

Electronic Literature and Biocultural Diversity: BVBEL RÉVOLU TION, a Heterolingual Research-Creation Project

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ABSTRACT

BVBEL RÉVOLU TION (<https://babel.utc.fr/>) is a creative project developed by a multidisciplinary team and inspired by a research question about the link between biodiversity and linguistic and cultural diversity. In a movement between scholarly imaginaries and writing practices, this creative practice-based research project has led to the development of a rhizomatic online participatory work. The first part of this paper presents the theoretical framework that informed the project, at the crossroads of sociolinguistics, literary and didactic plurilingualism, and environmental issues. The second part analyses digital works dealing with similar questions, while the third presents the design and development process of BVBEL RÉVOLU TION. The work seeks to create a space conducive to the emergence of a contributory narrative by bringing into contact languages and cultures, social and biological aspects, with an aim that is at once literary, scientific, and pedagogical.

KEYWORDS

biodiversity, linguistic diversity, sociolinguistics, plurilingual pedagogy, practice-based research, participatory narrative

RESUMO

BVBEL RÉVOLU TION (<https://new.babel-revolution.fr/>) é um projeto criativo desenvolvido por uma equipa multidisciplinar e inspirado por uma questão de investigação sobre a ligação entre biodiversidade e diversidade linguística e cultural. Num movimento entre imaginários académicos e práticas de escrita, este projeto de investigação baseado em práticas criativas conduziu ao desenvolvimento de uma obra rizomática participativa em linha. A primeira parte deste

artigo apresenta o quadro teórico que inspirou o projeto, no cruzamento da sociolinguística, do plurilinguismo literário e didático e das questões ambientais. A segunda parte analisa obras digitais que tratam de questões semelhantes, enquanto a terceira apresenta o processo de concepção e desenvolvimento de BABEL RÉVOLUTION. A obra procura criar um espaço propício à emergência de uma narrativa contributiva, pondo em contacto línguas e culturas, aspectos sociais e biológicos, com um objetivo simultaneamente literário, científico e pedagógico.

PALAVRAS-CHAVE

biodiversidade, diversidade linguística, sociolinguística, pedagogia plurilingue, investigação orientada para a prática, narrativa participativa

INTRODUCTION

According to the latest United Nations report on biodiversity, the world will lose one million species in the upcoming years. In parallel, it has been demonstrated that the degradation of biological diversity has a negative effect on cultural and linguistic diversity, as declared by UNESCO” (*Manifesto on Biocultural Diversity*, 2019). Indeed biodiversity and cultural diversity are closely connected and languages themselves could be understood as constantly moving and evolving systems in constant evolution in a living environment (Bulot and Blanchet, 2013). This paper argues that literature is not only a privileged place of action in resisting the degradation of linguistic and cultural diversity, but can also act as a powerful tool in highlighting the latter’s link with biodiversity. After a brief theoretical introduction, we focus on how electronic literature in particular can perform an ecological approach in the tradition of environmental literature (Buekens, 2019) to raise awareness of this link and invite a reflection on, and a form of resistance to, the degradation of biocultural diversity. We present a small selection of relevant works before elaborating on the creative process of ours, BVBEL RĚVOLUTION developed through practice-led interdisciplinary research.

1. THE DIVERSITY PARADIGM IN LIFE SCIENCES AND LINGUISTICS

The *Manifesto on Biocultural Diversity* (2019) emphasizes that biodiversity and cultural diversity are intimately related and interconnected:

As indicated by recent research, there is an important decline in biocultural diversity across the globe. [...] Cultural practices and knowledge systems transmitted through language and linguistic cultures impact us either positively or negatively, as well as our approaches to preservation of the earth’s resources and biodiversity. This is why we urgently have to transform cultural practices and develop a language of sustainability and coexistence that can have a chance of positive outcomes. (*Manifesto on Biocultural Diversity*, 2019)

For example, in Mexico, the loss of knowledge about medicinal plants is a direct consequence of the disappearance of vernacular languages:

nuances in the knowledge about medicinal plants and their use disappear when indigenous youth in Mexico become bilingual without teaching in and through the medium of their own languages — the knowledge is not transferred to Spanish which does not have the vocabulary for these nuances. (Skutnabb Kangas, 2003)

The emphasis on biocultural diversity is based on the scientific observation of the benefits of diversity in life sciences as a warrant of the proper functioning of biological systems (Hamant, 2022). Based on the study of plants and living processes, he suggests that this diversity could also guarantee the proper functioning of technical and socio-cultural systems, such as communication. Similarly, Picot and Guillaume (2023) highlight the fact that standardisation, the introduction of a single norm seen as optimisation, goes against diversity. Picot and Guillaume focus on technological diversity, but the same applies to languages, where the imposition of a single language or linguistic norm is in tension with the promotion of linguistic and cultural diversity. The latter seems indeed in as rapid a decline as biodiversity:

There are 6-7,000 spoken languages [...], and maybe equally many Sign languages:

- The median number of speakers of a language is estimated around 5-6,000;
- Over 95% of the world's spoken languages have fewer than 1 million native users;
- Some 5,000 spoken languages have fewer than 100,000 speakers. (Skutnabb Kangas, 2003).

