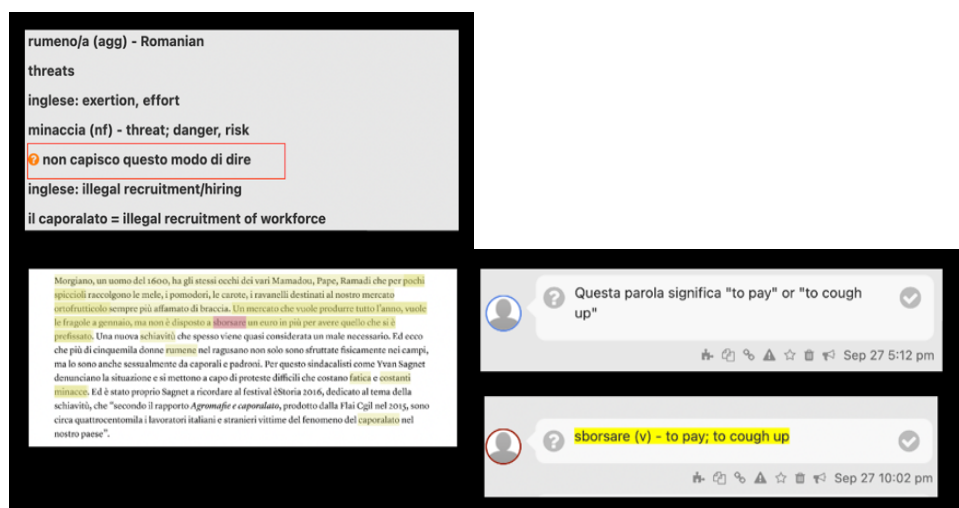
APPENDIX A

Image 1: A paragraph from Igiaba Scego's newspaper article was assigned to provide students a contextual example of fruit and vegetable vocabulary and to introduce a discussion on "caporalato." In the top image, the orange question mark signals a student's question to the instructor. The images on the bottom depict collective learning through vocabulary inquiry.[3]
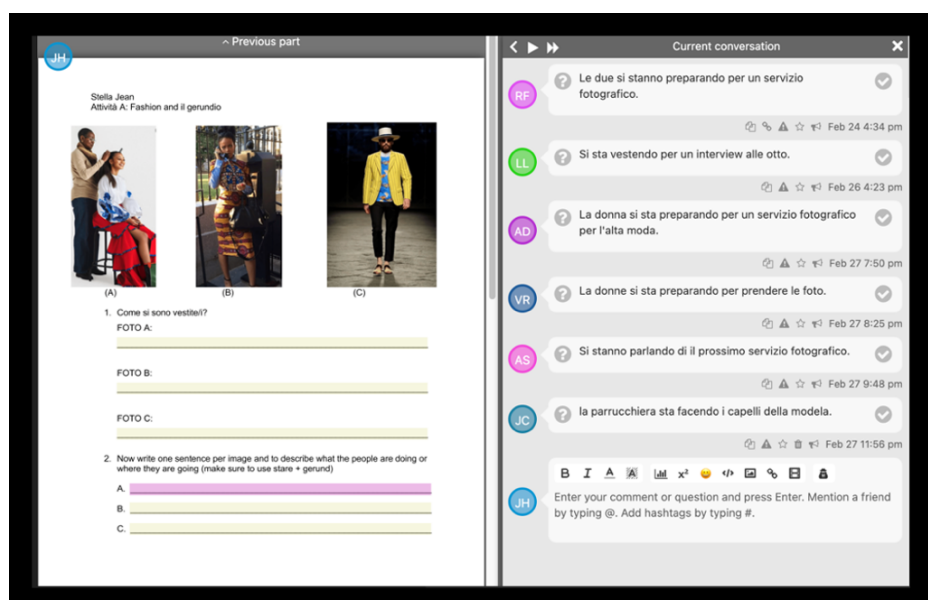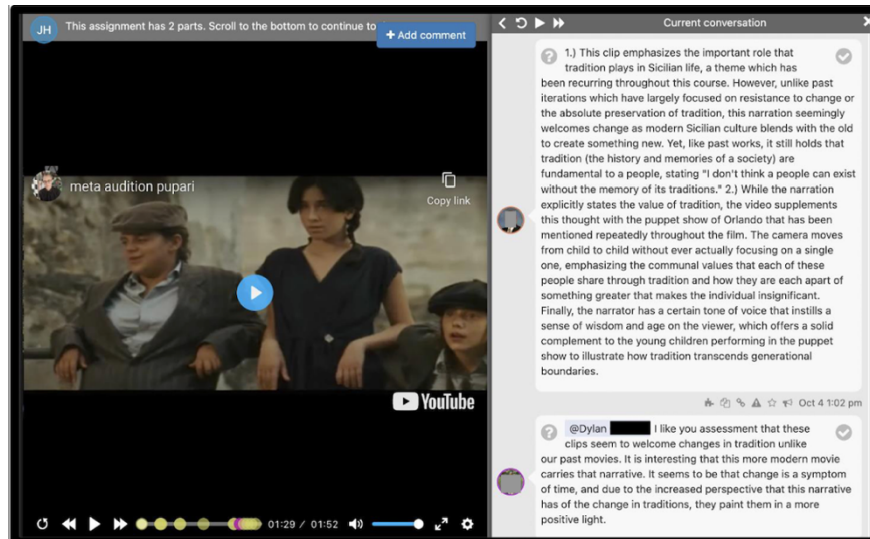

