Becoming a spectator with e-spect@tor

The challenges of the digital theatre experience

Juliette BRISTAULT CANOVA

La Rochelle Université

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Abstract : Developed as part of the Ecole du Spectateur de Nouvelle-Aquitaine research program (Chantraine Braillon 2021), e-spect@tor is a web-based application designed for individual and collaborative viewing and annotation of theatre performances on video. Its primary aim is to introduce and educate audiences in the performing arts through the medium of video. This paper presents findings from a series of experiments conducted with primary school students in France and Argentina between January and July 2024, as part of the implementation of e-spect@tor in educational settings. Based on collected data, we examine how video annotation of theatre productions fosters students' understanding of the conventions of spectatorship and theatrical aesthetics. Furthermore, we explore the discussions and analysis opened up through both individual and collaborative annotation.

Keywords : Performance studies, Digitally theatre, Digital pedagogy, Spectatorship, Cultural studies

Introduction

As part of the digitalization of research in the Performing Arts (Chantraine Braillon 2022), the tool e-spect@tor (https://especellu.huma-num.fr) was developed to train audiences in the analysis of live performance by using video archives. This Web-based application offers several features, including the ability to timestamp annotations on a video recording of a theatrical performance. Additionally, it allows users to watch videos in either an analytical mode or a performance mode—the latter closely resembling the experience of attending a live performance, as the video cannot be paused, fast-forwarded, or rewound once begun. Within the framework of our doc-

toral research, we are working on implementing this tool within school environments (primary and lower secondary education), both in France and Argentina. Drawing from Jorge Dubatti's concept of *tecnovivio*[1] (Dubatti 2016), this presentation will show that e-spect@tor offers a valuable opportunity to engage more closely with the audience's experience, while explicitly acknowledging that this is an artificial and *de-territorialized* performance situation due to its videographic nature (Dubatti 2024; Chantraine Braillon 2022).

The aim of our work is to explore how this digital tool can be used in a school context as a means of theatre education, to support the development of the spectator's posture, and to examine how annotating a theatrical play with emojis can facilitate an effective initial analytical approach to the work. First, we will introduce e-spect@tor, its features, and its pedagogical applications in both France and Argentina. Second, we will consider this Web application as a training space for spectators within the educational setting. Finally, we will analyze our preliminary results from working with plays, based on the emotions expressed by student-spectators.

1 e-spect@tor, functionalities and presentation of the experimental framework

1.1 Operation and use

To use e-spect@tor, you first need to 'create a project' by uploading the video file of the performative show on which you want to work on from Peertube[2] Once the video has been recorded, you activate the sharing mode and receive a code to pass on to whoever the video will be studied with (this allows it to be viewed collectively and individually, while protecting it from public viewing). Each participant joins the project ('join a project') by entering their surname, first name and the code on the platform, and they can then view it and annotate it in real time.

[1] Jorge Dubatti defines the concepts of *convivio* and *tecnovivio* in this way (personal translation from Spanish) : 'We oppose *convivio*, then, to *tecnovivio*, an existential paradigm of everyday life that allows, thanks to technological resources, the establishment of a deterritorialised link (without territorial reunion) that permits the subtraction of the present body. Artistic practices based on digital and satellite printing or transmission (printed literature, cinema, television, video, etc.) are technovivial practices. In *convivio*, territoriality and the present body are sine qua non conditions. The matrix-theatre is founded on an event of conviviality + poiesis + expectation: it is a matrix-event.' "Oponemos a convivio, entonces, tecnovivio, paradigma existencial de la vida cotidiana que permite, gracias a recursos tecnológicos, establecer un vínculo desterritorializado (sin reunión territorial) que permite la sustracción del cuerpo presente. Las prácticas artísticas que se fundamentan en la impresión o la transmisión digital y satelital (la literatura impresa, el cine, la televisión, el video, etc.), son prácticas tecnoviviales. En el convivio territorialidad y cuerpo presente son condiciones sine qua non. El teatro-matriz se funda en un acontecimiento de convivio + poíesis + expectación: es una matriz-acontecimiento."

[2] PeerTube is a free, open-source, decentralized video hosting network developed by the nonprofit Framasoft (https://joinpeertube.org).