The figures given in the UN report on food and agriculture reveal an equally vertiginous decline in biodiversity:

- Of 6 000 plant species that have been cultivated for food 9 account for 66% of total crop production ;
- Of 7 745 extant local breeds of livestock reported globally, 26% are classified as at risk of extinction ;
- Bee-colony losses are on the rise; 17% of vertebrate pollinator species are threatened with global extinction.
- Global forest area continues to decline, although the rate of loss decreased by 50% in recent decades. (UN, 2019: 9)

As a response to these facts, our project BVBEL RÉVOLUTION (<https://babel.utc.fr/>) is a reflection on potential ways in which digital literature can support biocultural diversity.

The coincidence of struggles formulated by The *Manifesto on Biocultural Diversity* is part of what Jucquois (2000) calls the “episteme of diversity,” a cross-paradigm that links life sciences and language sciences, among others. Since the 1970s, a commitment to ecology and a commitment to plurilingualism and interculturalism have evolved in parallel. Language family, living language, revitalisation of languages: biological metaphors are multiplying in sociolinguistics, highlighting the so-called biological and ecological approaches. Known as “language ecology, linguistic ecology or ecolinguistics” (Lechervrel, 2010), these approaches borrow epistemological terms from the life sciences to explain how linguistic systems function and how languages evolve. The American sociolinguist Haugen laid the foundations of ecological linguistics with his conceptualisation of the “ecology of language” (1971). French sociolinguists have theorised the ecology of languages of the world (See *Pour une écologie des langues du monde*, Calvet 1999) through their contextualised study in their environment, uses and practices, far from the normative and prescriptive linguistics of school grammars and the ideology of state monolingualism in France, which values a single standard (Gadet, 2003).

This epistemological approach of ecological sociolinguistics is in line with the paradigm of diversity in language pedagogy, which emerged in the 1990s with theorists such as Dabène (1994). It proposed a more open approach to the teaching and learning of languages, valuing the multiplicity of languages in the learners’ “linguistic repertoire” (Coste, 2002; see also the review article on this concept by Dufour, 2014), as well as the languages present in the classroom. While at the beginning of the 20th century, direct methodology prohibited the use of the first language (Puren and Galisson, 1988), the so-called pluralistic approaches to languages aim to enhance plurilingualism through teaching methods such as integrated didactics, language awareness, intercomprehension, and interculturality (Candelier, 2008; also see CARAP on European Center for modern languages). However, this enhancement takes place without exoticising or stigmatising diversity or essentializing culture, and speak instead of “diversity of diversity” (Debono, Huver and Peigné, 2013). These approaches form part of an educational policy of “linguistic revitalisation” based on “work on the language and its conditions of use, such as adding new linguistic forms or social functions to a beleaguered minority language with a view to multiplying its uses and the number of its speakers” (King, 2001: 23, quoted by Costa, 2010, our translation).

Our online participatory work, BVBEL RÉVOLU TION (henceforth: BR), offers a space of expression to a multiplicity of voices in a variety of languages. As Martinican poet Edouard Glissant, one of the great thinkers of *créolité* and theorist of the “Tout-Monde” said, it is no longer possible to write without acknowledging the presence of all the languages of the world (Glissant and Gauvin, 2010): the heterolingual literature — which is defined as the co-presence of different languages in the same text, following a linguistic reality in which languages exist as a continuum, rather than as separate systems (Suchet, 2014) — bears witness to this. Even the institutional French-speaking world (OIF, AUF) is opening up to this plurality of voices and languages (Blanchet & Martinez, 2010) after a French colonial policy of imposing the French language in France and in the colonial empire.

BR emphasizes this linguistic continuum as a space of diversity and invites to draw on its richness as a way of resisting reductive standardization on both language and its referents. We position this work as an environmental writing, defined above all by ethical and thematic criteria, in the tradition of nature writing and American ecocriticism (Buekens, 2019). Building on the threefold theoretical framework of the ecology of languages, pluralistic approaches to languages and culture, and heterolingual literature, BR proposes an ecological metaphor to experiment with the link between ecology and ecological linguistics through electronic literature.

2. DIVERSITIES IN DIGITAL LITERATURE

Electronic literature, and digital media in general, might be seen as a homogenizing space (Flores, 2021): global platforms and widely available tools enable authors and other content creators to gain access to international audiences and facilitate cultural homogenization. Artificial intelligence and the large language models (LLMs) it has enabled now generate fresh anxiety about the future of languages and writing as they dispense authors of any linguistic effort, thereby also doing away with any form of linguistic originality, creativity, and hybridity, mostly producing linguistically as consensual texts as possible. Already powerful large languages and the standard variety of each language also enjoy a clear advantage at the expense of others (Larsonneur, 2021; Raus *et al.*, 2023), which can accelerate their colonization of the digital space thanks to the easy and intensive automatized text production and threaten multilingualism (Moorkens, 2022).

