Article

Coolification and Language Vitality: The Case of Esperanto

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Abstract: Despite a relative positive revival in the digital age, Esperanto and the assessment of its language vitality is often problematic and prone to gross errors, and therefore a theoretical reflection is required. Unlike other lesser-used languages, Esperanto is intergenerationally transmitted mainly outside the family, and so Fishman's GIDS and subsequent scales such as the EGIDS cannot be applied straightforwardly for language vitality diagnosis and estimation. In particular, it is the social movement with its language activists who guarantee Esperanto vitality and development, for more than a century. A key aspect is the digital domain, where, paradoxically, the relatively good positioning of Esperanto in terms of new users does not imply a parallel increase in the number of activists. This paper critically assesses the digital language vitality of Esperanto on the basis of its language ideology and other sociolinguistic data as a starting point for a discussion to overcome the limits of Blanke's (2006) scale of language vitality of Esperanto and its rivals (in the sense of Garvía 2015). This assessment eventually leads to a more general reflection on the role of 'coolification', i.e., the positive effects on language attitudes and development due to digital visibility, its limits and the issue of placing it in the context of language vitality in general.

Keywords: language vitality; digital language vitality; Esperanto; coolification; intergenerational transmission.

1. Introduction

To what extent digital technologies foster the vitality of lesser-used languages is still unclear. Experiences from different languages throughout the world elicit good practices from which scholars and language activists published documents on how to take more effective action in the digital realm, such as the guideline prepared by the First People's Cultural Council (2010) for the indigenous languages and by the institute for endangered languages respectively (Daigneault et al. 2020). This paper aims to contribute to the ongoing discussion on the digital dimension of language vitality from the perspective of planned languages in general and Esperanto – the most developed one – in particular. Although rarely taken into account, planned languages offer an interesting case study as, by definition, they come into existence through the publication of a written standard variety. In the field of nowadays digital technologies, planned languages do not face many key issues other lesser-used languages have to overcome; we will briefly mention only the most evident issues (also, Astori 2018). First, there is no issue in finding – or deciding not to find – an orthography among different writing systems already spontaneously in use, as the ortography comes off the shelf since the start. Second, there is no need to choose or plan a prestigious variety, dialectical variation being either irrelevant (Esperanto) or totally non-existent (in the case of Esperanto rivals).

Apart from these rather technical traits, planned languages lack of any myth of ancestry and authenticity (for a sociolinguistic classification, see Stewart 1968). This fact has immediate consequences in the language attitudes of their speakers and their perception from an external point of view. First, planned languages are not linked to a particular territory, ethnic group, or past history. Second, first-language speakers – among planned languages, present only in the case of Esperanto – do not hold a special authority; in other words, there is no friction between 'the whole mystique of native speakers' already

questioned by Ferguson (1982) and new speakers. In fact, in the case of planned languages, all speakers are new – in the sense of 'post-traditional' used by Costa (2015) for Provençal. In particular, they are often involved in the production of original cultural products in the language, most notably original songs of various genres (from heavy metal to reggae). A possible exception are Esperanto family speakers, who are indeed a tiny minority, in quantitative terms (for a discussion, see Fiedler 2012). The peculiar status of Esperanto speakers is the source of its contestedness (in the sense of Tamburelli and Tosco 2021), e.g., it is accused to be "artificial", "dead" or "parasitic", not having prototypical monolingual speakers of its own.

This paper proceeds as follow: after a brief presentation of the language attitudes by Zamenhof, the founder of Esperanto (Section 2), and a summary of language attitudes speakers developed until today, which is quite different from Zamenhof's (Section 3), the paper illustrates the digital presence of Esperanto (Section 4) and discusses why the scales proposed for measuring the vitality of lesser-used languages cannot be used as such in the case of planned languages (Section 5). Finally, Section 6 draws insights from the case study analysis in the broader perspective of identity-building and language representation.