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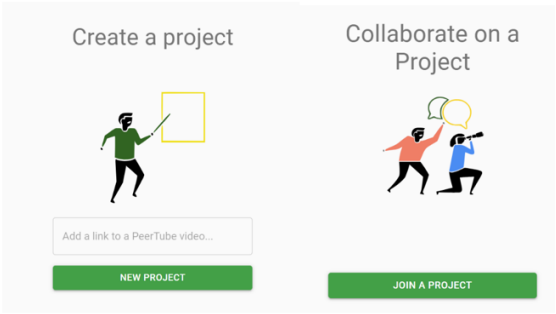


Figure 1: Screenshot e-spect@tor

Annotations are made either freely, in the form of comments, or through a predefined panel of emojis. These methods may also be combined. Annotations can be classified using an ontology created specifically for performative analysis (Chantraine Braillon 2022).

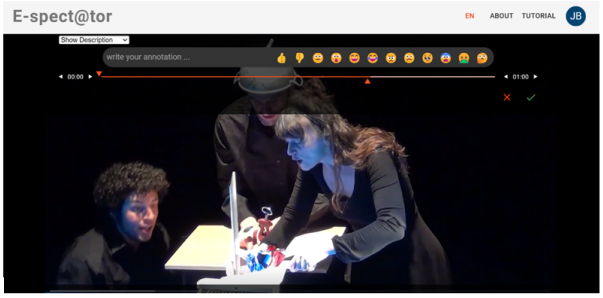


Figure 2: Screenshot – *La llamada del mar*, directed by Philippe Genty and Mary Underwood

After annotating the video, users can retrieve their annotations in a CSV table. They can also consult them directly on e-spect@tor in the form of diagrams.

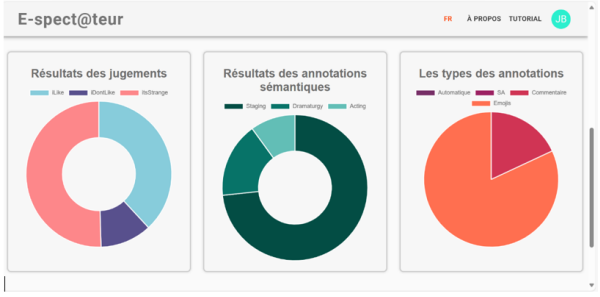


Figure 3: Screenshot – Diagrams : result of judgments ; results of semantic annotations ; types of annotations

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1.2 Worked pieces and experimental groups

Our investigations were conducted in France and Argentina, two countries historically recognized for their rich theatrical traditions. From the mystery plays of the Middle Ages to the founding of the Comédie-Française in 1680, through the establishment of French theatres abroad in the nineteenth century (where performances were staged in French), as well as the development of touring companies and international tours, French theatrical culture has extended both within the national territory and beyond its borders. Jean-Claude Yon further notes that "nineteenth-century France was the first country in Europe and in the world to establish a genuine theatrical industry capable of producing, in large quantities, works intended for a very broad audience"[3] (Yon 2008, 8). This is still reflected today in the sheer number of plays performed, even within Paris alone, where an average of approximately 300 productions are staged each week in the capital[4]. Moreover, the cultural decentralization policy implemented after the Second World War aimed to disseminate theatre across the national territory by developing a public theatre system (subsidized by the State) throughout France, within a framework of cultural democratization[5]. It is within this context that our first field site is located in Brittany, on the outskirts of Rennes, which hosts, among other cultural institutions, a National Drama Centre (also designated as a European Theatre and Choreographic Centre). Our second field site is in Argentina, and more specifically in Buenos Aires, a Latin American theatre capital often compared to New York. The city is home to approximately 300 theatres (and 552 cultural centers and performance venues dedicated to theatre)[6], encompassing all production networks. In 2025, the Alternativa Teatral Website listed 7,552 theatrical productions performed across Argentina, of which 4,333 took place in Buenos Aires alone. These two geographical and cultural contexts—countries with a major theatrical production and dissemination—thus appear particularly relevant for observation. Within spaces where cultural and educational policies actively promote access to theatre, questions arise regarding the habits—or lack thereof—of young audiences in relation to this artistic discipline. How do young people experience theatre as spectators?

In France, we worked with a CE2-CM1 class – mixed-age primary school class in France combining pupils aged 8–9 years old) – from a socially mixed public primary school on the outskirts of Rennes. The experiment led in March 2024, involved an object theatre piece entitled *La Pelle du Large*, directed by Philippe Genty and Mary Underwood and produced by the company 'L'Atelier de l'orage'. In Buenos Aires, the experiment took place last June, in a Segundo class in a 'Primaria básica' state school (students aged 6–7 years old), catering mainly for middle to upper middle-class children (according to several interviews with teachers at the school). We watched

[3] Personal translation from French: "La France du XIXème siècle est le premier pays, en Europe et dans le monde, à se doter d'une véritable industrie théâtrale capable de produire en grande quantité des ouvrages destinés à un très large public."