If this danger of automatized mass production combined with global reach is real, artistic and literary projects can counter them precisely by continuing to highlight the creative potential of digital technology.

They can, on the one hand, build on local and less known traditions and modes of expression, maintaining them in a dynamic cycle of transmission (Fülöp, 2018), and on the other hand, take advantage of the flexibility of the technology to remix, combine, rethink, and revive them, including through encounters with other traditions and modes of expression. Linguistic variation, code switching, and plurilingualism are much better accommodated for by digital spaces than by print (Moïse, 2021), as are interactivity and collaborative writing across borders, linguistic and geographic, and the web can also represent a relative safe space for such practices, less controlled by institutional controllers of correctness (Feussi and Lorilleux, 2020). Before moving on to BR, let us see a few other works that gesture towards diversity through the rich linguistic and ecopoetic potentials of digital media.

Although without a direct link to biodiversity, the work of Annie Abrahams is perhaps the one that plays most on plurilingualism and is best known for this aspect. Her various net art projects and performances are, among other things, about care and connection, with, through, or without language. Linguistic “identity” does not imply a single linguistic norm here, but highlights an organic entanglement of languages. She allows languages to meet and mix without boundaries, in projects like *The Reading Club*, co-created with Emmanuel Guez¹, letting new languages emerge from the encounters — just like new forms of life and expression are born from new encounters and evolving environments, rather than simple self-contained mutations.

“Being human,” Abrahams’s longest series, highlights the vulnerability of humans, our desire to be understood as well as the importance of listening. Her *from estranger to e-stranger: living in between languages*² goes the farthest in highlighting the importance of language in its organic, hybrid, symbiotic form for “living together” (while the online meeting-performances called *Utterings*³ experiment with distant communication without words). The emphasis is in all cases on entanglement and on “staying with the trouble” (Haraway, 2016), of language and/or Otherness — in oneself and in the others — and we can extend this attitude beyond humans.

1 For example <https://readingclub.fr/events/5956491d9da50cf70d000004/0/text>.

2 <https://e-stranger.tumblr.com/>.

3 <https://utterings.hotglue.me/>.

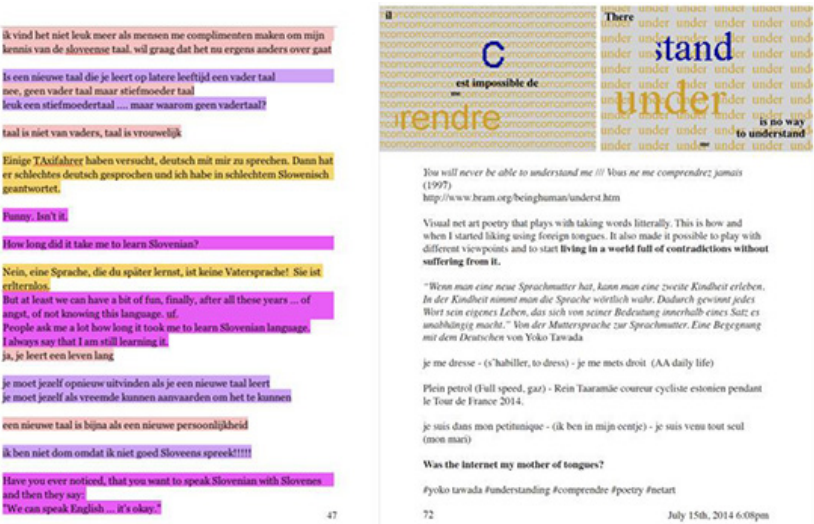


Fig. 1: (E)stranger, Annie Abrahams

Amira Hanafi’s *CreaTures Glossary*⁴ offers another experiment with collaborative work on language and ecological thought and action. Although in English, the website invites a discussion about key terms and language that can pave the way to a different way of thinking of the relative place of humans. The participatory glossary also emphasizes the reality of entanglement and a posthumanist perspective of ecological attention:

Entanglement: Messy or differently ordered relationships between us, creatures, materials, and geographies that are carried as things move through the world. multiple facets intertwined, complexity of relationships between ideas and objects The complex interconnections between living things and matter that structure everything around (within, and outwith) us. Different layers of relationships between creatures, things, and ideas. The multiple, overlapping threads of life, culture, story that make up our worlds Overlapping, multiple, intertwined layers and connections between creatures, materials, and geographies.

Multi-species: Acknowledgement of, allowance for, and engagement with the agency of other beings a recognition of the diverse species whose lives and livelihoods are entangled within an ecosystem but even on and without our human bodies a world where all species cohabit with equal attention. (<https://glossary.languagin.gs/>)

Her definition of “sustainability” emphasizes that ecological and social sustainability can only work in conjunction.

4 <https://creatures-eu.org/productions/glossary/>.