2. Zamenhof's vision for the international language

In 1887, Ludwik Lejzer Zamenhof published the structure of his language project in Warsaw in a small book in Russian, that eventually became known under the name of Esperanto (Zamenhof 1887). Originally, Zamenhof called his language project *lingvo internacia*, t.e. 'international language' (Gobbo 2016). However, for him, this expression does not refer to a language widely spread across the world and therefore it is used by native and non-native speakers to communicate, for example English or French, but to something more radical. Echoing the myth of the Tower of Babel, 'the human family was divided' and 'a never-ending war started' because of two causes: plurality of religions and languages (Dietterle 1929: 361). Therefore, in his conceptualisation, elaborated in his public speeches collected in Dietterle (1929), a "just" international language should be detached from ethnicity, i.e., it should not belong to any special people or ethnic group – he used the Esperanto word *gento*, recalling the Latin word *gens*.

The first target group of his interest were the Jewish people, Zamenhof being a *litvak* ashkenazi (Fishman 1996; Korzhenkov 2010), for whom he envisioned a reform of the Covenantal Judaism that he called Hillelism – see Schor (in press and 2010). Such an enlighted reform should act as a natural bridge between the Jewish and non-Jewish people, and this 'neutral ground' (*neŭtrala fundamento*, in Dietterle 1929: 314 et passim) should be realised under the form of 'round circles and temples', starting from the cities of 'neutral Switzerland' (in Dietterle 1929: 312 et passim). Hillelism was essentially a failure, and even Homaranism, the second version of the project – in essence a moral philosophy for the individual, close to Kant's categorical imperative – had no great fortune, neither among the Jewish people nor Esperanto speakers in general. Thus, already clearly in 1906 Zamenhof clearly disentangled the religious and linguistic aspects of his project, declaring that 'we should not intermix Hillelism with Esperantism! Both ideas are closely related one to the other, although not entirely identical' (in Dietterle 1929: 315, footnote *).

Zamenhof had no particular trust in politics and politicians, since he realised that ethnic conflicts are found both in empires, for example the Tsarist Russia and Austria-Hungary, and in nation-states – such as France or Germany. An indirect proof of this fact is his withdrawal from the Zionist movement already in 1882, when he was a university student.[1] Zamenhof formulated his political testament as an appeal to the diplomats, published bilingually in Esperanto and English, in which he advocated for the

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[1] In 1881, the Palestine option for settling the new state of Israel definitely overcame his political proposal, i.e., settling a state inside the United States of America on the river of Mississippi, similarly to what Mormons did in Utah (Esperanto version of the Russian original in Kanzi 1976).

'United States of Europe', suggesting a language policy of 'neutral names' of countries and cities in Esperanto across the continent in order to set a common linguistic ground for the new super-national institution to be formed after the end of the war (Zamenhof 1915).

In sum, the role of Esperanto envisaged by his founder, was to be a shield against 'chauvinism', that he considered a degeneration of patriotism, i.e., the 'natural love of one's country' (in Dietterle 1929: 382-383). The 'international language' should be a 'neutral-human ground', *fundamento neŭtrale-homa*, where individuals from different ethnic origins put their respective national identities in the background, forming literally 'one great familiar circle', *unu grandan rondon familian*, which is a key passage of his fundamental poem *La Espero*, The Hope (in Dietterle 1929: 586). In other words, Zamenhof's vision was that Esperanto should be a stepping stone for achieving human brotherhood beyond national identities, which was the core of first Hillelism and then Homaranism. Needless to say, he did not see his vision realised, and neither do we nowadays.

3. Esperanto in the 21st century: a language in search of an identity

What does remain of Zamenhof's vision in today'as Esperanto Movement is admittedly not much. There are many language ideologies fostered by Esperanto supporters and speakers, and they differ especially in their relation with national identities and the place of Esperanto in a multilingual panorama. What they have in common is some version of the 'internal idea', *interna ideo*, which is the expression Zamenhof used to indicate the use of Esperanto to realise 'brotherhood and justice between all people' (my translation from Dietterle 1929: 372). What this 'internal idea' exactly means depends on the times and cultural milieux in which the Esperanto speakers find themselves, as well as the uninterrupted tradition formed by the ideologies that the Esperanto intellectuals formed in more than a century of use – for an overview, Gobbo (2017).