[4] Official municipal sources from the City of Paris, https://www.paris.fr, last accessed on 15 January 2026.

[5] Data concerning, inter alia, the establishment of 38 National Drama Centers and the designation of 77 "National Stage" venues throughout mainland France and the overseas territories, available on the Ministry of Culture Website (https://culture.gouv.fr) and accessed on 15 January 2026.

[6] Based on the data provided in the "Statistics" section of the Alternativa Teatral Website (https://alternativateatral.com), a resource established in 2000 that systematically records and documents theatrical production in Argentina.

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a puppet play, *El Dormilón*, by the company '¡Agarrate Catalina!'. The two plays chosen allowed us to mobilize several concepts linked to theatre, such as object theatre, puppet theatre, the comic register and its different characteristics. They also enhance the engagement of the student-viewers with civic, moral and philosophical issues such as inclusion, exile, harassment, language, rituals and anxiety.

In terms of IT equipment, a laptop or tablet with an Internet connection and a pair of headphones per pupil are needed. Conveniently, the equipment was available in each school involved in the experiment and enabled by the digital education programmes in both countries (France, "Plan de relance – Transformation numérique de l'enseignement", 2020 and "Socle numérique de base pour les collèges", 2022; Argentina, Buenos Aires, "Plan S@rmiento", 2017).

1.3 Teaching scenario

As part of the fieldwork carried out in France, we co-constructed all the sessions with the teacher, from supervising and working on the set-up, to viewing and having feedback sessions afterwards. After reviewing the results, we would then carry activities for collective analysis of the work (oral and written tasks, group work). In Argentina, although the initial work protocol was the same, for reasons beyond our control, we only carried out a single work session, in June 2024, consisting of an introduction to the theatre, the viewing of a play, a graphic reception activity, and a time for collective oral discussion. The teacher let us manage the group and the activities.

In each of the experiments aforementioned, we asked the students to watch the play in performance mode and to annotate the emotions they felt as they watched it, using emojis. Before starting the play, we reviewed the meaning of the emojis together, so that we all had the same frame of reference.

2 The digital theatre experience as a way of learning to be a spectator?

2.1 Children's definition of theatre versus the school curriculum

Through various oral and written exercises, the students met during this experiment defined theatre in terms of "representation" (performance), of space (venue) and of what the researcher Nora Lía Sormani calls the 'face-to-face encounter' (Sormani 2020)[7]. However, when reading the French national school curricula and the official bulletins of the National Education system, the term "theater" appears mainly as a literary genre. Argentinian teacher-researcher Ana Durán highlighted the same paradox in Argentinian school curricula when she set up her research and cultural education program, Programa de Formación de Espectadores. She concluded that: 'In educational institutions today, it is absolutely necessary to re-establish the distinction between the "dramatic genre" and the performing arts: reading a play in class is not the same as experiencing theatre, let alone the performing arts. The dimension

[7] Nora Lía Sormani refers to "encuentro en presencia" in the video presenting her book *El Teatro para niños, del texto al escenario* (2004) "El teatro para niñ@s. Del texto al escenario" in this Webinar online https://www.youtube.com/watch?v=T9vD_HjbWd8 accessed May 12, 2025.

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of representation is essential to understanding the theatrical phenomenon.'[8] (Durán 2016, 93). What we see here is a disconnection between what the general official school curricula present as 'theatre' and how students define it. As a result, depending on the commitment of teachers, the budgets of schools and the geographical distance separating them from socio-cultural or theatrical centers, a pupil might spend their entire compulsory schooling without ever going to the theatre, without ever attending a theatrical performance, without ever experiencing what it is like to be a spectator, and only knowing theatre through its literary aspect.

2.2 When students become spectators

Although the video approach may seem like it does not fully grasp the theatrical experience, the dichotomy between the expectations and definitions of students and the institutional treatment of the discipline, enhances, as we will see, the usefulness of audiovisual archives in the approach to theatre as a performing art, as well as taking into account the spectacular and living aspects defined by the students prior to our experiments. Indeed, the audiovisual medium is currently the best way to observe and become aware of the various elements inherent to theatrical performance. Patrice Pavis defines this as material and vectorial aspects: scenography, lighting, staging, and embodiment of a text, to name a few (Pavis 2021, 174-176).