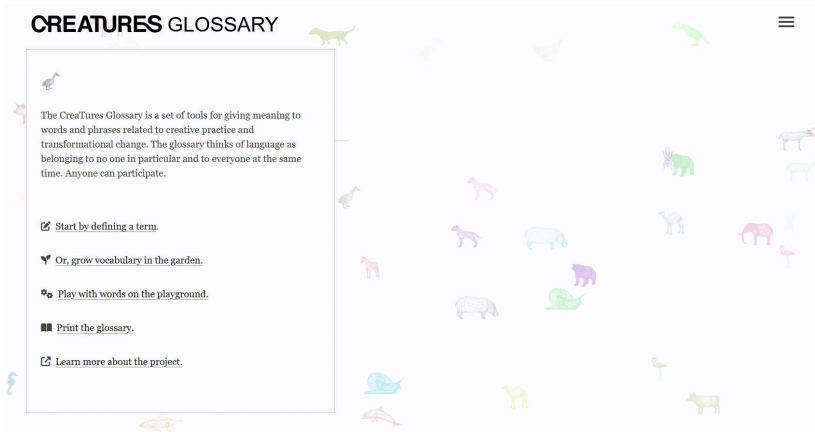


Fig. 2: Creatures Glossary, Amira Hanafi, <https://glossary.languagin.gs/>

Other works tackle the topic of the ecological crisis and biodiversity, but without reference to multi- or plurilingualism. *Amazon* (<http://motorhueso.net/amazon/>, 2018), by the Mexican artist Eugenio Tisselli, for instance, deals with the destruction of the Amazonian forest. “What is destroying the forest? it is the capitalist algorithm, executed by fascist war-men/machines. Delete the algorithm from bodies and minds, smash the killer machines!” This is a minimalist piece with only a few lines of highly efficient code to copy and paste in a local html file and run from a browser. The trees progressively — and with an increasing speed — transform into numbers. Through its approach to code and its relationship to real-world processes, this work performs and highlights the complex relationship between ecological issues, code, and computers⁵.

Alinta Krauth’s recent *The (m)Otherhood of Meep (the bat translator)*⁶ proposes a form of poetic interspecies translation to highlight the presence of, and danger to, flying foxes, a bat species the artist has worked with closely. Her work captures the sounds emitted by the bats and, using a carefully constructed database of sound samples and scientific research on the communication of these animals, translated them into poetic human language. The work thus proposes new ecological use of AI that can help interspecies communication and cohabitation⁷.

⁵ <http://wg20.criticalcodestudies.com/index.php?p=/discussion/61/week-1-amazon-html-by-eugenio-tisselli>.

⁶ <https://www.alintakrauth.com/#!portfolio>.

⁷ <https://starts-prize.aec.at/en/the-motherhood-of-meep/?fbclid=IwAR3n-xThR3AZo1g6log-b2rSinFVlWbAROp11NRHrPtIFLLfnEdpJIFozWo>.

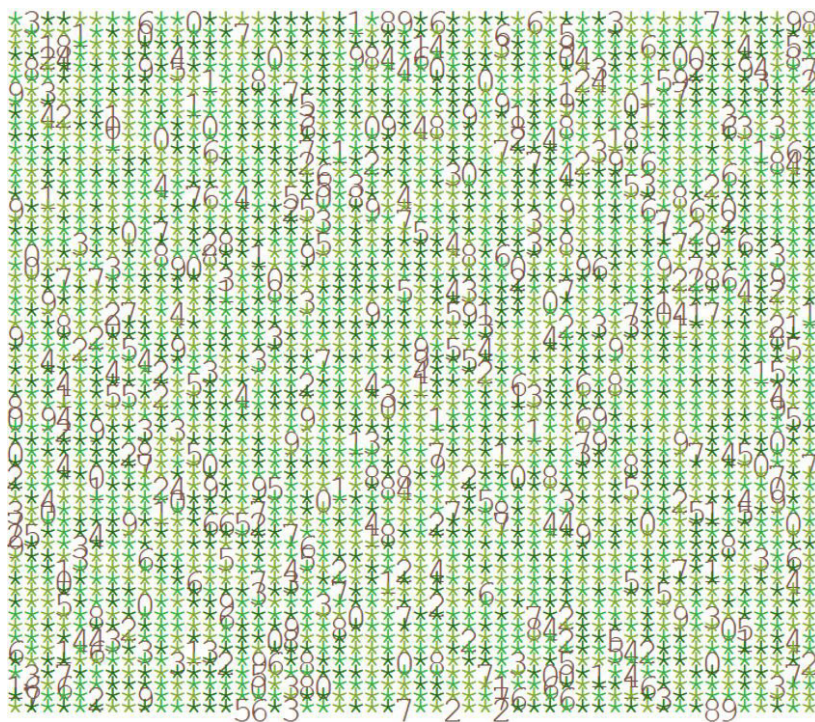


Fig. 3: *Amazon*, Eugenio Tisselli, 2018.



Fig. 4: *The (m)Otherhood of Meep (the bat translator)*, by Alinta Krauth (<https://www.alintakrauth.com/#!portfolio>).