It was the Esperanto Movement in France that transformed *La Espero* in a pseudo-national anthem in the crucial 'vertigo years' (as Blom 2008) at the dawn of the new century (1900-1914). Eventually French Esperantists applied the rhetoric of a national uprising to Esperanto, only applied to a worldwide scale. In the long run, the French way to Esperanto lead Mark Fettes (1996) to formulate the conception of the Esperanto community as a 'quasi-ethnic' minority, then reprised and elaborated in particular by Melnikov (2015) and Astori (2016).

Such a conception of Esperantists being a "pseudo-people" is partially reflected in the Manifesto published in the World Esperanto Congress in Prague in 1996, the drafting of which was done by Fettes himself. That Manifesto was never seriously challenged or put into question afterwards, therefore it can be considered representative of the mainstream Esperanto ideology and identity. There, the digital factor is completely absent, not to mention previous documents influencing the strategy of the Esperanto Movement. Surprisingly enough, the growth of interest in language learning through digital tools did not spark interest to reconfigure the objectives of the Esperanto Movement in a new programmatic document by the new generation of speakers, at least up to now. In introducing the Millennials or Generation Y (born 1980-2000) as a distinct sub-group, Rainer and Rainer (2011: 173) argue that they have 'clear convinctions' about 'issues like same-gender marriages and environmental actions' which go beyond national borders, if not embracing the whole planet, and therefore may be a fertile ground for Esperanto as a global endeavour. The relative popularity of the online Esperanto courses seems to confirm this impression; however, their long-term effects were recently put into question inside the community.

While Chuck Smith, the Esperantist of the Year 2015, could say then that every day 30 people across the world, found especially in the US, finished the Esperanto Duolingo course (Smith 2015), five years later, Robert Nielsen (2020), a major language activist belonging to the Millennials, complained that there are 2.8 millions people enrolled in the Esperanto Duolingo courses – via English, Spanish, and Portuguese – but 'very few' pass

to 'the other side' and enter the Esperanto community. As a final note, from 2020, Esperanto speakers – like all the rest of humanity – are fronting new issues for the severe limitations in physical mobility that are a prerequisite of real-world gatherings, due to the global COVID-19 pandemic. This may lead to a bias, i.e., the overestimation of the digital use of lesser-used languages in general, simply because of the lack of alternatives. In the following section, the use of Esperanto in the digital domains will be illustrated through the Digital Language Vitality Scale (DLVS) proposed by Ceberio et al. (2018).

4. Lessons learnt from Esperanto and digital vitality

The case of Esperanto is particularly interesting as the language is detached from any specific proper identity-building territory (*Sprachraum*), claiming to be a 'word language', thus being at ease in the World Wide Web. Preliminary research shows that digital presence is a key factor for the 'coolness factor', especially when producing original content or adding specific information that helps constructing language identity, instead of mere translating information in other languages. Esperanto gives evidence of good practice; for instance, in comparison with Piedmontese, Gobbo & Miola (2016) notice: "thus, writing Wikipedia pages with original content would be a more relevant and smarter move than translating from Wikipedias in other languages, as the rich and original resources on Zamenhof or linguistics (*lingvistiko*) show in the Esperanto Wikipedia" (298, my translation from Italian). However, it is still open to discussion how far the process of 'coolification' eventually helps maintain or actually promotes the language as a whole. Ceberio et al (2018) give recommendations on how to assess – and improve – the digital capacity, presence and performance of the language under scrutiny.

In terms of availability of internet media, it is important to consider that the majority of Esperanto speakers are digitally literate, especially the Millennials (see above for a definition). Not surprisingly, the presence and visibility of language mentors, activists and disseminators creating original digital content is far from being neglectable. The size and activity rates of the Esperanto Wikipedia is remarkable, at least in terms of visibility: activists and the public generally look at the raw number of entries, which is undoubtably remarkable – more than 291 thousand articles, by January 2021 (for a discussion, see van Dijk 2009). Apart from Wikipedia, Esperanto speakers can use Facebook, Wordpress or Telegram in the language; part of these translations are supported through the initiative Instigo-Liberapay, whose aim is 'to provide online services in Esperanto and other satellite activities' (source: liberapay.com/instigo), under the auspices of the Universal Esperanto Association.