Using the performative mode of e-spect@tor enables students to learn about the 'vectorial'nature of the performance, meaning that the play is not meant to be stopped once it has started, i.e:

Before the performance:

- Go to the bathroom if needed.

During the performance:

- Focus solely on the performance — no multitasking.
- Respect other spectators.
- Do not talk.
- Remain attentive in a space dedicated to the experience of being a spectator for the entire duration of the performance.

All these requirements are part of the experience of being a spectator, which is thus enabled here with e-spectator through the digital theatre experience. Therefore, the aim is to become more familiar with these codes of the live performance, since, according to Ana Durán, 'in the imagination of young people, the theatre is a space frequented at weekends by well-dressed, educated and well-off adults […] In other words, "the theatre-goer is not us" '[9] (Durán 2016, 58). Ultimately, one of the chal-

[8] Personal translation from Spanish: "De manera perentoria, en las instituciones educativas hoy es necesario volver a establecer la distinción entre "género dramático" y artes escénicas: leer una obra de teatro en clase no es experimentar el teatro y mucho menos las artes escénicas. La dimensión de la representación es indispensable para comprender el fenómeno escénico."

[9] Personal translation from Spanish: "En el imaginario de los jóvenes, el teatro es aquello a lo que asisten los fines de semana los adultos, bien vestidos, cultos, y con buen poder adquisitivo. […] Dicho de otra manera "el espectador de teatro no somos nosotros" ".

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lenges of learning these codes is to help students feel legitimate, and to help them find their place more easily in a context that is sometimes remote to them. Finally, it aims to guide them to become a spectator.

3 Annotation: nuancing, categorizing, discussing?

3.1 Experimentation: categorizing a performance according to reception?

The goal is now to measure the potential of the e-spect@tor tool for training in the analysis of theatrical performances, and in particular the value of using students' annotations to feed into and direct this analysis. In order to do this, we will describe in detail the two activities mentioned above, which will be referred to as Experiments 1 and 2 for the sake of clarity and to avoid repetitions. In both cases, the instruction was to annotate the emotions felt throughout the play using emojis.

For Experiment 1, there were a total of 388 annotations (of all types). One pupil set himself the target of making as many annotations as possible, with 99 alone. Each pupil in the class took part, annotating the play between 3 and 99 times per person, for a video lasting 32 minutes. The two emotions that stood out the most were laughter (119) and strangeness (53).

For Experiment 2, there were a total of 177 annotations (of all types), for a 24-minute show. Each student participated, annotating the play between 1 and 57 times per person for a 24-minute video. The two emotions that stand out the most are laughter (60 occurrences) and smile (16 occurrences), followed very closely by surprise (13) and empathy (12).

During the collective analysis session of the play in experiment 1, we used the annotations of the most frequently used emotions to categorize the play:

- Laughter (119 occurrences) as an element that runs through the play but intervenes at key moments: puns, actions and interventions by funny, ridiculous and comic characters. This emotion (laughter) and the different moments in the play highlighted by the students enabled us to characterize this show as a comedy, specifying at least three forms of comedy (situation, words, gestures).

- Strangeness (54 occurrences) was not present throughout the play, but overwhelmingly during the opening scene and at the arrival of each new character in an object theatre context. We therefore proposed a reception activity centered on the presentation of each character and their role in the story, which enabled us to classify the play as object theatre.

For experiment 2, although we were unfortunately unable to organize a session dedicated to analyzing the play, the graphic feedback (pupil's drawings) and annotations highlighted an awareness of the space (stage, distribution of the set design) as well as the interweaving of temporality, space and movement (figures 4 and 5) demonstrating an awareness of the vectorial aspect of the performance. In this class, 10 out of 16 pupils had already gone to the theatre (on a regular basis) before our experiment, and the collective feedback time highlighted the mastery of certain theatrical concepts (already well acquired as a result of the theatre culture in Buenos Aires) such as :

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comedy, puppet theatre as opposed to 'people' theatre and silent theatre. However, an analysis session would have enable us to use the results of the beginnings of each new scene in the play to work on the sources of comedy (situation and repetition in particular), as well as to look at the scene as being a narrative unit, especially since there is an abundance of annotations – particularly marked at the beginning of each scene – when an element disturbs the sleep of the puppet protagonist, thus underlining the comedy of repetition and the entry into a new narrative unit (the scene). Although the two emotions most frequently expressed are nuanced (laughter and smiles), we could have used surprise (13) to reinforce the work on the comedy of repetition, as well as the empathy expressed in and through the comments to evoke the play's cross-cutting themes (12 annotations using emojis and 21 verbal annotations).