Last but not least, *Les évaporés*⁸ by Ed Snowcrash is an interactive multilingual investigative story in French, English, and Esperanto, among other languages, conceived as part of the solarpunk movement. It won the

⁸ <https://evapores.fr/>.

multimedia prize of the *Concours Inalco de la nouvelle plurilingue 2022*⁹, which imposes the constraint of using more than one language and which focused that year on the topic of *Langues en germe* (“Budding languages”) (Combe, Cros and David, 2022). Combining the idea of alternate reality games and *Capture the Flag*, the work invites the reader/writer to find a protagonist who disappeared through the digital traces left on social networks. The search for clues in heterolingual and multimodal posts helps to involve the reader in the heroine’s quest for meaning. The heroine’s use of Esperanto is a sign of the emergence of a possible alternative reality, promoting greater harmony between people but also between human beings and nature.

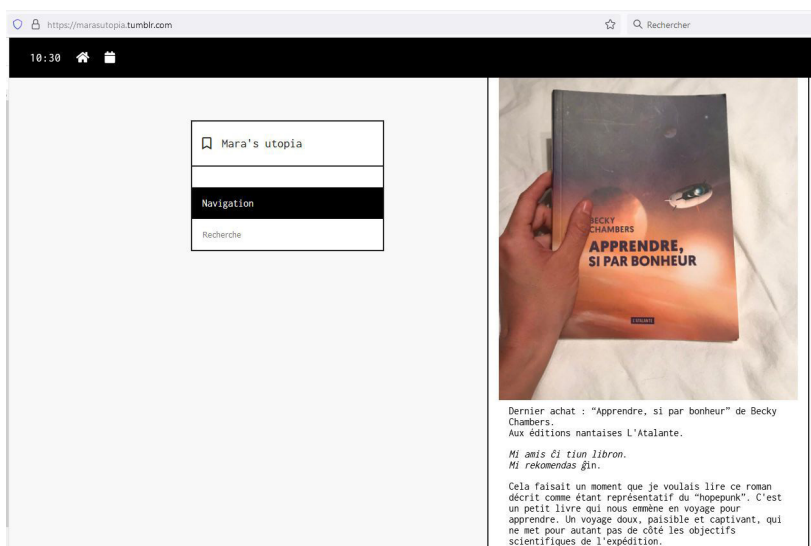


Fig. 5. Les évaporés, by Ed Snowcrash, winner of the Inalco Digital Short Story Prize 2022, Digital Writing Special (<https://evapores.fr>).

The competition was organized by Isabelle Cros, who then initiated a collaboration to respond to the same challenge with Serge Bouchardon, joined by Erika Fülöp, Simon Renaud, and software engineering students at the *Université de technologie de Compiègne*. The threefold challenge was identical to that imposed on *Les évaporés*: linguistic (writing in more than one language), thematic (addressing an environmental issue), and technical (conceiving a digital piece appropriate to the task and at low ecological cost). This collaboration gave birth to BVBEL RÉVOLU TION.

9 <https://concoursdelanouvelleplurilingue.com/>.

3. BABEL RÉVOLUTION: LINKING DIVERSITIES IN A CREATIVE COLLABORATION/DESIGN PROCESS

BR (<https://babel.utc.fr/>) is an online participatory work which aims to invite reflections on the importance of diversity from an ecological, linguistic, and cultural perspective. It was created through an interdisciplinary collaboration informed by research in sociolinguistics and plurilingual pedagogy, involving researchers in didactics, contemporary literature, communication science, design, and students in software engineering. The piece queries the connection between the loss of flora and the disappearance of languages through a multi-voiced narrative and opens up to a wider linguistic diversity than that of its creators. It is also an experiment on how digital participatory narratives translate in different areas, people, and cultures through artistic expression, and on how they can facilitate the crossing of boundaries of all sorts.

A narrative framework for plurilingual contributions

In a dystopian world inspired by Orwell's 1984, Damasio's *Hauts® Parleurs®*, and the philologist Victor Klemperer's notebooks, *LTI* (1947), analysing the rise of Nazism through the evolution of the German language, a resistance movement is growing against a political regime that applies a monolingual policy impoverishing both language and the natural world and contributing to the disappearance of words as well as of the reality that they shape and refer to. Voices are invited to be raised in online posts, in any language. The posts respond to central decrees or previous posts, immediately connected with them and constituting a network that grows in the form of a dynamic graph. Will this polyphonic collective of rebels succeed in overthrowing the regime of monoculture and monolingualism? The outcome depends on the contributions (with several alternative endings) and is established by the session leader.

This narrative framework is based on a critique of the monolingual ideology and of the universal language, this utopia of communication which is not necessarily productive, as evidenced by the fact that international tensions are not reduced with the development of a global English. It also highlights the pertinence of Wittgenstein's observation that "the limits of my language mean the limits of my world" (Wittgenstein, 1922).