Graphisation of the language, which is an issue open to debate in the case of many lesser-used languages (e.g., Miola 2015 on Piedmontese) is not particularly problematic in the case of Esperanto. The encoding of the flag characters of Esperanto <ĉ, ĝ, ĥ, ĵ, ŝ, ŭ> is guaranteed with free add-ons in the major operating systems of computers (both proprietary and free) as well as mobile devices, and especially telephones, avoiding the risk of 'tyranny of the keyboard', as Miola (2015) defined it. Interestingly, the debate on the opportunity (or not) of an orthographic reform for Esperanto, that was still very lively in the 1980s, as Large (1985) and especially Foster (1982) attested, is now almost forgotten, thanks to the technological change.

The making of e-dictionaries requires not only interfaces in the language, but also ad hoc software. People may install Linux in Esperanto and find (video) bloggers explaining various topics, not only language-related, and sometimes under the form of tutorials. There are spelling checkers available for Esperanto in the realm of free software[2], such as Esperantilo, and the popular suite LibreOffice completely translated in the language. Tools for Part-of-Speech and syntactic tagging are still limited, even if the transparent syntactic marking of Esperanto permits a relatively high quality in machine translation

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[2] Broadly, free software is non-proprietary, so that anybody is allowed to modify its source code, so to improve its functionality.

tools, both in proprietary software (such as Google Translate) and free ones (such as Apertium). Also, there are few corpora, but only of written use. The most used one, and the better maintained and updated by a leading figure of the social movement, is called Tekstaro: by now, it has approximately 10.4 million words (see Wennergren 2021; last major update: 2018), which in absolute term makes Tekstaro a small corpus, as the benchmark used in corpus linguistics for larger one is usually 100 million words. This paucity is counterbalanced by a rich and updated monolingual e-dictionary called Vortaro, and a conspicuous presence of bilingual e-dictionaries, even in not-so-large languages, such as Basque and Catalan. It should be noted, however, that most bilingual Esperanto dictionaries are still published on paper only, even very recently – e.g., the Lithuanian one edited by Čeliauskas and Puodėnas (2018).

A thorough scrutiny of the position of Esperanto in the digital realm would go beyond the scope of this paper, which aims to illustrate the role and limit of digital presence and use in promoting the vitality of lesser-used languages, through the lenses of the Esperanto case. It comes not entirely by surprise that the application of the DLVS can lead to paradoxical results. In sum, in terms of active production and use of digital tools, Esperanto could be put even on level 4 (Developing), but on the other hand the tools for NLP are still underdeveloped, more on level 2 (Dormant). As a working hypothesis, Esperanto is suitable for level 3 (Emergent); however, a more in-depth analysis would be needed to assess it through robust and hopefully longitudinal data. Table 1 illustrates the initial assessment of Esperanto in terms of the DLVS made so far.

Table 1. The digital language vitality assessment of Esperanto (following Ceberio et al. 2018).

Parameter	Label	Score
Digital Capacity		
Evidence of connectivity	good	2
Digital literacy	basic	2
Internet penetration	good	2
Character encoding	supported	6
Availability of language resources	limited	3.5[1]
Use for e-communication	strong	5
Availability of Internet media	strong	5
Digital Performance		
Availability of Internet services	strong	6
Localised social networks	medium	5
Localised software	medium	4
Machine translation tools	advanced	6
Internet top-level domain	no	3

[1] This score is tentative; see remarks infra-text for details.