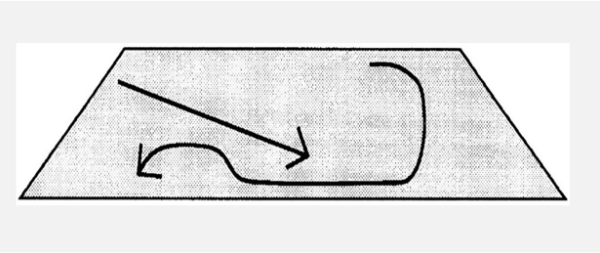


Figure 4: Pavis Patrice, 2021. *L'analyse des spectacles : Théâtre, mime, danse, cinéma* (p. 175).



Figure 5: 3 Pupil's drawings, June 27, 2024, Buenos Aires

3.2 Semantic annotations and misuse of instructions

It should also be remembered that the instruction was to annotate the plays using emojis only. The results of the two experiments show that this instruction was circumvented, but this did not seem to be seen as transgressive by the student viewers. When asked about this, the students justified their choice by the lack of emojis in the application and their desire to annotate as closely as possible what they were feeling. This demonstrates the need to scale the emotion in order to describe it. Camille Alloing and Julien Pierre's work on the use of emojis on Twitter reinforces our point : 'Emojis, as emotion words, are used here as modelizers (i.e. to signify the intensity or direction of an affection)'[10](Alloing et Pierre 2021, 290-291). Indeed, the results

[10]Personal translation from French: "Les emoji, comme mots-émotions, sont donc ici utilisés comme modalisateurs (c'est-à-dire pour signifier l'intensité ou l'orientation d'une affection). […] Nos résultats

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of experiment 1 highlight the collective and instinctive use of the free annotation to add one or more emojis: there were 69 comments, 55 of which consisted solely of lines of emojis, or a single emoji not included in the panel proposed by e-spect@tor, representing 79.71% of the free annotations. In experiment 2, we found 25.42% of free annotations, all of them verbal, which also highlights the need to organize gradually the emotions felt, through the combination of onomatopoeia (free annotation comments) and annotation with emojis to evaluate their emotions and judgements. This correlates with what Etienne Candel and Gustavo Gomez-Mejia call the 'performance indicator', which is no longer just the like (Candel & Gomez-Mejia 2016) but also the 'emotive words', to use Laurence Allard's term[11].

At first glance, the difference seems to be linked to the viewing medium: experiment 1 was carried out on a tablet, the keyboard was similar to that of a smartphone's, i.e. with direct access to emojis, which was not the case in experiment 2 carried out on a laptop. However, the comment annotation also includes direct and indirect addresses, questions and empathy markers that demonstrate the need to communicate.

We can assume that the question asked by a pupil in experiment 1, 'Why were you laughing ?' is addressed to other pupils heard laughing in the room, marking the collective aspect of the experiment and the impact of the reception of others on individual reception, whereas the injunction (from this same pupil) 'Catch her' is directed at the actors in action on the stage. Similarly, empathetic comments such as 'so sad', 'so harsh for a poor boy' 'so tiring'[12] refer to oral comments that would probably have been whispered into the ears of the people sitting next to them in a convivial setting. The desire to share the experience of live performance in Experiment 2 was also seen in the classroom: one pupil turned to the accompanying adult placed behind him to comment on the amusing action that had just taken place, another asked the teacher to come and watch with her to show her an extract that she found particularly amusing, then realized that she could not go back (because of the performance mode). This need to share the experience of the theatre, signaled by the verbal annotation, resides in its collective dimension in the context of the classroom, putting into practice what several directors of independent theatres and mediators interviewed about audience practices in Buenos Aires call the 'need to get together', 'to share together' or even the need to 'form a tribe'[13] around the theatre. Thus, it raises the question of the need to make an individual digital experience collective once again.

montrent que, du point de vue des organisations, les emoji sont un élément grammatical utile pour leur communication affective numérique, pour réguler l'affection des publics (mots-émotions) ou pour favoriser l'attachement affectif et la circulation des affects (mots-images)."