The narrative invites contributors to choose their position between resisting the regime, supporting it, or neither of those clearly defined camps. While the history of intercultural communication has been fraught with a tension between a (European-centric) humanism that called for a universal language in the name of a common good and as a supposed guarantee of peace and inter-comprehension, from Renaissance humanists through

the revolutionaries who fought against regional languages in France to supranational organizations such as Unesco, and a form of culturalism that respects the diversity of languages and cultures, such as the Council of Europe's project (Beacco, 2005), also criticized for its angelism (see the debate between Forlot and Maurer, 2012), this opposition runs the risk of being reductive. In their posts, the contributors are invited to engage in complex thinking that connects issues rather than forcing them into binary oppositions (Morin, 1995), while also making the link between the question of biological diversity and that of cultural and linguistic diversity. The piece thus both promotes contact between languages in a variety of ways, from translation to code-switching and to translanguaging (Vogel and García, 2017) and offers a rhizomatic user space of interactions facilitating the emergence of a collective intelligence.



Fig. 6: Two posts in BABEL RÉVOLUTION (ELO Coimbra session)

In this vein, BR can also be considered as creative space for collaborative speculative fiction in Donna Haraway's sense, who observes that "[t]he worlds of S[cience] F[iction] are not containers; they are patternings, risky co-makings, speculative fabulations [...]. It matters which ideas we think other ideas with" (Haraway, 2016: 14).

Creative and design process

BR's design was guided by three main objectives: to produce an interactive and evolving story, to provide an easy way to understand context for the story, and to incite the audience to write. This required addressing a number

of design challenges, including collecting plurilingual messages, permitting the co-construction of the story through them, and presenting the evolving narrative using a dynamic graph that helps the interpretation.

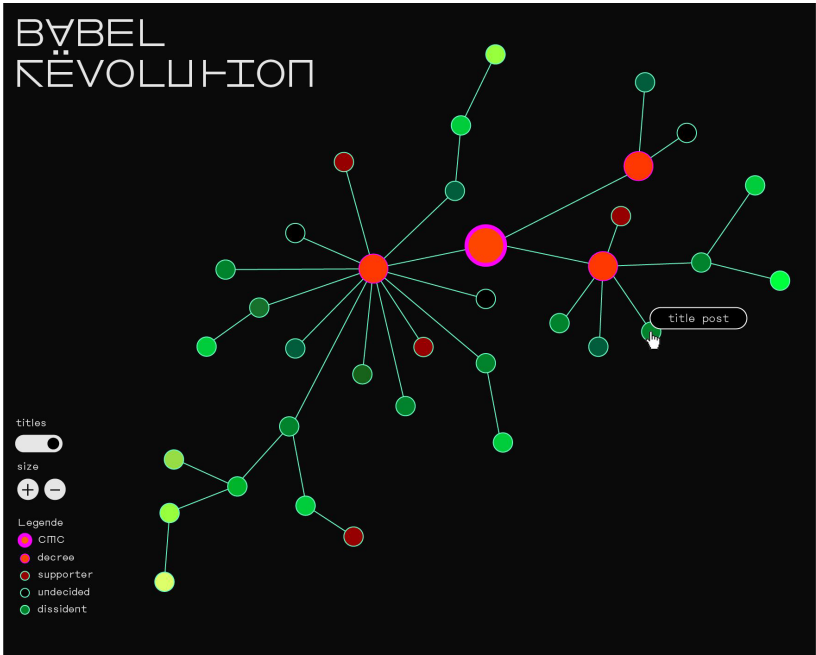


Fig. 7. Visual design of the graph

Our design choices (see fig. 7) were accordingly guided by functional considerations to optimize reading and interactions, ensuring a smooth text flow and rapid comprehension, also taking into account the most common interactive gestures (Bouchardon, 2014), while also aiming at minimalism. Each element must be reduced with the goal of optimizing overall readability. The variations of typographic elements are minimized (see fig. 8), hierarchical levels are distinguished with a single graphic solution (indentation or font size), without any additional ornamentation. This minimalist perspective was motivated by an eco-friendly ethic, which also guided other graphic as well as technical choices aiming at an overall lightweight design to limit the energy footprint (dark background, absence of images or video media, a typography with minimal weight (see <https://alterytype.fr/>)). The website was developed using open-source languages such as HTML, CSS, and JavaScript, and graphics are generated through code rather than image files for lower energy consumption.

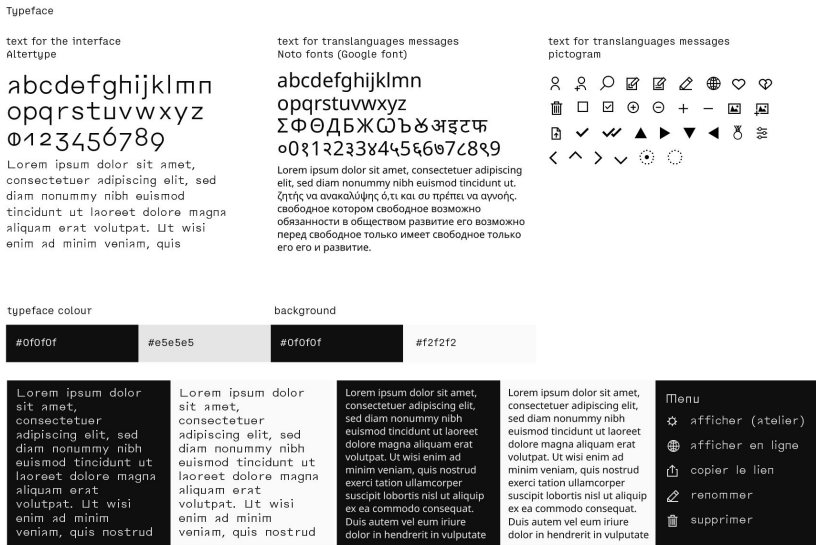


Fig. 8. First choice for functional elements (typeface & colors)