The assessment of the digital vitality of Esperanto shows that activists are certainly lively and passionate but their actions are rarely coordinated to obtain robust outcomes, especially in the field of e-dictionary making. The underlying working hypothesis is that, while merely translating documents for existing software can be performed by isolated individuals, long-term results for software development and corpora use could profit from collective efforts by high-skilled training for language activists, eventually lifting the target language up in the DLVS. For the purposes of the usage of the scale, the application of DLVS to Esperanto did not pose particular problems, with one exception, i.e., the assessment of availability of language resources. In fact, the distance between values 3 and 4 in such variable is quite distant and may require a revision or at least a clarification by the authors. A more in-depth analysis of the limitations of the DLVS – as well as scales in general, in order to measure language vitality – is postponed in the final discussion (Section 6).

5. How to measure the language vitality of Esperanto and its rivals

In the field of Interlinguistics, traditionally devoted to the comparison between international auxiliary languages such as Esperanto and its rivals, Detlev Blanke (1985/1989) proposed a scale measuring the "socialization process" of such languages in 19 steps, indicating that "the only planned language which really has functioned, up to now, is Esperanto" (1989: 71). He then revised the scale in 2006, which presents 27 steps. Although their undoubtably informativeness, Blanke's scales cannot be applied as such in order to assess the current situation of Esperanto and other planned languages, as the role reserved to digital use is either absent (in the first version of 1985/1989) or very marginal (in the revision of 2006). In the following, we revise the main points of Blanke's 2006 scale in comparison with Fishman's GIDS and its extended version EGIDS, having in mind the previous assessment of the terms of DLVS. The aim is to propose a new scale of language vitality for planned languages in general and Esperanto in particular, that includes the digital domains, without overestimating their role.

The rationale behind the construction of the original Graded Intergenerational Disruption Scale (GIDS) was stated very clearly by Fishman (1991): "the higher the GIDS rating the lower the intergenerational continuity and maintenance prospects of a language network or community" (p. 87). Such a principle is retained in its extended version currently in use, the EGIDS (Lewis and Simon 2010). Unlike most languages in the world, intergenerational continuity in the case of Esperanto passes mainly not through family use, but through language activists passing their knowledge and involvement to the next generation. By definition, planned languages violate what Lyons called 'the historical priority of speech over writing' (1981:12), sign languages being the other example of violation. Unlike lesser-used languages across the world, the ultimate goal is not to obtain an accepted formal variety in wide use among existing and new speakers, but to form a community of speakers starting from a prescriptive variety, initially only written on paper, that should be the guideline for the standard language, and eventually becomes the flag of its legitimacy, in the sense of Milroy (2001). For this reason, there will never be a correspondence of stage 8 of the GIDS, as in the case of planned languages 'vestigial users' or 'socially isolated old folks' are never found (Fishman 1991: 88). Although demographics show that retirees were always present in the Esperanto Movement since the first sociological surveys (reprised by Garvía 2015, Chapter 12) they were never isolated in Fishman's terms, thanks to writing: even in the pioneers' generation (1887-1905), Esperanto was mainly used for correspondence in written form, often publicly available through the first periodic in the language, *La Esperantisto*, (Haupenthal 1988, Dietterle 1929).

The whole point of Esperanto – and most planned languages – has always been to connect with other users across barriers, no matter if they are geographical or cultural. In order to be used, the language should be stable; in other words, its basic structure should be stated clearly enough in order to be ready for use by people other than the original proponent. In the terms of Blanke (2006), the prerequisite of usage is the pass from the stage of being a manuscript (step 1) to a *Plansprachprojekt*, a language project (step 2), which implies a publication of some sort – a brochure, a web site, or other forms. History shows that language projects heavily rely on the leading figure of the proponent, which is to say that they may not survive him – 'him', planned languages being proposed in their vast majority by men, not women (for a review, Eco 1996). Blanke's steps 3-7 illustrate the main actions to be done in order to make the figure of the proponent no longer necessary. This goal is obtained by producing publications in and about the language, such as: teaching instruments (step 3), so to let activists acquire the language; propagandistic or apologetic texts, justifying the need or opportunity to learn the language (step 4), periodicals for producing basic texts that guide the early adopters in their language use (step 5); correspondence (step 6); translated and original texts of literature in the sense of *belle lettre* (step 7).