Image 2: This image-based gerund and fashion vocabulary exercise is part of a larger activity on Italian Haitian fashion designer Stella Jean, designed to decolonize the unit on Italian Fashion and discuss Stella's contribution to the Black Lives Matter Movement in Fashion while simultaneously reinforcing grammar objectives.[4]

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[3] Scego Igiaba, "Il silenzio dell'Italia sulle schiavitù di ieri e di oggi." *Internazionale*. June 5, 2016.

[4] This activity will be available on the Open Education Resource *PRIMA* (Pedagogical Repository of Italian Media Activities) created by the Italian Studies Department and sponsored by and housed within the Library of the University of Pennsylvania (see primalearning.org).

APPENDIX B

Images 3: In this assignment students were to reflect on various Sicilian cultural traditions and their representation by non-Sicilian documentarians. Students were asked to comment throughout the clips on various thematic prompts and engage with one another to make connections and form deeper meanings.[5]
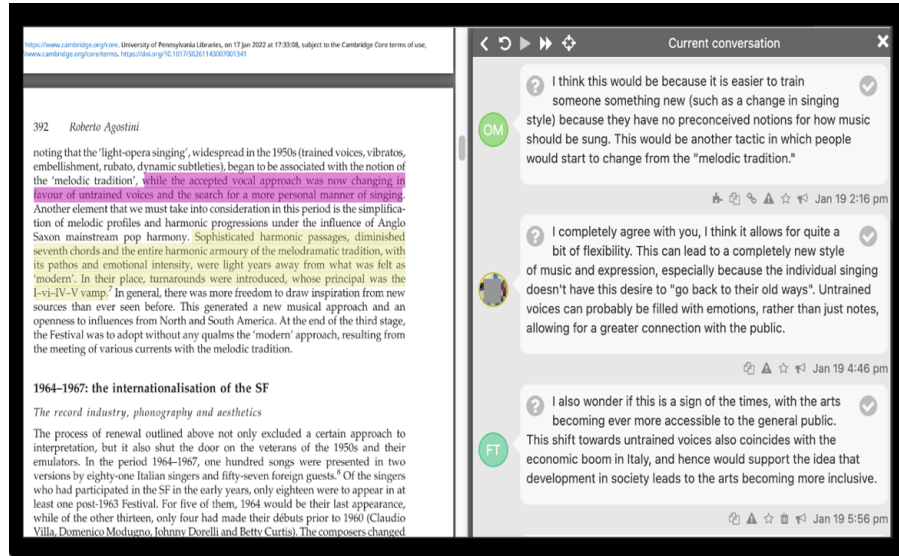
APPENDIX C

Image 4: This reading annotation was designed to facilitate dialogic learning while teaching students about the socio-cultural changes affecting music festivals in Italy during the 1960s and fostering paratextual investigation by asking them to include clips and links to references made in the text.[6]

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[5] *Rehearsal for a Sicilian Tragedy,* directed by Roman Paska (First Run Features, 2009).

[6] Agostini, Roberto. "The Italian *Canzone* and the Sanremo Festival: change and continuity in Italian mainstream pop of the 1960s," in *Popular Music* v. 26 n. 3 (October 2007): 389-408.
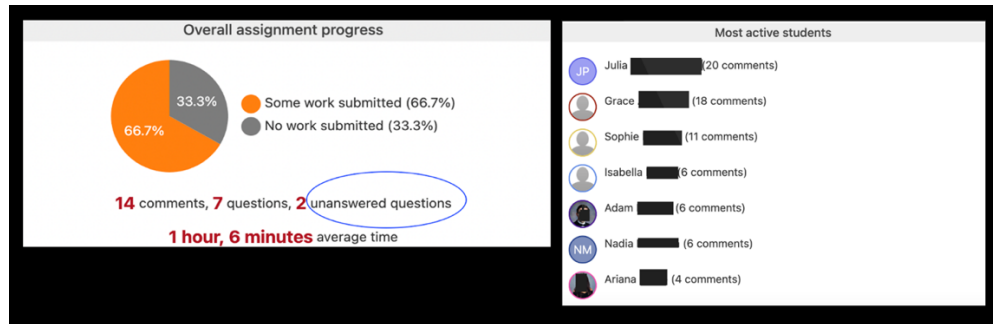
APPENDIX D

Image 5: This image shows the instructors' assessment capability highlighting both questions proved confusing or in need of a review and students' engagement.

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