The graph itself combines two levels of reading: a micro level that aligns its form with the users' choices and thereby presents the evolution of the story; and a macro level that gives a global impression, more open to interpretation. Users can also "read" the narrative through the graph in a variety of ways, as the graphic image conveys information beyond formal notation, suggesting an association with plant biology. This only works, however, as far as the shapes are widely recognizable (i.e. they evoke plants) and that the addition of new contributions is also indicated. The color choices are also oriented towards iconic representation through the resemblance with the natural environment, drawing a parallel between the degradation of biodiversity and the degradation of linguistic and cultural diversity through the green color as a reference to healthy plants and red suggesting their degradation due to drying, burning, or disease (see fig. 9).

The idea of multiple levels of reading was also inspired by Johanna Drucker's (2014) distinction between notation (*mathesis*, or formal language) and inscription (*graphesis*, its form). The graph invites the user to consider both the abstract structure and its singular material trace, both the universal and localized cultural assertions, open to both an interaction with, and a reflection on, the object and the interactions that it represents.

A creative literary device for writing workshops

Combining theoretical reflections on the diversity of languages and the creative practices of heterolingual writing, BR is part of a research-creation approach, where the two activities [of research and creative practice]

intersect, touch, even hybridize, summoning each other without merging into the same indistinct entity. However, when the two activities are placed in close proximity, they become part of an ambiguous organization in which we no longer know whether it is the research that enables the creative practice or the creative practice that enables the research (Paquin and Béland, 2015: 2, our translation).

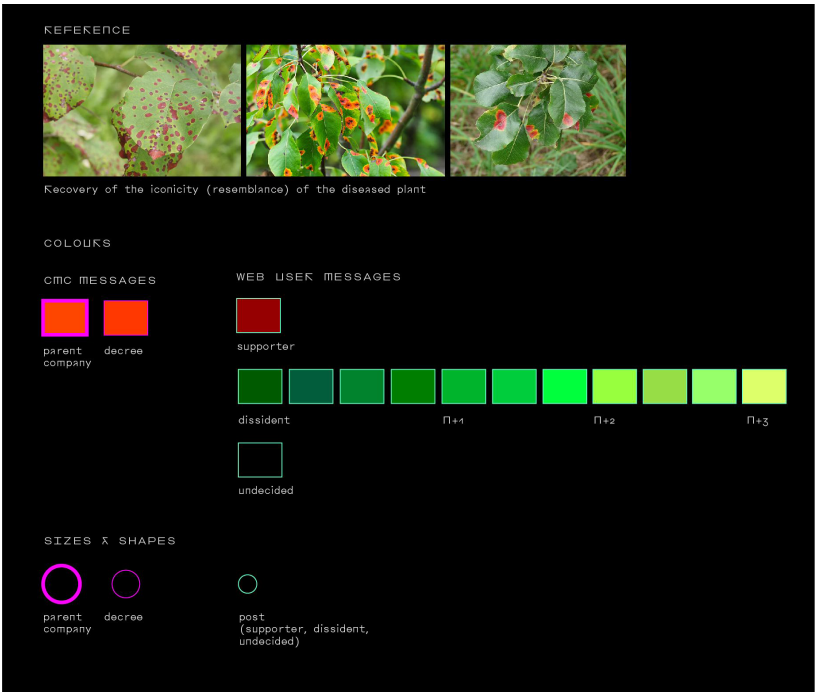


Fig. 9. Recovery of the iconicity (resemblance) of the diseased plant

The work makes it possible to think about the links between linguistic and ecological diversity through a collaborative process that goes beyond the initial co-design team. Writing workshops managed through the administrator interface can invite participants to engage in a performative reflection on multilingualism, as well as on the implications of a simplified universal language. The contributions might take the form of argumentative discourse or be more creative, literary. Each workshop or writing session is a collective “revolution” in the search for ways in which languages can coexist through mediated interactions.

The development of BR is still in progress, and we have involved users in this process. We tested the initial beta version in a workshop, in line with the principles of the agile / SCRUM methodology focused on the user experience through “agile mix,” or sprints. The first sprint took place in

Aix-en-Provence in June 2023, as part of the “Lire et écrire entre les langues” (Reading and writing between languages) conference (LEEL conference, June 2023, <https://babel.utc.fr/completed/74>). The one-hour workshop involved 14 participants, mainly academics in languages and literature, and/or workshop leaders. Following the experiment, we collected immediate verbal feedback, as well as sending participants a written questionnaire.