It is questionable whether Blanke's steps are followed in the exact order he envisaged; however, what is certain is that the establishment of a language project initially passes through the sharing of the language in written use. For the initial testing of the project, there is no essential difference between old-fashioned postcards and email messages, or between brochures and blogs. What changes nowadays is the possibility to immediately produce audio and video material directly in the language and for free; one century ago, when Esperanto and its rivals were proposed and discussed, at least by the intellectual élites and social avangardes, this possibility was unthinkable (Garvía 2015). While written standardization is often a goal for languages escaping danger, in the case of planned languages the challenge is orality.

Fishman (1991: 92) states that the first major passage in the GIDS is reaching step 6, when "the younger generation… leave behind an already ongoing sociolinguistic *modus vivendi*" adopting the lesser-used language so to guarantee intergenerational transmission. The EGIDS makes a further step, specifying that the trend in the number of users is crucial to pass from the status of being threatened (step 6b) to vigorous (step 6a; Lewis and Simon 2010). To reprise the original example by Fishman (1991: 92), there is no Esperanto counterpart to "pioneering Jewish settlements in late nineteenth and early twentieth century Palestine". In other words, there are no primary schools, nor a stable public linguistic landscape, nor any other basic service for everyday public life, such as the post office or grocery market, in Esperanto, anywhere. Esperanto families gather in specific meetings – always in Europe – but they do not live together. In other words, paraphrasing Fishman's terms, they form families but they do not attain community. Interestingly, the emphasis put on the 'Esperanto native speakers', a heavily ideologically loaded term to indicate Esperanto family speakers, is an emergent phenomenon in the language representation by the younger generations (Caligaris 2016). However, such a trend is still at an infancy stage, and it should be confirmed by the developments shown inside the community in the next years. By now, there is no sign of concrete projectes struggling to live together so to settle an "Esperantoland", for the ideological reasons illustrated above – see also Gobbo (2017).

Does this sociolinguistic profile mean that Esperanto is a threatened language, and therefore it should be collocated in step 6b of the EGIDS? Arguably, not, as it is without any doubt that Esperanto is mainly used between people from different cultural backgrounds in knowledge exchange, which is one of the traits for achieving the status of 'international language' (stage 0), the highest possible stage in the EGIDS. Simply, Esperanto does not fit the scales based on in-family intergenerational transmission. We need to take a different perspective in analysing the bonds that connect Esperanto speakers together. Blanke's scale indicates the community-building phase as the major passage for planned languages: a lively community permits to pass from the status of language project to the status of *Semiplansprachen* (Blanke 2006: 71), which sounds as 'semilanguages' in English (Blanke 1989). Since step 8, *Mündliche Kommunikation*, worldwide communication, the formation of a network of local clubs scattered through the world is the first move in establishing the social movement, then expressed under the form of a registered, non-governmental organisation (with fees and services to the members) and culminating in the formation of 'a small community' (*Kleine Sprachgemeinschaft*, step 12), based on 'personal contacts' between the adherents. In the terms of Social Network Theory (SNT), Blanke's indication may correspond to the formation of strong and weak ties, in which the common language is the *fil rouge* that ultimately ties the speakers, that results in "the combination of amount of time, the emotional intensity, the intimacy (mutual confiding) and the reciprocal services which characterize the tie" (Granovetter 1973: 1361). As a working hypothesis, the immediate feeling of trust of comrades speaking Esperanto even if they never met before, that anecdotally informants report in participant's observation during over twenty years, suggests that the ties between Esperanto speakers may be either weak or strong. Unfortunately, extensive sociological or longitudinal studies to corroborate such a hypothesis are still not available.

Blanke's term 'semilanguage' is unfortunate, as it may suggest that the planned language is used only by semi-speakers, i.e., that there is nobody who has full competence of the language, which is not necessarily true. According to him, few traditional major rivals of Esperanto – in particular: Ido, Interlingue (ex Occidental), and IALA's Interlingua – are 'semilanguages'. In the last decades, the aforementioned languages gained some visibility thanks to digital resources, so it seems appropriate to use the DLVS for an initial assessment of their vitality in general. Participant observation shows that these languages have a tiny support (<1,000 users) by a bunch of isolated activists whose main activity is to update their websites, Wikipedia, and to translate user interfaces of means of digital communication; however, in general, outputs are very limited, for lack of human resources. For this reason, the working hypothesis is that they fit level 2 of the DLVS (i.e., Emergent), in the best case.