[11] Allard, L. (2014, June 18) "Emoji, le « mot-image » de la culture mobile, signe métisse du smartphone aux objets connectés" blogpost MOBACTU / by @laurenceallard – Page 2 – Blog de recherche sur les usages du numérique et du smartphone dans le monde, https://www.mobactu.org/page/2/, retrieved January 13, 2025

[12] Personal translation from Spanish: "que triste", "que violento por un pobre chico", "que cansador".

[13] "La necesidad de reunirse", interview with Guillermo Zuloaga, director of the theater Dumont 4040 (09/12/2024, in Dumont 4040) "hacer tribu", interview with Pierpaolo Olcese director of the theater Galpón de Guevara (09/13/24, in Galpón de Guevara), "una pequeña comunidad" "la experiencia de ser espectador con otros" interview with Florencia Feijoo from the Programa de formación de Espectadores of the Ministry of Education of the Federal Capital of Buenos Aires (10/22/2024, in Teatro San Martin).

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3.3 Annotation using emojis: individual annotation and social emotion

In experiment 1, the observation of the annotations made by the student viewers revealed the messages they found problematic. The play is a reinterpretation of Homer's *Odyssey* in which the scene of Ulysses and his sailors arriving on the island of the Cyclops is used as a pretext to evoke and denounce European migration policies in the Mediterranean basin. In this classroom, which included several pupils with complex migratory backgrounds, the annotation of several different emojis highlighted some misunderstandings. Looking at this data, we decided to go back over this fragment of the play orally and collectively with the students, and to leave room for questions. These were also related to civic education issues: are we making fun of the characters? Can we laugh at this scene? Is the scene racist? Given the importance and seriousness of the subject, perhaps we would naturally have returned to this question, but the clear evocation of emotions such as empathy, sadness and disgust caught our attention.

Similarly, the demonstration of a scene of intimacy – and more clearly, the evocation of a form of sexuality – between Ulysses and Calypso (Calypso is represented by a bowl filled with water and foam in which Ulysses is immersed), generated unease on the part of several pupils, who kept quiet during the collective feedback. However, the emoji annotation revealed what Véronique Christophe calls 'negative emotions' (Christophe 1998), such as 'shame' – or 'discomfort' – and 'disgust', which was ultimately Ulysses' infidelity (empathy for the character of Penelope who is desperately waiting for him who, according to the pupils, meets many women along the way). According to Véronique Christophe, when 'the situation is judged to be negative: the event can be judged to be stressful, painful, threatening or dangerous'[14]. (Christophe 1998, 23-60). This negative charge showed the weight of family and cultural norms in the reception of an activity that sets different standards to those of the pupils. The disconnection between the subject's emotional schemas and the information they are given in the show creates a gap that generates negative emotion. 'In this case, the emotion is a direct function of the subject's social norms' (Christophe 1998). Furthermore, the written activity carried out by the students immediately after seeing the play did not mention these two negatively experienced sections. As a result, without using e-spect@tor we could have overlooked these scenes judged as problematic by some pupils, thus giving them the impression of not being heard or that their emotions were not valid in the more general treatment of the play as a comedy.

4 Conclusion

To conclude, the digital tool e-spect@tor enables an initial spectator experience, highlighting the material and vectorial dimensions of theatre as a living art form, rather than as a literary genre. Through its performance mode, users become aware of certain conventions and codes inherent to the status of a spectator of live performance. Moreover, for audiences unfamiliar or untrained in theatre, taking individual

[14]Personal translation from French: "Dans ce cas, l'émotion serait directement fonction des normes sociales du sujet. […] (c) la situation est jugée négative : l'événement peut être jugé stressant, douloureux, menaçant, ou dangereux".

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emotions into account in the analysis of performances appeared to strengthen the learning of theatre-related knowledge—particularly when we were able to carry the experience all the way through. In *the second experimentation, this* approach allowed us to identify key concepts to be addressed, offering young audiences interpretive tools to understand their emotions and to enrich their reading of the performances they watched.

Finally, for all the teachers with whom we collaborated—both in these two experiments and in subsequent ones currently under analysis—the e-spect@tor tool proved useful in addressing broader, less explicitly targeted educational themes in a transversal and empirical way. These include moral and civic education, digital citizenship education, as well as affective education and the development of empathy among student-spectators, through the individuality of the collective experience.

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