Fig. 10: Workshop, Aix-en-Provence, June 2023

A second workshop has taken place in Coimbra, Portugal (ELO conference, July 2023, <https://babel.utc.fr/completed/98>). On the occasion of this conference, we also tested the work through an open session in the framework of the “ELO Coimbra Exhibition” (cf. fig. 11), which allowed visitors to contribute to an ongoing “revolution.” This session remains open and available to visitors of the project website.

These workshops had a heuristic dimension and raised several new perspectives and questions, including whether we should move more towards role-playing (using avatars with pseudonyms that users would keep throughout a session, or even a role that everyone is assigned at the beginning — but how to avoid caricaturing positions and arguments?); whether we should slow the movement of the dynamic graph and concentrate more on the texts and their readability (some participants found that the graph moved too quickly as a result of contributions in synchronous mode); and whether we should add the possibility of contributions in media other than text (pictures, voices... this would allow us to work on the visual and auditive dimensions of language, but it would also run counter to the choice of a lightweight minimalist design).



Fig. 11: BYBEL RÉVOLUTION at the ELO 2023 exhibition (Coimbra, Portugal). Credits: ELO 2023 organizers

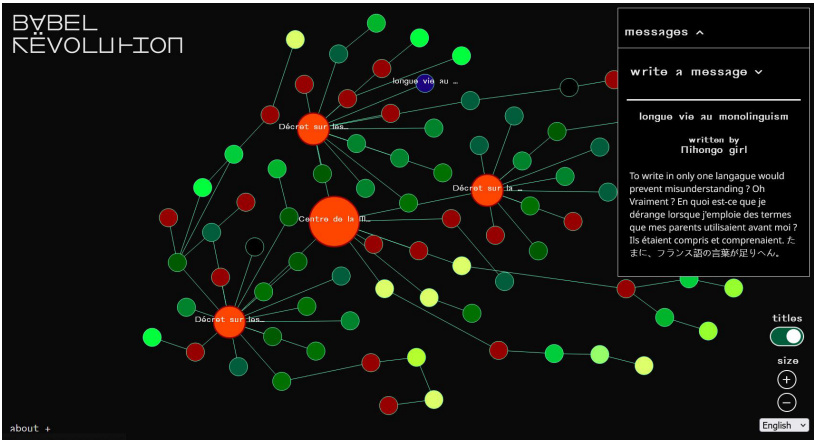


Fig. 12: The Aix-en-Provence workshop's final graph

CONCLUSION

This collaborative project started with a research question and a creative challenge, aiming to highlight the link between biodiversity and cultural and linguistic diversity, and exploring the ways in which the cross-cutting issues of sociolinguistics and ecology can be transposed into a work of digital literature. In the spirit of practice-based research, the epistemological questions about plurilingualism in both its political and literary dimensions

have led to the collective development of an interactive participatory work combining a narrative framework and graphic interface designed to encourage heterolingual creative contributions that make users reflect on the question of biodiversity in relation to that of language(s) as well. The aim of BVBEL RĚVOLUTION was to provide a digital space for this relatively unexplored form of writing, at the crossroads of digital literature and environmental literature, to which we provided a handful of examples in the second part of this paper. BVBEL RĚVOLUTION was also conceived for educational purposes, in particular to develop digital literacy in the classroom in a more creative form, through digital writing workshops. Its refinement is still in progress as we continue to seek user feedback from writing workshop leaders and participants, including teachers, researchers, and language learners.

Indeed, along the way, the focus has shifted to the creative process, rather than the product. Beyond the website and workshop tool, the interest of this work lies for us in the way in which digital interactions were organized within an interdisciplinary team involving both confirmed researchers and students in a shared effort to meet the challenges of the project and think and work together creatively, “producing an idea that can be expressed in an observable form or making a production that is both innovative and unexpected, adapted to the situation and (in some cases) considered to have value,” to quote Bonnardel’s definition of creativity (Bonnardel, 2002: 95).

The links between the ecological and cultural-linguistic diversity deserve to be explored further, and we propose to continue this work through workshops and technoliterary analyses of the products and the apparatus. We will continue to reflect on ways in which a digital interface can help to encourage plurilingual writing through translation across user contributions, transgressions of the dominant norm, orality, code switching, translanguaging, creation of a new language/new alphabet, multimodal writing, searching for a style of multilingualism to the point of opacity.

One of the challenges of the project was also to imagine a multilingual digital work that would take into account the environmental issues associated with digital technology, the ecological impacts of which are well known (Flipo and al., 2013). This was reflected in the search for low impact solutions. We have also incorporated this issue into the narrative, proposing that one possible outcome with the victory of the dissidents could be a form of disconnection from the Machine. To reinforce this coincidence between narrative and technology, we are working on an epilogue in an even more low-tech, minimalist version. Rather than offering a fully fleshed answer, this project therefore represents an ongoing and constantly renewed collaborative process also propelled by discussions with effective and potential users, in line with the work’s participatory spirit.

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