I propose here to use the term 'awakening languages' instead of 'semilanguages', as ultimately planned languages in such a stage are mainly strengthening the ties of the social network established in step 12. In particular, in the upper steps of Blanke's (2006) scale, the digital dimension of language vitality shows its anachronism and arbitrariness: for instance, Blanke (2006) indicates the production of CD-ROMs (step 24) *after* state recognition (step 23), which makes no sense in the 21st century.

Blanke indicates that only Esperanto succeeded to fulfill all the steps, as it shows, among the other indicators, evidence of organisation of big congresses ('big' meaning more than 1,000 participants), official recognition (e.g., Esperanto is UNESCO Intangible Cultural Heritage of Croatia, Poland, and Europe 'as a carrier of Esperanto culture'), family speakers (already mentioned above), and over all original culture, including oral traits such as myths, rituals, traditions, which entails language evolution. The main difference between awakening planned languages and Esperanto is that the latter is both recognised externally on various levels and in use internally in various domains, both formal and informal, in particular in the domain of the family.

6. Discussion and concluding remarks

Sanguin (2020) argues that lesser-used languages across the European Union 'come up against a double wall', due to a move 'from a stage to resistance to a stage of tolerance and indifference'; the first wall is that they are anchored to their ancestral myth of autenticity, eventually reducing their appeal to non-heritage speakers while the second wall is that they do not reach a critical mass, i.e., the number of speakers is relatively small. Digital resources eventually give a 'modern look' (Coluzzi 2005) to lesser-used languages, projecting them in present and future time, instead of being entrapped in the rhetorics of the "good ol' days" of authentic ancestry of the pre-digital world. In other words, coolification is a bridge that may pass through Sanguin's first wall, overcoming tolerance and indifference with respectively engagement and visibility.

On the other hand, the experience of internet-only Esperanto learners shows that coolification is necessary but not enough to sustain and nurture the community. The analysis of Piedmontese in comparison with Esperanto made by Gobbo and Miola (2016) suggests a possible line of research, which unfortunately is still underexplored in the literature. Esperanto does not easily fit current categories of analysis, being neither in danger, nor a minority language, stricto sensu. Rigorous comparison with other lesser-used language avoids the application of inappropriate categories of analysis and therefore severe and superficial judgement of "failure". In particular, while we assess language vitality, Esperanto shows that a non-threatened language can exist even if intergenerational transmission happens mainly outside family use. Finally, the initial ties formed through digital communication among learners of Esperanto online are challenging the tenets of the social movement, as they do necessarily pass by societies, associations, or organisations, but they are not offering a stable alternative so far, which questions the future of the organisation of the social movement supporting the language,

and, by extension, the social movements promoting less fortunate languages, that may put too much hope in the role played by the digital realm to guarantee their survival.

A working hypothesis is that it is the appeal of the existing services provided by the social movement that channels the interest of the would-be new activists bring the new-comers inside the social network (in the sense of SNT), ultimately transforming an online language learner in a real-world new speaker through the establishment of weak and strong ties. How to reach this goal is unclear, even in the fortunate case of Esperanto, where neither any myth of ancestry nor specific territorialities are in place, easily over-coming any resistance to its use through digital means.

As a suggestion for further research, perhaps the limitations rely in the *formal* assumption behind the choice of proposing indexes and scales, as they imply the existence of one and one only definite line of progression, while the sociolinguistic reality of languages may require different formal representations: after all, there is no direct relation between informal domains such as family use and formal ones as state recognition. We argue that the indicators of language vitality should give solid explanation of changes in the realm of language attitudes, so to sustain language development, otherwise they remain merely an academic exercise.

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